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COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,
CANBERRA.

OFFICIAL

YEAR BOOK

OF THE

COMMONWEALTH OF AUSTRALIA

No. 43—1957.

Prepared under Instructions from
The Right Honorable the Treasurer,

BY

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COMMONWEALTH STATISTICIAN.



By AUTHORITY:

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PREFACE.

By the Constitution of the Commonwealth of Australia, the Parliament of the Commonwealth is empowered, subject to the Constitution, "to make laws for the peace, order, and good government of the Commonwealth, with respect to Census and statistics." In the exercise of the power so conferred, a "Census and Statistics Act" was passed in 1905, and in the year following the "Commonwealth Bureau of Census and Statistics" was created. The first Official Year Book was published early in 1908. The publication here presented is the forty-third Official Year Book issued under the authority of the Commonwealth Government.

The Synopsis on pp. xi to xxxi following shows the general arrangement of the work. The special index (preceding the General Index) provided at the end of the volume, together with certain references given in the various chapters, will assist in tracing in previous issues special articles and other more or less important miscellaneous matter which, owing to limitations of space, have been omitted or abbreviated in the present volume. Where, in the General Index, more than one reference to a subject is given, the chief reference (or references) has been specially indicated wherever possible.

Every endeavour has been made to meet the demand occasioned by the current economic and financial conditions for new information, or information expressed in new terms, concerning many branches of statistics, while a Diary of Principal Economic Events of the years 1953 to 1956 is inserted after the last chapter.

It is not proposed to refer to the whole of the new matter or to the new treatment of existing matter incorporated in the present volume, but attention may be drawn to the following:—

- Chapter VI. Labour, Wages and Prices.—Basic Wage Inquiry, 1956—Précis of judgment (p. 171).
- Chapter VIII. Electric Power Generation and Distribution.—Revised material relating to Victoria (p. 272).
- Chapter XI. Transport and Communication.—Expanded section dealing with Broadcasting and Television (pp. 429–434).
- Chapter XIV. Public Health and Related Institutions.—Revised data and amended order of sections relating to Commonwealth Government activities (pp. 498–511). Grants to Organizations (Lady Gowrie Centres, National Fitness, Flying Doctor Service, and Blood Transfusion Service) associated with Public Health (pp. 512–514).
- Chapter XVIII. Housing.—New chapter bringing together various sections dealing with Housing. Revised and enlarged details of Commonwealth–State Housing agreements (p. 627). New Section relating to Government Assistance to Housing (pp. 627–636).
- Chapter XX. Private Finance.—Private Savings Banks (p. 724).
- Chapter XXIX. Repatriation.—The Services Canteens Trust Fund (p. 1043).
- Appendix.—Basic Wage Inquiry, 1956–57 (p. 1132).

The material in the Year Book has been carefully checked throughout, but I shall be grateful to those who will be kind enough to point out defects or make suggestions.

In a publication of this size, a considerable time must necessarily elapse between the handling, both by author and printer, of the earlier and later parts of the work. In order to offset, to some extent, the consequent delay in presentation, the contents of this issue have already been published in separate Parts as the successive chapters or groups of chapters were printed. Particulars of these Parts, numbering eleven in all, are shown in the Price List of Printed Publications at the end of this volume. In a statistical publication, the time element, however, does result in an unevenness in the periods to which the statistics relate. To overcome this difficulty, in part at least, an Appendix is provided in which so far as space permits, later particulars, where available, of many statistical series appearing in preceding chapters have been inserted. The insertions have been restricted mainly to figures, as the inclusion of current textual matter is not generally practicable.

In a number of chapters the figures in this issue have been brought forward two years from those in the previous issue. The Appendix to this issue contains information for various periods up to 1956–57.

It should be pointed out that for the most recent statistics the reader should refer to other publications issued by this Bureau, notably the *Monthly Review of Business Statistics* and the *Quarterly Summary of Australian Statistics*. There are also numerous mimeographed statements issued from time to time on a wide range of subjects. Particulars of these are shown in Chapter XXXI.—Statistical Organization and Sources of Information.

My thanks are tendered to the State Statisticians, who have collected and compiled the data on which a great part of the information given in the Official Year Book is based. Thanks are also tendered to the responsible officers of the various Commonwealth and State Departments, and to others who have kindly, and often at considerable trouble, supplied information.

I also desire to express my keen appreciation to the valuable work performed by Mr. A. E. Callander, Editor of Publications, Mr. E. H. Harry, B.A., B.Com., and Mr. G. I. Neville, B.Com., Assitant Editors, and the other officers of the Publications Division, and of the services rendered by the officers in charge of the several Branches of the Commonwealth Bureau of Census and Statistics upon whom has devolved the duty of revising the chapters relative to their respective Branches.

S. R. CARVER,
Commonwealth Statistician.

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,
Canberra, A.C.T., October, 1957.

CONTENTS.

CHAPTER.	SUBJECT.	PAGE.
	LIST OF MAPS AND GRAPHS	ix
	SYNOPSIS	xi
I.	DISCOVERY, COLONIZATION AND FEDERATION OF AUSTRALIA	1
II.	PHYSIOGRAPHY	25
III.	GENERAL GOVERNMENT	61
IV.	LAND TENURE AND SETTLEMENT	84
V.	THE TERRITORIES OF AUSTRALIA	103
VI.	LABOUR, WAGES AND PRICES	143
VII.	MANUFACTURING INDUSTRY	201
VIII.	ELECTRIC POWER GENERATION AND DISTRIBUTION	265
IX.	WATER CONSERVATION AND IRRIGATION	289
X.	TRADE	323
XI.	TRANSPORT AND COMMUNICATION	369
XII.	EDUCATION	435
XIII.	PUBLIC JUSTICE	473
XIV.	PUBLIC HEALTH AND RELATED INSTITUTIONS	489
XV.	WELFARE SERVICES	521
XVI.	POPULATION	541
XVII.	VITAL STATISTICS	585
XVIII.	HOUSING	627
XIX.	LOCAL GOVERNMENT	657
XX.	PRIVATE FINANCE	701
XXI.	PUBLIC FINANCE	753
XXII.	AGRICULTURAL PRODUCTION	821
XXIII.	PASTORAL PRODUCTION	885
XXIV.	FARMYARD, DAIRY AND BEE PRODUCTS	919
XXV.	FORESTRY	943
XXVI.	FISHERIES	957
XXVII.	MINERAL INDUSTRY	969
XXVIII.	DEFENCE	1013
XXIX.	REPATRIATION	1033
XXX.	MISCELLANEOUS	1047
XXXI.	STATISTICAL ORGANIZATION AND SOURCES OF INFORMATION	1079
	DIARY OF PRINCIPAL ECONOMIC EVENTS, 1953 TO 1956	1100
	CHRONOLOGICAL TABLE OF CHIEF EVENTS SINCE 1788	1111
	STATISTICAL SUMMARY, 1891-92 TO 1955-56	1123
	APPENDIX	1127
	LIST OF SPECIAL ARTICLES, ETC., CONTAINED IN PREVIOUS ISSUES	1163
	GENERAL INDEX	1168

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LIST OF MAPS AND GRAPHS.

	PAGE.
General Map of Australia	Frontispiece
Normal Daily Maximum Temperature, January (Map)	33
Normal Daily Minimum Temperature, January (Map)	34
Normal Daily Maximum Temperature, July (Map)	35
Normal Daily Minimum Temperature, July (Map)	36
Longest Heat Waves (Map and Graph)	37
Average Frost Free Period (Map)	39
Average Annual Evaporation (Map)	40
Average Annual Rainfall (Map)	41
Monthly Distribution of Rainfall (Map)	42
Wind Roses, 9 a.m. and 3 p.m. (Maps)	43, 44
Wholesale and Retail Prices; Nominal and Real Wage Rates—Index Numbers	173
Wage and Salary Earners in Civilian Employment	174
Industrial Disputes	175
Snowy Mountains Scheme (Map)	273
Artesian Basins (Map)	307-8
Oversea Trade: 1930-31 to 1955-56	341
Oversea Trade according to Currency Areas	342
Exports of Principal Commodities	343
Export Price Index Numbers	344
Railway Systems (Map)	377
Government Railways: Route-mileage and Traffic	378
Government Railways: Revenue and Working Expenses	379
Motor Vehicle Registrations	380
Air Routes (Map)	413-4
Commonwealth Expenditure on Social and Health Services	527
Population of Australia	561
Oversea Migration	562
Population Density and Distribution (Map)	563-4
Births, Deaths and Marriages	597
Rates of Births, Deaths and Natural Increase	598
Infant Mortality Rates	599
New Houses and Flats	633
Bank Deposits and Advances and Notes in Circulation	731
Life Assurance	732
Commonwealth Consolidated Revenue Fund	765
State Consolidated Revenue Funds	766
Area of Crops	831
Wheat Production and Exports	832
Wheat for Grain: Distribution of Acreage (Map)	833

	PAGE.
Production of Oats, Barley, etc.	834
Livestock	899
Sheep Numbers and Wool Production	900
Beef Cattle: Distribution of Numbers (Map)	909
Dairy Cattle: Distribution of Numbers (Map)	910
Sheep: Distribution of Numbers (Map)	911
Pigs: Distribution of Numbers (Map)	912
Mine Production of Principal Metals and Coal	977, 978

SYNOPSIS.

CHAPTER I.—DISCOVERY, COLONIZATION AND FEDERATION OF AUSTRALIA.

	PAGE		PAGE
§ 1. Early Knowledge and Discovery of Australia—		§ 5. The Establishment of the Commonwealth of Australia—	
1. Introduction	1	1. General	5
2. Terra Australis	1	2. Transfer of the Northern Territory to the Commonwealth	5
3. Discovery of Australia	1	3. Transfer of the Australian Capital Territory to the Commonwealth	5
4. Discoveries by the English	2	4. Present Composition of the Commonwealth	5
§ 2. The Annexation of Australia—		§ 6. The Constitutions of the States and of the Commonwealth—	
1. Annexation of Eastern Part of Australia, 1770	2	1. General	6
2. Original Extent of New South Wales	3	2. Commonwealth Constitution? Act	6
3. Extension of New South Wales Westward, 1825	3	§ 7. The External Territories of Australia—	
4. Annexation of Western Australia, 1827	3	1. Transfer of Norfolk Island	23
§ 3. The Exploration of Australia	3	2. Transfer of British New Guinea or Papua	23
§ 4. The Creation of the Several Colonies—		3. Territory of New Guinea	23
1. New South Wales	4	4. Nauru	24
2. Tasmania	4	5. Territory of Ashmore and Cartier Islands	24
3. Western Australia	4	6. Australian Antarctic Territory	24
4. South Australia	4	7. Territory of Heard and McDonald Islands	24
5. New Zealand	4	8. Territory of Cocos (Keeling) Islands	24
6. Victoria	4		
7. Queensland	4		

CHAPTER II.—PHYSIOGRAPHY.

§ 1. General Description of Australia—		§ 2. Climate and Meteorology of Australia—	
1. Geographical Position	25	<i>continued.</i>	
2. Area of Australia compared with Areas of other Countries	25	4. Evaporation	45
3. Areas of States and Territories, Coastal Configurations and Standard Times	27	5. Rainfall	45
4. Geographical Features of Australia	27	6. Remarkable Falls of Rain	48
5. Fauna, Flora, Geology and Seismology of Australia	29	7. Snowfall	50
§ 2. Climate and Meteorology of Australia—		8. Hail	50
1. Introductory	29	9. Barometric Pressures	50
2. Temperature	29	10. Wind	50
3. Humidity	32	11. Influences affecting Australian Climate	52
		12. Rainfall and Temperatures, Various Cities	52
		13. Climatological Tables	52

CHAPTER III.—GENERAL GOVERNMENT.

§ 1. Scheme of Parliamentary Government—		§ 2. Parliaments and Elections— <i>continued.</i>	
1. General	61	8. The Parliament of Tasmania	72
2. The Sovereign	61	9. Superannuation Funds of the Parliaments of the Commonwealth and of the Australian States	72
3. Powers and Functions of the Governor-General and of the State Governors	62	§ 3. Administration and Legislation—	
4. The Cabinet and Executive Government	63	1. The Commonwealth Parliaments	73
5. Number and Salary of Members of the Legislatures, Australian Parliaments, June, 1956	64	2. Governors-General and Commonwealth Ministries	73
6. Commonwealth Parliamentary Allowances	65	3. Governors and State Ministers	76
7. Enactments of the Parliament	65	4. Leaders of the Opposition, Commonwealth and State Parliaments	78
§ 2. Parliaments and Elections—		5. The Course of Legislation	78
1. Commonwealth	65	6. Legislation during 1955	78
2. State Elections	68	§ 4. Commonwealth Government Departments	81
3. The Parliament of New South Wales	69	§ 5. Cost of Parliamentary Government	81
4. " " " Victoria	69	§ 6. Government Employees	83
5. " " " Queensland	70		
6. " " " South Australia	70		
7. " " " Western Australia	71		

CHAPTER IV.—LAND TENURE AND SETTLEMENT.

	PAGE		PAGE
§ 1. Introduction	84	§ 7. Closer Settlement—	
§ 2. Free Grants and Reservations—		1. General	91
1-7. States and Northern Territory ..	84-6	2-7. States	91
8. Summary	86	§ 8. Settlement of Returned Service Personnel: 1939-45 War—	
§ 3. Unconditional Purchases of Freehold—		1. War Service Land Settlement Scheme	91
1-6. States	86-7	2. Loans and Allowances (Agricultural Occupations) Scheme	93
§ 4. Conditional Purchases of Freehold—		3. War Service Land Settlement Divi- sion—Total Expenditure	94
1. General	87	§ 9. Advances to Settlers—	
2-7. States	87-8	1. General	94
§ 5. Leases and Licences under Land Acts—		2-8. States and Northern Territory ..	95-8
1. General	88	9. Summary of Advances	98
2-9. States and Territories	88-9	§ 10. Alienation and Occupation of Crown Lands—	
10. Summary	89	1. General	99
§ 6. Leases and Licences under Mining Acts—		2-9. States and Territories	99-102
1. General	90	10. Summary	102
2-8. States and Northern Territory ..	90		
9. Summary	90		

CHAPTER V.—THE TERRITORIES OF AUSTRALIA.

THE NORTHERN TERRITORY.

§ 1. Area and Population—	
1. Area	103
2. Population	103
§ 2. Legislation and Administration ..	103
§ 3. Physiography—	
1. Tropical Nature of the Country ..	104
2. Contour and Physical Characteristics ..	104
§ 4. Climate, Fauna and Flora—	
1. The Seasons	104
2. Fauna	104
3. Flora	104
§ 5. Production—	
1. Agriculture	104
2. Pastoral Industry	105
3. Hides and Skins	105
4. Mining	105
5. Pearl and Other Fisheries	106
§ 6. Land Tenure—	
1. General	106
2. Pastoral, Agricultural, etc., Leases ..	107
3. Mining Leases, etc.	107
§ 7. Trade, Transport and Communication—	
1. Trade	107
2. Shipping	108
3. Air Services	108
4. Railways	108
5. Roads	108
6. Posts, Telegraphs, Telephones and Wireless	109
§ 8. Education—	
1. European	109
2. Native	109
3. Theoretical Training of Appren- tices	110

THE NORTHERN TERRITORY—*continued.*

§ 9. Native Welfare	110
§ 10. Finance	110

AUSTRALIAN CAPITAL TERRITORY.

1. Introductory	112
2. Progress of Work	112
3. Forestry	113
4. Lands	114
5. Transport and Communication	114
6. Population	115
7. Production	115
8. Education	115
9. Finance	116

NORFOLK ISLAND.

1. Area, Location, etc.	119
2. Settlement and Population	119
3. Administration	119
4. Economic Activity	119
5. Trade, Transport and Communi- cation	120
6. Social Condition	120
7. Finance	121

PAPUA AND NEW GUINEA.

§ 1. Administration	121
§ 2. Finance	121
§ 3. Agriculture and Animal Industry—	
1. Soils	122
2. Climate	123
3. Suitable Crops	123
4. Plantation Agriculture	123
5. Native Agriculture	124
6. Animal Industry	124
7. Co-operative Societies	125

CHAPTER V.—THE TERRITORIES OF AUSTRALIA—*continued.*

	PAGE
PAPUA.	
§ 1. General Description—	
1. Early Administration	125
2. Administration by Commonwealth of Australia	125
3. Area, etc.	125
§ 2. Population—	
1. Non-indigenous Population	125
2. Native Population	125
§ 3. Native Labour, Taxation, Health—	
1. Native Labour	125
2. Native Taxes	126
3. Health	126
§ 4. Land Tenure	126
§ 5. Production—	
1. General	127
2. Forestry	127
3. Mining	127
4. Fisheries	128
5. Water Power	128
§ 6. Trade, Transport and Communication—	
1. Customs Tariff	128
2. Imports and Exports	128
3. Shipping	130
4. Other Forms of Transport and Communication	130
§ 7. Finance	130
TRUST TERRITORY OF NEW GUINEA.	
§ 1. General Description	130
§ 2. Government—	
1. Military Occupation (1914–18 War)	130
2. Mandate (1920)	131
3. 1939–45 War	131
4. Trusteeship (1946)	131
5. Administration	131
§ 3. Population—	
1. Non-indigenous Population	131
2. Native Population	131

TRUST TERRITORY OF NEW GUINEA— <i>continued.</i>	
§ 4. The Natives—	
1. General	131
2. Land Tenure	132
3. Research Work	132
4. Education	132
5. Health of Natives	132
6. Missions	132
§ 5. Land Tenure	132
§ 6. Production—	
1. General	133
2. Timber	133
3. Fisheries	134
4. Mining	134
§ 7. Trade, Transport and Communication—	
1. Customs Tariff	134
2. Imports and Exports	134
3. Shipping	136
4. Other Forms of Transport and Communication	136
§ 8. Revenue and Expenditure	137

TRUST TERRITORY OF NAURU.	
1. General	137
2. History	137
3. Trusteeship Agreement	137
4. Administration	138
5. Population	138
6. Health	138
7. Education	138
8. Judiciary	139
9. Religion	139
10. Phosphate Deposits	139
11. Transport	140
12. Trade	140
13. Revenue and Expenditure	140

TERRITORY OF HEARD AND McDONALD ISLANDS	140
AUSTRALIAN ANTARCTIC TERRITORY	140
TERRITORY OF COCOS (KEELING) ISLANDS.	
1. General	141
2. History	141
3. Transfer to the Commonwealth of Australia	141
4. Administration	141
5. Population	142
6. Transport	142

CHAPTER VI.—LABOUR, WAGES AND PRICES.

A. RETAIL PRICES AND PRICE INDEXES.	
§ 1. General	143
§ 2. Previous Retail Price Indexes—	
1. General	143
2. The "Court" Index	144
§ 3. The Interim Retail Price Index (1952-53 Base Year)—	
1. Origin of the Interim Retail Price Index	144
2. Definition of the Interim Retail Price Index	145
3. Differences between the Structure of the Interim Retail Price Index and the "C" Series Retail Price Index	145
4. Comparison of Trends, etc.	147

A. RETAIL PRICES AND PRICE INDEXES— <i>continued.</i>	
§ 4. Tabular Statements of Retail Price Index Numbers—	
1. General	148
2. The "C" Series Retail Price Index	148
3. The Interim Retail Price Index	148
§ 5. The "C" Series Retail Price Index: 1914-1955—	
1. Construction	150
2. Significant Dates	150
3. "C" Series Retail Price Index, Six Capital Cities, 1914 to 1955	151
§ 6. International Comparisons	152

CHAPTER VI.—LABOUR, WAGES AND PRICES—*continued.*

	PAGE		PAGE
B. WHOLESALE PRICES AND PRICE INDEXES.		D. WAGES—<i>continued.</i>	
§ 1. General	152	§ 5. Wage Margins	183
§ 2. Wholesale Price (Basic Materials and Foodstuffs) Index—		§ 6. Child Endowment in Australia ..	184
1. Price Quotations	153		
2. Commodities and Grouping	153	E. EMPLOYMENT AND UNEMPLOYMENT.	
3. Method of Construction	153	§ 1. Employment—	
4. Index Numbers	153	1. Total Occupied Persons	184
§ 3. Melbourne Wholesale Price Index—		2. Wage and Salary Earners in Civilian Employment	186
1. General	154	3. Government Employees	188
2. Index Numbers	155	§ 2. Unemployment	189
C. CONTROL OF PRICES DURING AND SINCE THE 1939-45 WAR.		§ 3. Commonwealth Employment Service ..	190
1. General	155	§ 4. Industrial Disputes—	
2. Transfer of Price Control to the States	155	1. General	191
3. Price Stabilization	155	2. Industrial Groups	191
		3. States and Territories	192
		4. Duration	192
		5. Causes	193
		6. Results	194
		7. Methods of Settlement	195
		F. WORKERS' COMPENSATION LEGISLATION	195
		G. LABOUR ORGANIZATIONS.	
D. WAGES.		§ 1. Labour Organizations in Australia—	
§ 1. Arbitration and Wages Board Acts and Associated Legislation—		1. Registration	196
1. General	156	2. Particulars regarding Trade Unions ..	196
2. Commonwealth	156	3. Central Labour Organizations	198
3. States	158	§ 2. International Labour Organization ..	199
§ 2. Rates of Wage and Hours of Labour—		H. COMPARATIVE INDEX NUMBERS.	199
1. General	158		
2. Weekly Wage Rates	158		
3. Hourly Wage Rates	161		
4. Weekly Hours of Labour	162		
5. Nominal and Effective Wage Rates ..	163		
§ 3. Average Weekly Wage Earnings—			
1. Average Weekly Total Wages Paid, and Average Earnings	165		
2. Average Weekly Wage Earnings Index Numbers	165		
§ 4. Basic Wages in Australia—			
1. General	166		
2. The Commonwealth Basic Wage	166		
3. Australian Territories	177		
4. Basic Wage Rates for Females	177		
5. State Basic Wages	177		

CHAPTER VII.—MANUFACTURING INDUSTRY.

§ 1. General—		§ 4. Power Equipment in Factories—	
1. Introduction	201	1. General	209
2. Decentralization of Manufacturing Industries	201	2. Rated Horsepower of Engines in Factories other than Central Electric Stations	209
3. Commonwealth Division of Industrial Development	202	3. Rated Horsepower of Engines and Electric Motors Ordinarily in Use	209
4. Customs and Excise Tariffs and Bounties on Manufactures	202	4. Capacity of Engines and Generators installed in Central Electric Stations	211
5. Scientific Research and Standardization	202	§ 5. Employment in Factories—	
6. Definitions in Factory Statistics	203	1. Number Employed	211
7. Classification of Factories	204	2. Rates of Increase	213
8. Factory Development since 1901—Australia	205	3. Persons Employed in Classes of Industry	213
§ 2. Number of Factories—		4. Persons Employed According to Occupational Grouping	214
1. Number of Factories in each State ..	206	5. Monthly Employment	215
2. Number of Factories in Industrial Classes	206	6. Distribution of Employees According to Age	217
§ 3. Classification of Factories according to Number of Persons Employed—			
1. General	207		
2. States	207		
3. Australia	208		

CHAPTER VII.—MANUFACTURING INDUSTRY—*continued.*

	PAGE		PAGE
§ 6. Sex Distribution in Factories—		§ 8. Salaries and Wages Paid and Value of Production— <i>continued.</i>	
1. Average Number of Males and Females Employed ..	218	6. Value of Production ..	227
2. Rate of Variation for each Sex ..	218	7. Value of Output and Cost of Production ..	229
3. Masculinity of Persons Employed in Factories ..	219	§ 9. Value of Land, Buildings, Plant and Machinery—	
4. Employment of Females in Particular Industries ..	219	1. General ..	229
§ 7. Child Labour in Factories—		2. Value of Land and Buildings ..	229
1. Conditions of Child Labour ..	220	3. Value of Plant and Machinery ..	231
2. Number of Children Employed ..	220	4. Depreciation of Land and Buildings and Plant and Machinery ..	232
3. Industries Employing Child Labour ..	221	5. Land and Buildings, Plant and Machinery—Values, Additions and Replacements, Depreciation ..	233
4. Apprenticeship ..	221	§ 10. Principal Factory Products ..	234
§ 8. Salaries and Wages Paid and Value of Production—		§ 11. Individual Industries—	
1. General ..	221	1. General ..	237
2. Salaries and Wages Paid ..	221	2-40. Industries ..	238-264
3. Power, Fuel and Light Used ..	224		
4. Value of Materials Used ..	225		
5. Value of Output ..	226		

CHAPTER VIII.—ELECTRIC POWER

A. INTRODUCTION.	
1. Distribution of Population and Location of Power Resources ..	265
2. Electric Power Generation and Distribution ..	265
3. Future Developments ..	266
B. SNOWY MOUNTAINS HYDRO-ELECTRIC SCHEME.	
1. Geography of Area ..	266
2. Description of Scheme ..	266
3. Utilization of Power ..	268
C. STATES AND TERRITORIES.	
§ 1. New South Wales—	
1. General ..	268
2. Organization ..	269
3. Generation and Transmission ..	270
4. Rural Electrification ..	272
§ 2. Victoria—	
1. General ..	272
2. State Electricity Commission of Victoria ..	272
3. Local Country Electricity Undertakings ..	277
§ 3. Queensland—	
1. General ..	277
2. Royal Commission on Generation and Distribution of Electric Power in Queensland, 1936 ..	278
3. The State Electricity Commission of Queensland ..	278
4. Regional Electricity Boards ..	278
5. Creation of Southern Electric Authority of Queensland ..	279
6. Hydro-electricity ..	279
7. New Capacity ..	280

GENERATION AND DISTRIBUTION.

C. STATES AND TERRITORIES— <i>continued.</i>	
§ 4. South Australia—	
1. General ..	282
2. The Electricity Trust of South Australia ..	282
3. Capacity and Production ..	282
4. Leigh Creek and other New Capacity ..	282
5. The Municipal Tramways Trust ..	283
§ 5. Western Australia—	
1. General ..	283
2. Metropolitan Undertaking ..	283
3. Kalgoorlie ..	283
4. General Pattern of Electricity Supply ..	283
5. The State Electricity Commission of Western Australia ..	284
6. South-west Development ..	284
§ 6. Tasmania—	
1. General ..	285
2. The Hydro-Electric Commission ..	285
3. Power Usage by Secondary Industry ..	286
§ 7. Commonwealth Territories—	
1. Internal Territories ..	286
2. External Territories—Papua and New Guinea ..	287
D. STATISTICAL SUMMARY ..	287

CHAPTER IX.—WATER CONSERVATION AND IRRIGATION.

A. RESOURCES, UTILIZATION AND NATIONAL AND INTERSTATE ASPECTS.	
§ 1. Introduction ..	289
§ 2. Water Resources and their Utilization—	
1. Surface Supplies ..	289
2. Major Dams and Reservoirs ..	289
3. Irrigation ..	291
4. Preservation of Catchments ..	292
5. Sub-surface Supplies ..	292
§ 3. National and Interstate Aspects—	
1. General ..	294
2. Murray River Scheme ..	294
3. New South Wales—Queensland Border Rivers Agreement ..	296
4. Snowy Mountains Hydro-electric Scheme ..	297

CHAPTER IX.—WATER CONSERVATION AND IRRIGATION—*continued.*

	PAGE		PAGE
B. STATES AND TERRITORIES.			
§ 1. Australian Local Pattern of Water Conservation and Use	298	§ 4. Queensland— <i>continued.</i>	
§ 2. New South Wales—		5. Irrigation	312
1. General	298	6. Bureau of Investigation	314
2. Schemes Summarized	299	7. Channel Country	314
3. Murrumbidgee Irrigation Areas	301	8. Hydro-electricity	314
4. Other Irrigation Areas	301	§ 5. South Australia—	
5. Irrigation Districts	302	1. General	315
6. Water Trust Districts, Irrigation Trusts and Flood Control and Irrigation Districts	302	2. Irrigation	315
7. River and Lake, and Farm Water Supplies	303	3. Water Supply Schemes	316
8. Underground Water	303	4. Underground Water	317
9. Future Programme	303	5. Farm Water Schemes	317
10. Hydro-electricity	304	6. South-Eastern Drainage	317
§ 3. Victoria—		§ 6. Western Australia—	
1. General	304	1. General	317
2. Systems Summarized	304	2. Irrigation	318
3. Goulburn System	305	3. Water Supply Schemes	318
4. Murray River System	306	4. Underground Water	319
5. First Mildura Trust District	306	5. Ord River Scheme	319
6. Wimmera-Mallee System	306	§ 7. Tasmania—	
7. Private Water Supplies	309	1. General	319
8. River Improvement, Flood Protection and Drainage	309	2. Hydro-electricity	320
9. Underground Resources	309	3. Industrial	320
10. Future Programme	309	4. Irrigation	320
11. Hydro-electricity	310	§ 8. Northern Territory—	
§ 4. Queensland—		1. Climate and Topography	321
1. General	310	2. Administration	321
2. Great Artesian Basin	310	3. Underground Water	321
3. Other Basins	311	4. Irrigation	322
4. Stock Route Watering	311	§ 9. Papua and New Guinea—	
		1. Rainfall	322
		2. General	322

CHAPTER X.—TRADE.

§ 1. Introductory—		§ 7. Direction of Oversea Trade—	
Constitutional Powers	323	1. According to Countries	337
§ 2. Commonwealth Legislation affecting Oversea Trade—		2. According to Currency Areas	338
1. General	323	§ 8. Trade with the United Kingdom—	
2. The Customs Tariff	323	1. Statistical Classes	339
3. Primage Duties	324	2. Imports of Principal Articles	340
4. Tariff Board	324	3. Exports of Principal Articles of Australian Produce	345
5. Industries Preservation	325	4. Imports from the United Kingdom and Competing Countries	345
6. Trade Descriptions	325	§ 9. Trade with Eastern Countries—	
7. Import Controls	325	1. Merchandise Trade according to Countries	346
8. Export Control	327	2. Exports of Principal Articles	347
9. Trade Agreements	327	§ 10. Oversea Trade at Principal Ports	348
§ 3. Imperial Preference in the United Kingdom—		§ 11. Classified Summary of Australian Oversea Trade—	
1. Preferential Tariff of the United Kingdom	328	1. Statistical Classes	348
2. The Australia-United Kingdom Trade Agreement	329	2. Imports of Principal Articles	349
3. Developments since the Ottawa Agreement	330	3. Exports of Principal Articles of Australian Produce	350
§ 4. Trade Commissioner Service	332	4. Imports of Merchandise and Bullion and Specie	351
§ 5. Method of Recording Imports and Exports—		5. Exports of Merchandise and Bullion and Specie	351
1. Source of Statistics	333	6. Imports and Net Customs Revenue	351
2. Customs Area	333	§ 12. Ships' Stores	352
3. The Trade System	333	§ 13. Movement of Bullion and Specie—	
4. Statistical Classification of Imports and Exports	334	1. Imports and Exports	352
5. The Trade Year	334	2. Imports and Exports by Countries	353
6. Valuation	334	§ 14. Exports according to Industries—	
7. Inclusions and Exclusions	335	1. Classification	353
8. Countries to which Trade is Credited	335	2. Relative Importance of Industrial Groups	355
9. Pre-Federation Records	335		
§ 6. Total Oversea Trade—			
1. Including Gold	335		
2. Excluding Gold	336		

CHAPTER X.—TRADE—*continued.*

	PAGE		PAGE
§ 15. Australian Index of Export Prices—		§ 18. Excise	360
1. General	355	§ 19. Interstate Trade	361
2. Historical	355	§ 20. The Australian Balance of Payments—	
3. Present Indexes	355	1. General	362
4. Monthly Index (Fixed Weights) ..	356	2. Australia's Balance of Payments	
5. " " " (Changing Weights) 358		on Current Account	362
§ 16. External Trade of Australia and other		3. Australia's Balance of Payments on	
Countries—		Capital Account	364
1. Essentials of Comparison	359	4. Australia's Balance of Payments on	
2. "Special Trade" of Various Coun-		Current Account—Various Coun-	
tries	359	tries and Monetary Areas	364
§ 17. Oversea Trade in Calendar Years ..	360	5. Australia's Balance of Payments	
		with the Dollar Area	367

CHAPTER XI.—TRANSPORT AND COMMUNICATION.

PART I.—TRANSPORT.

A. SHIPPING.

§ 1. Control of Shipping—	
1. War-time Control	369
2. Post-war Control and Developments	369
§ 2. System of Record	370
§ 3. Oversea Shipping—	
1. Total Movement	370
2. Total Oversea Shipping, States	370
3. Shipping Communication with	
Various Countries	371
4. Nationality of Oversea Shipping ..	371
§ 4. Interstate Shipping—	
1. System of Record	372
2. Interstate Movement	373
3. Shipping Engaged Solely in Interstate	
Trade	374
4. Interstate and Coastal Shipping	
Services	375
§ 5. Shipping at Principal Ports—	
1. Total Shipping, Australia	375
2. Total Shipping—Australia, New	
Zealand and the United Kingdom	376
§ 6. Shipping Cargo—	
1. Oversea and Interstate Cargo ..	376
2. Oversea Cargo by Nationality of	
Vessels	382
§ 7. Vessels Built and Registered—	
1. Vessels Built	382
2. Vessels Registered	383
3. World Shipping Tonnage	383
§ 8. Miscellaneous—	
1. Lighthouses	383
2. Distances by Sea	384
3. Shipping Freight Rates	384
4. Depth of Water at Main Ports ..	384
5. Shipping Losses and Casualties ..	384
6. Commonwealth Navigation and	
Shipping Legislation	384
7. Ports and Harbours	384

B. GOVERNMENT RAILWAYS.

1. General	384
2. Railway Communication in Aus-	
tralia	385
3. Government Railways Development	385
4. Standardization of Railway Gauges	386
5. Grafton-South Brisbane (Uniform	
Gauge) Line	386
6. Mileage Open for Traffic, all Lines	386
7. Classification of Lines according to	
Gauge	387
8. Summary of Operations	387
9. Summary, States	387

B. GOVERNMENT RAILWAYS—*continued.*

10. Gross Revenue	388
11. Working Expenses	389
12. Net Revenue	391
13. Exchange	391
14. Traffic	392
15. Rolling Stock	396
16. Accidents	397
17. Consumption of Coal, Oil and Petrol	397
18. Staff Employed and Salaries and	
Wages Paid	397

C. TRAMWAY AND TROLLEY-BUS SERVICES.

1. Systems in Operation	398
2. Summary of Operations, Australia	399
3. Traffic and Accidents	399
4. State Details	399

D. MOTOR OMNIBUS SERVICES.

1. General	400
2. Government and Municipal Services	401
3. Private Services	402

E. FERRY (PASSENGER) SERVICES.

1. General	402
2. Summary of Operations	402

F. MOTOR VEHICLES.

1. Motor Industry	403
2. Taxi-cabs and other Hire Vehicles ..	403
3. Motor Omnibuses	403
4. Motor Vehicles on the Register, etc.	403
5. New Vehicles Registered	404
6. World Motor Vehicle Statistics ..	405
7. Survey of Motor Vehicles, 1947-48	405

G. ROAD TRAFFIC ACCIDENTS.

1. General	406
2. Total Accidents Recorded	406
3. Persons Killed or Injured in Road	
Traffic Accidents	408

H. AVIATION.

1. Historical	408
2. Foundation and Administration of	
Civil Aviation	409
3. International Activity	409
4. Regular Air Services within Aus-	
tralia	409
5. Air Ambulance Services	409
6. Training of Air Pilots	410
7. Gliding Clubs	410

CHAPTER XI.—TRANSPORT AND COMMUNICATION—*continued.*

PAGE	PAGE
H. AVIATION—<i>continued.</i>	
8. Aeronautical Telecommunications ..	410
9. Air Traffic Control ..	410
10. Meteorological Aids to Civil Aviation ..	410
11. Aircraft Parts and Materials ..	411
12. Aircraft Overhaul and Repair ..	411
13. Test and Examination of Aircraft Parts and Materials ..	411
14. Statistical Summaries ..	411
15. Territory of Papua and New Guinea	415
PART II.—COMMUNICATION.	
A. POSTS; TELEGRAPHS; TELEPHONES; CABLE AND RADIO COMMUNICATION.	
§ 1. General—	
1. The Postmaster-General's Department ..	415
2. Postal Facilities ..	416
3. Gross Revenue, Branches—Postmaster-General's Department ..	417
4. Expenditure, Postmaster-General's Department ..	417
5. Profit or Loss, Postmaster-General's Department ..	419
6. Fixed Assets ..	419
§ 2. Posts—	
1. Postal Matter Dealt With ..	419
2. Cash on Delivery Parcels Post ..	420
3. Total Cost of Carriage of Mails ..	421
4. Transactions of the Dead Letter Offices ..	421
5. Money Orders and Postal Notes ..	421
§ 3. Telegraphs—	
1. General ..	423
2. Telegraph and Telephone Mileage ..	424
3. Telegraph Offices ..	424
4. Telegrams Dispatched within Australia ..	424
CHAPTER XII.—EDUCATION.	
§ 1. Evolution of Educational Systems in Australia ..	
§ 2. Government Schools—	
1. Administration ..	435
2. The School System ..	435
3. The Educational Ladder ..	436
4. Examinations and Accrediting ..	437
5. Health Services to Schools ..	437
6. Guidance ..	438
7. Research ..	438
8. Atypical Children ..	438
9. Education of Native Children in Australia ..	438
10. Provision for Rural Areas ..	438
11. School Broadcasting in Australia ..	439
12. Teacher Training and Recruitment ..	439
13. School Buildings and Grounds ..	441
14. Equipment ..	441
15. Parent and Citizen Organizations ..	442
16. Statistics of Government Schools ..	442
§ 3. Non-Government Schools—	
1. Public Authority and the Non-Government Schools ..	445
2. Numbers of Non-Government Schools, Teachers and Enrolments ..	446
3. Growth of Non-Government Schools ..	446
4. The Organization of Roman Catholic Education ..	446
5. The Organization of Other Non-Government Education ..	447
A. POSTS; TELEGRAPHS; TELEPHONES; CABLE AND RADIO COMMUNICATION—<i>continued.</i>	
§ 4. Telephones—	
1. General ..	424
2. Summary ..	425
3. Subscribers' Lines and Calling Rates ..	425
4. Effective Paid Local Calls ..	426
5. Trunk Line Calls and Revenue ..	426
6. Oversea Telephone Services ..	426
7. Revenue from Telephones ..	427
8. World Telephone Statistics ..	427
§ 5. Cable and Radio Communication—	
1. General ..	427
2. Merging of Cable and Wireless Interests ..	427
3. Oversea Cable and Radio Traffic ..	427
4. Coast Stations ..	428
5. Radio - communication Stations Authorized ..	428
B. BROADCASTING AND TELEVISION.	
§ 1. Introductory—	
1. General ..	429
2. Legislation ..	429
3. The Australian Broadcasting Control Board ..	429
§ 2. Broadcasting—	
1. General ..	430
2. The National Broadcasting Service ..	430
3. The Commercial Broadcasting Service ..	433
4. Overseas Broadcasting Service ..	433
5. Broadcast Listeners' Licences ..	434
6. Radio-inductive Interference ..	434
7. Prosecutions under the Broadcasting Act ..	434
§ 3. Television—	
1. General ..	434
2. The National Television Service ..	434
3. The Commercial Television Service ..	434
§ 4. Pre-school Education—	
1. Types of Pre-school Centres ..	447
2. The Training of Teachers ..	447
3. Kindergarten of the Air ..	448
4. Kindergarten Unions ..	448
§ 5. Technical Education—	
1. General ..	448
2. Correspondence Training ..	449
3. Teacher Training ..	449
4. Colleges, Teachers and Students ..	450
5. Expenditure ..	450
§ 6. Commonwealth Activities ..	
§ 7. Australia and International Relations in Education ..	
§ 8. Universities—	
1. General ..	452
2. Expansion within the Universities ..	452
3. Courses ..	453
4. Research ..	453
5. Services ..	454
6. The Commonwealth and the Universities ..	454
7. Teaching and Research Staff ..	456
8. Students ..	456
9. University Income for General Activities ..	457

CHAPTER XII.—EDUCATION—*continued.*

	PAGE		PAGE
§ 8. Universities— <i>continued.</i>		§ 10. Libraries— <i>continued.</i>	
10. Principal University Benefactions ..	458	4. University Libraries ..	467
11. University Expenditure for General Activities ..	458	5. Children's Libraries and School Libraries ..	469
12. Funds for Special Purposes ..	458	6. Special Libraries ..	470
13. Degrees Conferred, etc. ..	459	7. Microfilms ..	470
§ 9. Further Education—		§ 11. Public Museums ..	470
1. General ..	460	§ 12. Public Art Galleries ..	471
2. Adult Education ..	460	§ 13. Scientific Societies—	
3. The New Education Fellowship ..	462	1. Royal Societies ..	471
4. Migrant Education ..	462	2. The Australian and New Zealand Association for the Advancement of Science ..	472
§ 10. Libraries—		3. Other Scientific Societies ..	472
1. General ..	462	§ 14. State Expenditure on Education, Science and Art ..	472
2. Commonwealth ..	463		
3. States ..	464		

CHAPTER XIII.—PUBLIC JUSTICE.

§ 1. Introduction ..	473	§ 4. Civil Courts—	
§ 2. Lower (Magistrates') Courts—		1. Lower Courts ..	480
1. Powers of the Magistrates ..	473	2. Higher Courts ..	481
2. Cases Tried at Magistrates' Courts ..	474	3. Divorce ..	481
3. Convictions at Magistrates' Courts ..	475	4. Bankruptcies ..	485
4. Convictions for Serious Crime at Magistrates' Courts ..	475	5. High Court of Australia ..	486
5. Committals to Higher Courts ..	476	6. Commonwealth Industrial Court ..	486
6. Drunkenness ..	477	§ 5. Police and Prisons—	
7. First Offenders ..	478	1. General ..	486
8. Children's Courts ..	479	2. Duties of the Police ..	486
§ 3. Higher (Judges') Courts—		3. Strength of Police Force ..	486
1. Convictions at Higher Courts ..	479	4. Prison Accommodation and Prisoners ..	487
2. Convictions at Higher Courts, 1939 and 1950 to 1954 ..	479	5. Prisoners in Gaol ..	487
3. Habitual Offenders ..	480	§ 6. Cost of Administration of Justice—	
4. Capital Punishment ..	480	1. Expenditure by the States ..	488
		2. Commonwealth Expenditure ..	488

CHAPTER XIV.—PUBLIC HEALTH AND RELATED INSTITUTIONS.

A. PUBLIC HEALTH—STATE GOVERNMENT ACTIVITIES.		B. PUBLIC HEALTH—COMMONWEALTH GOVERNMENT ACTIVITIES— <i>continued.</i>	
§ 1. Public Health Legislation and Administration—		§ 3. Commonwealth Laboratories and Research Institutions—	
1-8. States and Territories ..	489-493	1. National Health and Medical Research Council ..	504
§ 2. Supervision and Care of Infant Life—		2. Commonwealth Serum Laboratories ..	505
1. General ..	493	3. The Commonwealth Health Laboratories ..	505
2. Government Activities ..	494	4. Commonwealth Acoustic Laboratories ..	506
3. Nursing Activities ..	494	5. Commonwealth X-ray and Radium Laboratory ..	506
§ 3. Medical Inspection of School Children—		6. The School of Public Health and Tropical Medicine ..	507
1. General ..	494	7. Commonwealth Bureau of Dental Standards ..	508
2-8. States and Australian Capital Territory ..	494-497	8. The Australian Institute of Anatomy ..	508
§ 4. Inspection and Sale of Food and Drugs ..	497	§ 4. Control of Infectious and Contagious Diseases—	
§ 5. Supervision of Dairies, Milk Supply, etc. ..	497	1. General ..	509
§ 6. Disposal of the Dead by Cremation ..	498	2. Quarantine ..	509
B. PUBLIC HEALTH—COMMONWEALTH GOVERNMENT ACTIVITIES.		3. Notifiable Diseases ..	511
§ . General ..	498	§ 5. Commonwealth Grants to Organizations Associated with Public Health—	
§ 2. National Health Benefits—		1. General ..	512
1. Pharmaceutical Benefits ..	498	2. Lady Gowrie Child Centres ..	513
2. Hospital Benefits ..	498	3. National Fitness ..	513
3. Medical Benefits ..	500	4. Royal Flying Doctor Service of Australia ..	514
4. Pensioner Medical Service ..	501	5. The Red Cross Blood Transfusion Service ..	514
5. Anti-Tuberculosis Campaign ..	501		
6. Anti-Poliomyelitis Campaign ..	502		
7. Free Milk for School Children Scheme ..	504		

CHAPTER XIV.—PUBLIC HEALTH AND RELATED INSTITUTIONS—*continued.*

C. INSTITUTIONS.		PAGE			PAGE
§ 1. General		514	§ 3. Leper Hospitals		517
§ 2. Public Hospitals (other than Mental Hospitals)—			§ 4. Mental Hospitals—		
1. General		515	1. General		517
2. Number, Staff and Accommodation		515	2. Hospitals, Staff, etc.		517
3. In-Patients (Cases) Treated		515	3. Patients		517
4. Revenue and Expenditure		516	4. Revenue and Expenditure		518
5. Summary		516	5. Summary for Australia		519
			6. Number of Mental Patients		520

CHAPTER XV.—WELFARE SERVICES.

A. COMMONWEALTH SOCIAL SERVICE BENEFITS.			B. OTHER SERVICES.		
§ 1. Introduction		521	§ 1. Benevolent Homes—		
§ 2. Commonwealth Expenditure on Social and Health Services		522	1. General		536
§ 3. Age and Invalid Pensions		523	2. Principal Institutions		536
§ 4. Commonwealth Rehabilitation Service		525	3. Revenue and Expenditure		536
§ 5. Funeral Benefits		526	4. The Aged Persons Homes Act		537
§ 6. Maternity Allowances		529	§ 2. Orphanages, Industrial Schools, etc.—		
§ 7. Child Endowment		530	1. General		538
§ 8. Widows' Pensions		532	2. Principal Institutions		538
§ 9. Unemployment, Sickness and Special Benefits		533	3. Children under Government Authority		538
§ 10. Reciprocal Agreements with Other Countries—			§ 3. Protection of Aborigines		539
1. New Zealand		536	§ 4. Lifesaving		539
2. United Kingdom		536	§ 5. Royal Humane Society		539
			§ 6. The Order of St. John		539
			§ 7. Other Charitable Institutions		540

CHAPTER XVI.—POPULATION.

§ 1. Population Statistics		541	§ 7. General Characteristics—		
§ 2. The Census—			1. Sex Distribution		559
1. Census-taking		542	2. Age Distribution		559
2. Population recorded at Censuses		542	3. Conjugal Condition		565
3. Increase since 1881 Census		542	4. Birthplace		566
§ 3. Growth and Distribution of Population—			5. Period of Residence in Australia		567
1. Growth of Population		543	6. Nationality		567
2. Present Numbers		544	7. Religion		568
3. Proportion of Area and Population, Density and Masculinity		544	8. Industry		569
4. Urban and Rural Distribution		545	9. Occupational Status		571
5. Capital Cities: Australia and Other Countries		547	10. Other General Characteristics		571
6. Principal Urban Areas		548	§ 8. Oversea Migration—		
7. Urban Areas Outside Metropolitan Areas		549	1. Oversea Migration during the Present Century		571
8. Principal Cities in the World		550	2. Classes of Arrivals and Departures		572
§ 4. Mean Population—			3. Extent of Journey		573
1. General		550	4. Racial Origin		574
2. Method of Calculation		550	5. Nationality		574
3. Results		551	6. Age Distribution		575
§ 5. Elements of Increase—			7. Conjugal Condition		575
1. Natural Increase		551	8. Occupation		576
2. Net Migration		554	§ 9. Assisted Migration into Australia—		
3. Total Increase		555	1. Joint Commonwealth and States Scheme		576
4. Rate of Population Growth		556	2. United Kingdom Free and Assisted Passage Agreements, March, 1946		576
§ 6. Density—			3. Child Migration from the United Kingdom		577
1. General		557	4. Assisted Passage Scheme, Eire		577
2. Main Countries of the World		558	5. Maltese Migration		577
			6. Empire and Allied Ex-Servicemen's Scheme		578

CHAPTER XVI.—POPULATION—*continued.*

	PAGE		PAGE
§ 9. Assisted Migration into Australia— <i>continued.</i>		§ 10. The Regulation of Immigration into Australia—	
7. Displaced Persons Scheme ..	578	1. Powers and Legislation of the Commonwealth ..	580
8. Netherlands Migration ..	578	2. Conditions of Immigration into Australia ..	581
9. Italian Migration ..	578	3. Racial Origin and Nationality of Persons Arriving ..	581
10. German Migration ..	578	§ 11. Passports ..	581
11. Austrian Migration ..	579	§ 12. Citizenship and Naturalization—	
12. Greek Migration ..	579	1. Commonwealth Legislation ..	582
13. Migration from Trieste ..	579	2. Certificates Granted ..	582
14. Hungarian Migration ..	579	§ 13. Population of External Territories ..	583
15. General Assisted Passage Scheme ..	579	§ 14. The Aboriginal Population of Australia ..	583
16. Summary of Arrivals of Assisted Migrants ..	579		

CHAPTER XVII.—VITAL STATISTICS.

§ 1. Provisions for Registration and Compilation of Statistics ..	585	§ 4. Fertility and Reproduction— <i>continued.</i>	
§ 2. Marriages—		10. Masculinity of Live Births ..	595
1. Number of Marriages ..	586	11. Ex-nuptial Live Births ..	595
2. Crude Marriage Rates ..	586	12. Legitimations ..	596
3. Marriage Rates based on Marriageable Population ..	587	13. Multiple Births ..	596
4. Crude Marriage Rates of Various Countries ..	587	14. Ages of Parents ..	601
5. Age and Conjugal Condition at Marriage ..	587	15. Birthplaces of Parents ..	601
6. Previous Conjugal Condition ..	588	16. Occupation of Fathers ..	601
7. Birthplaces of Persons Marrying ..	589	17. Age, Duration of Marriage and Issue of Mothers ..	601
8. Occupation of Bridegrooms ..	589	18. Nuptial First Births ..	603
9. Celebration of Marriages ..	589	19. Stillbirths ..	604
§ 3. Divorces ..	590	§ 5. Mortality—	
§ 4. Fertility and Reproduction—		1. Number of Deaths ..	605
1. Introductory ..	590	2. Crude Death Rates ..	606
2. Number of Live Births and Confinements ..	590	3. Standardized Death Rates ..	607
3. Crude Birth Rates ..	591	4. True Death Rates ..	607
4. Crude Birth Rates of Various Countries ..	592	5. Crude Death Rates of Various Countries ..	608
5. Fertility Rates ..	592	6. True Death Rates of Various Countries ..	608
6. Age-specific Fertility Rates for Females ..	593	7. Australian Life Tables ..	609
7. Gross and Net Reproduction Rates for Females ..	593	8. Infant Deaths and Death Rates ..	610
8. Gross and Net Reproduction Rates of Various Countries ..	594	9. Age Distribution ..	615
9. Fertility of Marriages ..	595	10. Causes of Death ..	617
		11. Deaths from Principal Causes ..	621
		12. Age at Death of Deceased Married Males and Females, and Issue ..	625
		13. Age at Marriage of Deceased Males and Females, and Issue ..	625
		§ 6. Vital Statistics of External Territories ..	626

CHAPTER XVIII.—HOUSING.

§ 1. Introduction—		§ 3. Statistical Summary—New Building—	
1. General ..	627	1. General ..	636
2. Number of Dwellings, Censuses 1911 to 1954 ..	627	2. New Houses ..	637
§ 2. Government Assistance to Housing since 1945—		3. New Flats ..	639
1. Agreements between the Commonwealth and State Governments ..	627	4. Value of New Buildings ..	640
2. Imported Houses ..	630	5. Persons engaged in New Building ..	642
3. Housing Schemes in Commonwealth Territories ..	630	§ 4. Census Dwellings—	
4. Other Housing Schemes in the States ..	630	1. Number of Dwellings ..	643
5. War Service Homes ..	635	2. Class of Dwelling ..	644
6. Other Forms of Government Assistance ..	636	3. Population According to Class of Dwelling, etc. ..	645
		4. Occupied Private Dwellings ..	646

CHAPTER XIX.—LOCAL GOVERNMENT.

	PAGE		PAGE
§ 1. Introduction—		§ 4. Roads and Bridge —	
1. Local Government Authorities ..	657	1. Commonwealth Government Grants ..	667
2. Semi-Governmental Authorities ..	657	2-7. States	668-676
3. Roads, Bridges, etc. ..	657	8. Summary of Roads used for General Traffic	677
4. Water Supply and Sewerage ..	658	9. Summary of Expenditure on Roads and Bridges	678
5. Harbours	658		
6. Fire Brigades	658	§ 5. Water Supply, Sewerage and Drainage—	
7. Other Local or Semi-Governmental Activity	658	1-6. States	679-692
§ 2. Local Government Authorities—		§ 6. Harbour Boards and Trusts—	
1-6. States	658	1-6. States	693-697
7. Area, Population, Dwellings and Value of Ratable Property	659	§ 7. Fire Brigades—	
8. Finances	659	1-6. States	698-700
§ 3. Local and Semi-Governmental Authorities' Debt—			
1. General	664		
2. Local and Semi-Governmental Authorities' Debt	664		

CHAPTER XX.—PRIVATE FINANCE.

A. CURRENCY.		C. COMPANIES.	
§ 1. General	701	§ 1. Trustee, Executor and Agency Companies ..	727
§ 2. Coinage—		§ 2. Building and Investment Societies—	
1. Coins in Circulation	701	1. Summary	727
2. Issues of Australian Coins	701	2. Liabilities and Assets	728
3. Profits on Coinage of Silver and Bronze	702	3. Co-operative Housing Societies, Victoria	728
4. Australian Mints	702	§ 3. Co-operative Societies	729
5. Price of Gold	703		
§ 3. Notes—		D. INSURANCE.	
1. General	703	§ 1. Introductory—	
2. The Australian Note Issue	703	1. Legislation	729
		2. Insurance Act 1932-1937	730
		3. Life Insurance Act 1945-1953	730
		4. Deposits under Insurance Acts	730
		§ 2. Life Assurance—	
		1. General	730
		2. Offices Transacting Business	733
		3. Australian Business—Policies in Existence	733
		4. New Policies Issued in Australia	735
		5. Policies Matured or Otherwise Discontinued in Australia	736
		6. Premiums and Claims, Australia	738
		7. Total Revenue and Expenditure	741
		8. Liabilities and Assets	742
		9. Loans	745
		§ 3. Fire, Marine and General Insurance—	
		1. General	746
		2. States	746
		3. Classes of Insurance	747
		E. FRIENDLY SOCIETIES.	
		1. General	747
		2. Societies, Members and Revenue	747
		F. PROBATES AND LETTERS OF ADMINISTRATION	748
		G. LOTTERIES AND BETTING.	
		§ 1. Lotteries	749
		§ 2. Betting	750
		H. GOVERNMENT, SEMI-GOVERNMENTAL AND PARLIAMENTARY PENSION AND SUPERANNUATION SCHEMES.	
		§ 1. Government and Semi-Governmental Pension and Superannuation Schemes	751
		§ 2. Parliamentary Pension and Superannuation Schemes	752

CHAPTER XXI.—PUBLIC FINANCE.

	PAGE		PAGE
A. COMMONWEALTH FINANCE.		C. COMMONWEALTH AND STATE FINANCE.	
§ 1. General—		1. Revenue and Expenditure ..	793
1. Financial Provisions of the Constitution ..	753	2. Taxation ..	794
2. Accounts of the Commonwealth Government ..	753		
§ 2. Commonwealth Consolidated Revenue Fund—		D. COMMONWEALTH AND STATE PUBLIC DEBT.	
I.—NATURE OF FUND.		§ 1. General ..	795
1. Provisions of the Constitution ..	753	§ 2. The Financial Agreement between the Commonwealth and the States—	
2. Annual Results of Transactions ..	753	1. General ..	795
II.—REVENUE.		2. Australian Loan Council ..	795
1. General ..	754	3. Loan Raisings for the Commonwealth and States ..	795
2. Taxation ..	755	4. Taking over of State Public Debts ..	795
3. Business Undertakings ..	761	5. Transferred Properties ..	796
4. Other Sources of Revenue ..	762	6. Payment of Interest ..	796
III.—EXPENDITURE.		7. Sinking Fund ..	796
1. Details of Expenditure from Consolidated Revenue ..	762	8. Borrowing by Semi-Governmental Authorities ..	797
2. Defence Services ..	763	§ 3. Commonwealth and State Public Debt Outstanding—	
3. War and Repatriation Services ..	764	1. Public Debt, Annual Interest Payable and Average Rate of Interest ..	797
4. Subsidies and Bounties ..	767	2. Public Debt and Annual Interest Payable ..	799
5. Total Cost of Departments ..	768	3. State Public Debt and Annual Interest Payable ..	799
6. National Welfare Fund ..	771	4. State Public Debt ..	800
7. National Debt Sinking Fund ..	772	5. Public Debt and Interest Payable in Australian Currency ..	801
8. Business Undertakings ..	772	6. Public Debt at each Rate of Interest ..	802
9. Territories ..	773	7. Dates of Maturity ..	802
10. Capital Works and Services ..	774	8. Short-term Debt ..	804
11. Payments to or for the States ..	775	9. State and Municipal and Semi-Governmental Authority Public Debt ..	804
12. Other Expenditure ..	778	§ 4. Commonwealth Loan Raisings—	
§ 3. Commonwealth Trust Funds—		1. New Loans Raised ..	805
1. Receipts, Expenditure and Balances ..	779	2. Conversion and Redemption Loans ..	806
2. Summary ..	779	3. International Bank for Reconstruction and Development Loans ..	807
§ 4. Commonwealth Loan Fund ..	780	4. Swiss Loan ..	808
		5. Summary of Loan Transactions ..	808
B. STATE FINANCE.		§ 5. National Debt Sinking Fund—	
§ 1. General—		1. Commonwealth Public Debt ..	809
1. Functions of State Governments ..	780	2. State Public Debt ..	809
2. Accounts of State Governments ..	781		
3. Inter-relation of Commonwealth and State Finances ..	781	E. TAXES ON INCOME.	
§ 2. State Consolidated Revenue Funds—		1. General ..	810
I.—REVENUE.		2. Present Taxes ..	810
1. General ..	781	3. Assessable Income ..	810
2. Revenue Received ..	782	4. Concessional Deductions ..	811
3. Sources of Revenue ..	782	5. Effective Exemptions from Tax ..	812
II.—EXPENDITURE.		6. Rates of Income Tax and Social Services Contribution on Individuals ..	812
1. General ..	787	7. The Income Tax (International Agreements) Act, 1953 ..	813
2. Total Expenditure ..	788	8. Taxes on Specified Incomes ..	813
3. Details of Expenditure ..	788	9. Pay-as-you-earn ..	815
III.—SURPLUS REVENUE.	790	10. Lodgment of Returns and Assessment of Tax ..	815
§ 3. State Trust Funds ..	790	11. Company Income Taxes ..	815
§ 4. State Loan Funds—		12. Yield of Income Taxes ..	817
1. General ..	790		
2. Gross Loan Expenditure ..	791		
3. Total Loan Expenditure ..	792		

CHAPTER XXII.—AGRICULTURAL PRODUCTION.

	PAGE		PAGE
§ 1. Introductory	821	§ 8. Rice	852
§ 2. Progress of Agriculture—		§ 9. Sorghum for Grain	853
1. Early Records	821	§10. Potatoes—	
2. Progress of Cultivation	822	1. Area, Production and Yield per Acre	854
3. Area under Sown Pastures	822	2. Gross Value of Potato Crop	855
4. Australian Agricultural Council	822	3. Consumption	855
§ 3. Distribution, Production and Value of Crops—		4. Marketing	855
1. Area of Crops in States and Territories	823	5. Exports	855
2. Relative Areas of Crops in States and Territories	824	§ 11. Onions—	
3. Area of Principal Crops in Australia	825	1. Area, Production and Yield per Acre	855
4. Weights and Measures	825	2. Gross Value of Onion Crop	856
5. Production of Crops in States and Territories	826	3. Consumption	856
6. Production of Principal Crops in Australia	827	4. Imports and Exports	857
7. Yield per Acre of Principal Crops in Australia	827	§ 12. Hay—	
8. Gross Value of Principal Crops in Australia	827	1. General	857
9. Value of Production and Indexes of Price and Quantum of Production	828	2. Value of Hay Crop	858
§ 4. Wheat—		3. Farm Stocks of Hay	858
1. Royal Commission on the Wheat Industry	829	4. Imports and Exports	858
2. Wheat Costs of Production Committee	830	§ 13. Green Fodder—	
3. Licensing of Areas Sown to Wheat, and Acreages Sown	830	1. Nature and Extent	858
4. Legislation Relating to Wheat Industry	830	2. Value of Green Fodder Crops	859
5. Marketing of Wheat	835	§ 14. Sugar-cane—	
6. International Wheat Agreements	836	1. Area	859
7. Wheat Farms	836	2. Productive and Unproductive Cane	860
8. Area, Production and Yield per Acre	837	3. Production of Cane and Sugar	860
9. Varieties of Wheat Sown	838	4. Average Production of Cane Sugar	860
10. F.A.Q. Standard of Wheat	839	5. Quality of Cane	861
11. Price of Wheat	839	6. Production and Utilization	861
12. Value of the Wheat Crop	840	7. Consumption in Factories	861
13. Production and Disposal of Wheat in Australia	840	8. Control of Cane Production in Queensland	862
14. Exports of Wheat and Flour	840	9. Sugar Agreement in Australia—	
15. Stocks of Wheat and Flour	842	Embargo on Imports, etc.	862
16. Bulk Handling and Storage of Wheat in Australia	842	10. International Sugar Agreement	862
17. World Area and Production of Wheat	843	11. Net Return for Sugar Crop	862
18. Exports—Principal Countries	844	12. Exports of Sugar	863
19. Imports—Principal Countries	845	13. Sugar By-Products	863
§ 5. Oats—		14. Sugar Prices	863
1. Area, Production and Yield per Acre	846	15. Marketing Arrangements	863
2. Price of Oats	846	16. Fruit Industry Sugar Concession Committee and Sugar Rebates	864
3. Value of Oat Crop	847	17. Sugar Inquiry Committee	864
4. Imports and Exports	847	18. Bulk Handling of Sugar	864
5. Oatmeal, etc.	847	§ 15. Vineyards—	
6. World Production	847	1. Progress of Cultivation	864
§ 6. Maize—		2. Imports and Exports of Wine	865
1. States Growing Maize	847	3. Oversea Marketing of Wine	866
2. Area, Production and Yield per Acre	847	4. Other Viticultural Products	866
3. Price of Maize	848	5. Production and Disposal of Dried Vine Fruit	866
4. Value of Crop	848	6. Post war Contracts	867
5. Exports of Maize and Maize Products	848	7. Oversea Marketing of Dried Fruits	867
6. World Production	849	§ 16. Orchards and Fruit-Gardens—	
§ 7. Barley—		1. Area	867
1. Area, Production and Yield per Acre	849	2. Varieties of Crops	868
2. Australian Barley Board	850	3. Principal Fruit Crops	869
3. Prices	851	4. Production of Jams and Jellies and Preserved Fruit	869
4. Value of Barley Crop	851	5. Consumption of Fruit and Fruit Products	870
5. Exports	851	6. Imports and Exports of Fruit	870
6. Malt	852	7. Marketing of Apples and Pears	871
7. World Production	852	8. Oversea Marketing of Canned Fruit	871
		§ 17. Vegetables for Human Consumption—	
		1. Area and Production of Fresh Vegetables	871
		2. Production of Canned and Dehydrated Vegetables	872
		3. Imports and Exports of Vegetables	872
		4. Consumption of Vegetables	872

CHAPTER XXII.—AGRICULTURAL PRODUCTION—*continued.*

	PAGE		PAGE
§ 18. Tobacco—		§ 25. Ensilage—	
1. States, Area and Production ..	872	1. Government Assistance in Production ..	879
2. The Tobacco Industry ..	872	2. Quantity Made and Stocks held on Farms ..	879
3. Oversea Trade ..	873		
§ 19. Hops ..	874	§ 26. Agricultural Colleges and Experimental Farms ..	880
§ 20. Flax ..	874		
§ 21. Peanuts ..	876	§ 27. Tractors on Rural Holdings ..	880
§ 22. Cotton—		§ 28. Number and Area of Rural Holdings and Employment thereon—	
1. General ..	876	1. Number and Area ..	881
2. Area and Production ..	876	2. Special Tabulation Relating to Rural Holdings ..	882
3. Consumption of Raw Cotton ..	877	3. Employment on Rural Holdings ..	882
§ 23. Financial Assistance to Primary Producers ..	877	4. Salaries and Wages Paid to Employees on Rural Holdings ..	884
§ 24. Fertilizers—			
1. General ..	878		
2. Imports and Exports ..	878		
3. Quantities Used Locally ..	878		
4. Local Production ..	879		

CHAPTER XXIII.—PASTORAL PRODUCTION.

§ 1. Initiation and Growth of Pastoral Industry—		§ 5. Wool—	
1. Livestock Numbers ..	885	1. General ..	898
2. Minor Classes of Livestock ..	885	2. Greasy and Scoured Wool ..	898
3. Carrying Capacity of Pastoral Holdings ..	885	3. Production ..	898
4. Value of Pastoral Production ..	886	4. Care Needed in Comparing Clips ..	901
5. Indexes of Quantum and Price of Pastoral Production ..	887	5. Average Weights of Fleeces Shorn ..	901
6. Consumption of Meats ..	887	6. Wool Classified according to Quality ..	902
7. Marketing of Meat ..	888	7. World Sheep Population and Wool Production ..	902
§ 2. Horses—		8. War-time Contracts ..	903
1. Distribution throughout Australia ..	889	9. Australian Wool Realization Commission ..	903
2. Oversea Trade in Horses ..	889	10. Australian Wool Bureau ..	904
§ 3. Cattle—		11. Marketing of Wool ..	904
1. Purposes for which Raised ..	889	12. Wool Publicity and Research ..	905
2. Distribution throughout Australia ..	890	13. Consumption of Wool ..	905
3. Classification of Cattle According to Purpose ..	890	14. Exports of Wool ..	906
4. Size Classifications of Cattle Herds ..	891	15. Local Sales of Wool ..	908
5. Comparison with other Countries ..	891	16. Stocks of Wool ..	908
6. Imports and Exports of Cattle ..	891	17. Price ..	908
7. Cattle Slaughtered ..	892	18. Value ..	913
8. Production of Beef and Veal ..	892	19. United Kingdom Importation of Wool ..	913
9. Consumption of Beef and Veal ..	892	20. Principal Importing Countries and Sources of Supply ..	913
10. Exports of Frozen Beef and Veal ..	893	§ 6. Trade in Hides and Skins—	
§ 4. Sheep—		1. Extent of Trade ..	914
1. Initiation of the Pastoral Industry ..	894	2. Sheepskins with Wool ..	914
2. Movement in Sheep Numbers in Australia ..	894	3. Sheepskins without Wool ..	914
3. Distribution throughout Australia ..	894	4. Hides ..	915
4. Classification of Sheep According to Age, Sex and Breed ..	895	5. Furred Skins ..	915
5. Numbers of Sheep on Rural Holdings ..	895	6. Marketing of Hides and Skins ..	916
6. Comparison with other Countries ..	895	§ 7. Tallow and Lard—	
7. Oversea Imports and Exports of Sheep ..	895	1. Production ..	917
8. Sheep Slaughtered ..	896	2. Consumption of Tallow in Factories ..	917
9. Production of Mutton and Lamb ..	896	3. Exports of Tallow and Lard ..	917
10. Consumption of Mutton and Lamb ..	896	4. Marketing of Tallow ..	918
11. Exports of Frozen Mutton and Lamb ..	897	§ 8. Net Exports of Principal Pastoral Products ..	918

CHAPTER XXIV.—FARMYARD, DAIRY AND BEE PRODUCTS.

	PAGE		PAGE
§ 1. Introductory—		§ 4. Pigs and Pig Products—	
1. General	919	1. Pigs	934
2. Mixed Farming	919	2. Size of Pig Herds	934
3. Employment	919	3. Pigs Slaughtered	935
4. Growth of the Dairying Industry	920	4. Pork	935
5. Official Supervision of Dairying Industry	920	5. Bacon and Ham	936
6. Australian Agricultural Council	920	6. United Kingdom Contracts	936
§ 2. Value of Farmyard, Dairy and Bee Production and Indexes of Price and Quantum of Production—		7. Oversea Trade in Pigs and Pig Products	936
1. Gross Value of Farmyard, Dairy and Bee Production	920	§ 5. Poultry-Farming—	
2. Gross and Net Values	921	1. General	937
3. Net Value of Production	922	2. Numbers of Poultry	937
4. Indexes of Quantum and Price of Farmyard, Dairy and Bee Production	923	3. Recorded Production and Disposal of Eggs	937
§ 3. Dairy Cattle and Dairy Products—		4. Production and Consumption of Eggs	938
1. Dairy Herds	923	5. Marketing of Eggs	938
2. Size of Dairy Herds	925	6. Oversea Trade in Poultry Products	939
3. Factory System	925	§ 6. Bee-Farming—	
4. Butter and Cheese—Stabilization Schemes	925	1. Production of Honey and Bees-wax	939
5. Commonwealth Subsidies	925	2. Oversea Trade in Bee Products	940
6. Total Dairy Production	927	§ 7. Exports of Australian Farmyard, Dairy and Bee Products	940
7. Whole Milk	928	§ 8. Imports of Dairy and Farmyard Products into United Kingdom—	
8. Butter Production	929	1. Summary, Principal Products	941
9. Cheese Production	930	2. Butter	942
10. Condensed, Concentrated and Powdered, etc., Milk Production	931	3. Cheese	942
11. Local Consumption of Butter and Cheese	932	4. Bacon	942
12. Marketing of Dairy Products	932	5. Pork	942
13. Oversea Trade in Butter, Cheese and Milk	933	6. Eggs	942
		7. Milk Products	942
		8. Other Products	942

CHAPTER XXV.—FORESTRY.

§ 1. General—		§ 5. Forestry Production—	
1. Objects of Forestry	943	1. Timber	950
2. General Account of Forests and Timbers	943	2. Wood Pulp and Paper	951
3. Extent of Forests	944	3. Other Forest Products	952
4. Forest Reservations	945	4. Value of Production	953
5. Plantations	946	5. Employment	954
6. Fire Protection	946	§ 6. Imports and Exports of Timber and Tanning Substances—	
§ 2. Forestry Activities of the Commonwealth—		1. Imports of Timber, Veneers and Plywood	955
1. Prior to 1925	947	2. Exports of Timber, Railway Sleepers, Veneers and Plywood	955
2. Forestry and Timber Bureau	947	3. Classification of Imports and Exports	956
3. Commercial Forests	948		
4. Forest Products Research	949		
§ 3. Forest Conferences	949		
§ 4. State Forestry Departments—			
1. Functions	949		
2. Forest Reservations	949		
3. Employment	950		

CHAPTER XXVI.—FISHERIES.

§ 1. General—		§ 4. Inquiries and Research—	
1. Fish Resources	957	1. General	963
2. Fishing Areas	957	2. Commonwealth Scientific and Industrial Research Organization, Division of Fisheries and Oceanography	963
3. Fishing Boats and Equipment	958	3. Commonwealth Fisheries Office	963
4. Administration	958	4. North Australia Development Committee	963
§ 2. Development and Present Condition of the Fishery—		5. Whaling	963
1. Fisheries Proper	958	§ 5. The Fishing and Whaling Industry—Statistics—	
2. Crustaceans and Molluscs	961	1. Fisheries	964
3. Pearl-shell and Trochus	961	2. Whaling	966
§ 3. Marketing and Distribution—		3. Value of Production	966
1. Marketing	962	4. Fish Preserving	967
2. Consumption of Fish	962	5. State Revenue from Fisheries	968
3. Processing, including Canning	962	§ 6. Oversea Trade in Fishery Products—	
4. By-products	963	1. Imports of Fish	968
		2. Exports of Fish	968
		3. Exports of Pearl and other Shell	968

CHAPTER XXVII.—MINERAL INDUSTRY.

	PAGE		PAGE
§ 1. The Mineral Wealth of Australia—		§ 7. Other Metallic Minerals—	
1. Place of Mining in Australian Development	969	1. Tungsten	993
2. Extent of Mineral Wealth	969	2. Mineral Sands	994
3. Standardization of Mineral Statistics	969	3. Cadmium and Cobalt	994
4. Quantity and Value of Minerals Produced	970	4. Manganese	995
5. Mine Production of Principal Metals and Production of Coal and Sulphur	973	5. Other	995
6. Value of Output and Value of Production for Mining and Quarrying	973	§ 8. Coal—	
7. Industrial Census of the Mining and Quarrying Industry, 1954 and 1955	976	1. Total Production of Coal	995
§ 2. Gold—		2. Production of Coal in each State	997
1. Discovery in Various States	979	3. Production in Principal Countries	999
2. Production	979	4. Exports	999
3. Sources of Production	980	5. Consumption in Australia	999
4. Refinery Production	981	6. Coal Value at the Mine in New South Wales	1000
5. Changes in Stocks of Gold held in Australia	981	7. Values in New South Wales, Great Britain and the United States of America	1000
6. Production in Principal Countries	982	8. Employment in Coal-mines	1001
7. Employment in Gold Mining	982	9. Production of Black Coal per Man-shift	1001
8. Assistance to Gold Mining Industry	982	10. Joint Coal Board	1002
§ 3. Silver, Lead and Zinc—		§ 9. Coke and Other By-products from Coal—	
1. Production	983	1. Coke	1002
2. Sources of Production	984	2. Other By-products from Coal	1002
3. Production and Sales of Refined Silver, Lead and Zinc	985	§ 10. Mineral Oils—	
4. Silver, Lead and Zinc: Production in Principal Countries and World Total	985	1. Australia	1003
5. Prices of Silver, Lead and Zinc	986	2. New South Wales	1003
6. Employment in Silver, Lead and Zinc Mining	987	3. Victoria	1003
§ 4. Copper—		4. Queensland	1003
1. Production	987	5. South Australia	1003
2. Sources of Production	987	6. Western Australia	1003
3. Production and Sales of Refined Copper	988	7. Northern Territory	1003
4. Production in Principal Countries and World Total	988	8. Papua	1003
5. Prices	989	9. General	1003
6. Employment in Copper-mining	989	§ 11. Sulphur	1003
§ 5. Tin—		§ 12. Non-metallic Minerals—	
1. Production	989	1. Asbestos	1004
2. Sources of Production	990	2. Clays	1005
3. Production of Refined Tin	990	3. Gypsum	1005
4. Production in Principal Countries and World Total	990	4. Limestone	1005
5. Prices	991	5. Magnesite	1006
6. Employment in Tin Mining	991	6. Mica	1006
§ 6. Iron—		7. Salt	1006
1. General	991	8. Other Non-metallic Minerals	1006
2. Production	991	§ 13. Persons Engaged, Wages Paid and Accidents in Mining—	
3. Production of Iron and Steel	992	1. Total Employment in Mining	1007
§ 7. Other Metallic Minerals—		2. Salaries and Wages Paid in Mining	1008
1. Tungsten	993	3. Accidents in Mining	1008
2. Mineral Sands	994	§ 14. Oversea Trade in Minerals and Metals	1009
3. Cadmium and Cobalt	994	§ 15. Government Aid to Mining, and Mineral Control—	
4. Manganese	995	1. Aid to Mining	1010
5. Other	995	2. Control of Minerals	1012

CHAPTER XXVIII.—DEFENCE.

	PAGE		PAGE
§ 1. Department of Defence—		§ 4. Air Defence—	
1. Introduction .. ..	..1013	1. General .. ..	..1024
2. Functions and Organization ..	..1013	2. Operations in Korea and Malaya ..	..1024
3. Basis of Current Defence Policy ..	..1014	3. Administration and Organization ..	..1024
4. The Defence Programme ..	..1014	4. Aircraft .. ..	..1025
5. Australian Forces Serving Overseas	..1015	5. Establishment .. ..	..1025
6. National Service Training ..	..1016	6. Strength of Royal Australian Air Force ..	..1025
§ 2. Naval Defence—		7. Women's Royal Australian Air Force ..	..1025
1. General .. ..	..1017	§ 5. War Gratuities .. ..	..1026
2. Naval Board .. ..	..1017	§ 6. Department of Defence Production—	
3. Strength of the Fleet .. ..	..1017	1. General .. ..	..1026
4. Personnel .. ..	..1017	2. Functions of the Department and Act Administered ..	..1026
5. Women's Royal Australian Naval Service ..	..1017	3. Production .. ..	..1026
6. Strength of Royal Australian Navy	..1017	4. Defence Production Planning ..	..1028
7. Reserve and National Service Training ..	..1017	5. Finance and Accounts ..	..1028
8. Fleet Air Arm .. ..	..1018	§ 7. Department of Supply—	
9. Ship Construction and Repair ..	..1018	1. General .. ..	..1029
10. The Relation of New Weapons ..	..1018	2. Functions of the Department ..	..1029
11. Naval College .. ..	..1018	3. Acts Administered .. ..	..1029
12. Training Establishments .. ..	..1018	4. Research and Development Branch ..	..1029
13. The Australia Naval Station ..	..1018	5. Design and Inspection Branch ..	..1030
14. Foreign Service .. ..	..1018	6. Contract Board .. ..	..1030
15. Papua and New Guinea Division of the Royal Australian Navy ..	..1019	7. Tinsplate .. ..	..1031
16. Ships of the Royal Australian Navy	..1019	8. Stores and Transport Branch ..	..1031
§ 3. Military Defence—		9. Finance Branch .. ..	..1031
1. State Systems .. ..	..1020	10. Australian Aluminium Production Commission ..	..1032
2. Commonwealth Systems .. ..	..1020		
3. Strength of Australian Military Forces .. ..	..1024		

CHAPTER XXIX.—REPATRIATION.

§ 1. General .. ..	..1033	§ 4. Medical Treatment of Returned Soldiers Suffering from War Service Disabilities .. ..	..1041
§ 2. War Pensions—		§ 5. General Benefits and Miscellaneous—	
1. General .. ..	..1034	1. Other Departmental Activities ..	..1041
2. Appeals Tribunals .. ..	..1035	2. Expenditure by the Repatriation Commission .. ..	..1043
3. Summary of War Pensions ..	..1035	3. Settlement of Returned Service Personnel on the Land ..	..1043
4. Classes of War Pensions, Australia	..1036	4. The Services Canteens Trust Fund	..1043
5. Number of War Pensioners and Annual Liability, States, etc. ..	..1036		
6. Summary of War Pensions ..	..1038		
§ 3. Service Pensions—			
1. General .. ..	..1039		
2. Operations .. ..	..1040		
3. Number of Service Pensioners and Amount Paid .. ..	..1040		

CHAPTER XXX.—MISCELLANEOUS.

§ 1. Valuation of Australian Production—		§ 5. Copyright—	
1. General .. ..	..1047	1. Legislation .. ..	..1058
2. Value of Production, Australia ..	..1048	2. Applications and Registrations ..	..1059
3. Net Value of Production, States ..	..1048	3. Revenue .. ..	..1059
4. Net Value of Production, Australia	..1049	§ 6. Australian Shipbuilding Board—	
§ 2. Indexes of Production—		1. Constitution .. ..	..1059
1. Farm Production Price Indexes ..	..1049	2. Functions .. ..	..1059
2. Indexes of Quantum of Farm Production ..	..1051	3. Construction Programme ..	..1060
3. Farm Products for Food Use: Indexes of Quantum of Production, Exports and Consumption ..	..1052	§ 7. Commonwealth Scientific and Industrial Research Organization—	
§ 3. Consumption of Foodstuffs and Beverages—		1. General .. ..	..1060
1. Quantities Consumed .. ..	..1052	2. Science and Industry Research Act 1949 .. ..	..1060
2. Level of Nutrient Intake .. ..	..1056	3. Science and Industry Endowment Act 1926-1949 .. ..	..1060
§ 4. Patents, Trade Marks and Designs—		4. Work of the Organization .. ..	..1060
1. Patents .. ..	..1057		
2. Trade Marks and Designs .. ..	..1058		
3. Revenue .. ..	..1058		

CHAPTER XXX.—MISCELLANEOUS—*continued.*

	PAGE		PAGE
§ 8. Mount Stromlo Observatory—		§ 15. The United Nations—	
1. General ..	1062	1. General ..	1068
2. Foundation of Observatory ..	1062	2. General Assembly ..	1069
3. Site of Observatory ..	1062	3. The Security Council ..	1069
4. Equipment ..	1062	4. The Economic and Social Council ..	1069
5. Functions of Observatory ..	1062	5. The Trusteeship Council ..	1069
6. International Co-operation ..	1062	6. The International Court of Justice ..	1070
§ 9. Standards Association of Australia ..	1062	7. The Secretariat ..	1070
§ 10. Film Censorship Board—		8. Specialized Agencies ..	1070
1. Legislation ..	1063	§ 16. Australian Representation Abroad:	
2. Import of Films ..	1064	Oversea Representation in Australia—	
3. Export of Films ..	1064	1. General ..	1070
§ 11. Australian National Film Board and the		2. Australian Representation Overseas	1070
Film Division—		3. Oversea Representation in Australia	1072
1. The Australian National Film Board	1064	§ 17. Retail Trade—	
2. The Film Division of the News and		1. General ..	1073
Information Bureau ..	1065	2. Value of Retail Sales in Each Com-	
§ 12. National Safety Council of Australia ..	1065	modity Group, Australia ..	1073
§ 13. Australian Road Safety Council—		3. Takings for Certain Services, Aus-	
1. Origin and Organization ..	1066	tralia ..	1074
2. Mode of Operation ..	1066	4. Number of Establishments with Sales	
§ 14. Australian Atomic Energy Commission ..	1067	in each Commodity Group, States	1074
		5. Value of Retail Sales of Goods in	
		each Commodity Group, States ..	1075
		6. Number of Retail Establishments	
		and Value of Retail Sales Classi-	
		fied According to Main Type of	
		Business, States ..	1076
		7. Takings for Certain Services, States	1078

CHAPTER XXXI.—STATISTICAL ORGANIZATION AND SOURCES OF INFORMATION.

§ 1. Statistical Organization in Australia—		§ 2. Statistical Publications of Australia—	
1. Early Development of Australian		1. General ..	1082
Statistics ..	1079	2. Commonwealth Publications ..	1082
2. Creation of the Commonwealth		3. State Publications ..	1084
Bureau of Census and Statistics ..	1079	§ 3. The Third Conference of British Com-	
3. Integration of Statistical Services ..	1079	wealth Statisticians, Canberra, 1951 ..	1084
4. Scope of the Commonwealth Bureau		§ 4. Select List of Works about, or published	
of Census and Statistics ..	1080	in, Australia ..	1084
5. Relation of the Bureau to other			
Commonwealth Departments ..	1081		

DIARY OF PRINCIPAL ECONOMIC EVENTS, 1953 TO 1956 (p. 1100).

CHRONOLOGICAL TABLE OF CHIEF EVENTS, 1788 TO 1956 (p. 1111).

STATISTICAL SUMMARY, 1891-92 TO 1955-56 (p. 1123).

APPENDIX.

Chapter II.—Physiography—		Chapter VI.—Labour, Wages and Prices—	
§ 2. Climate and Meteorology of Australia—		A. RETAIL PRICES AND PRICE	
Rainfall: Australian Capital Cities ..	1127	INDEXES—	
Chapter III.—General Government—		§ 4. Tabular Statements of Retail Price	
§ 1. Scheme of Parliamentary Government—		Index Numbers—	
Commonwealth Parliamentary Al-		The Interim Retail Price Index ..	1128
lowances ..	1127	§ 5. The "C" Series Retail Price Index—	
§ 2. Parliaments and Elections—		"C" Series Retail Price Index, Six	
State Parliaments ..	1127	Capital Cities ..	1130
§ 3. Administration and Legislation—		B. WHOLESALE PRICES AND PRICE	
Governors and State Ministers ..	1127	INDEXES—	
Leaders of the Opposition, Common-		§ 2. Wholesale Price (Basic Materials and	
wealth and State Parliaments ..	1128	Foodstuffs) Index—	
§ 5. Cost of Parliamentary Government ..	1128	Index Numbers ..	1131

APPENDIX—*continued.*

PAGE	PAGE
Chapter VI.—Labour, Wages and Prices— <i>continued.</i>	Chapter XI.—Transport and Communication— <i>continued.</i>
D. WAGES—	PART II.—COMMUNICATION.
§ 2. Rates of Wage and Hours of Labour—	A. POSTS; TELEGRAPHS; TELEPHONES;
Weekly Rates of Wage .. .. .1132	CABLE AND RADIO COMMUNI-
§ 3. Average Weekly Wage Earnings—	CATION—
Average Weekly Total Wages Paid	§ 5. Cable and Radio Communication—
and Average Earnings .. .. .1132	Radio-communication Stations
§ 4. Basic Wages in Australia—	Authorized .. .. .1143
Basic Wage Inquiry, 1956-57 ..1132	B. BROADCASTING AND TELEVISION—
State Basic Wage Rates .. .. .1133	§ 2. Broadcasting—
E. EMPLOYMENT AND UNEMPLOYMENT—	Broadcasting Stations .. .. .1143
§ 1. Employment—	Broadcast Listeners' Licences ..1143
Wage and Salary Farmers in Civilian	§ 3. Television .. .. .1143
Employment .. .. .1134	Chapter XII.—Education—
Government Employees .. .. .1134	§ 2. Government Schools—
§ 4. Industrial Disputes—	Number of Schools, Teachers and
States and Territories .. .. .1134	Pupils .. .. .1143
G. LABOUR ORGANIZATIONS—	Average Enrolment and Attendance
§ 1. Labour Organizations in Australia—	of Pupils .. .. .1144
Trade Unions .. .. .1135	Expenditure on Government Schools1144
Chapter VII.—Manufacturing Industry—	Chapter XIII.—Public Justice—
Summary .. .. .1135	§ 2. Lower (Magistrates') Courts, § 3. Higher
Value of Production in Classes of	(Judges') Courts, § 4. Civil Courts,
Industry .. .. .1136	§ 5. Police and Prisons—
Chapter X.—Trade—	Convictions, Bankruptcies, Police,
§ 6. Total Oversea Trade—	Prisons .. .. .1145
Summary of Movements .. .. .1136	Chapter XIV.—Public Health and Related
§ 7. Direction of Oversea Trade—	Institutions—
According to Countries .. .. .1136	C. INSTITUTIONS—
According to Monetary Areas ..1137	§ 2. Public Hospitals (other than Mental
§ 11. Classified Summary of Australian	Hospitals)—
Oversea Trade—	Number, Staff, etc. .. .. .1145
Imports and Exports in Statistical	Chapter XV.—Welfare Services—
Classes .. .. .1137	A. COMMONWEALTH SOCIAL SERVICE
Exports of Principal Articles of	BENEFITS—
Australian Produce .. .. .1138	§ 2. Commonwealth Expenditure on Social
§ 15. Australian Index of Export Prices—	and Health Services—
Monthly Index (Fixed Weights) ..1139	States .. .. .1146
§ 20. The Australian Balance of Payments—	§ 3. Age and Invalid Pensions, § 6. Maternity
Australia's Balance of Payments on	Allowances, § 7. Child Endowment,
Current and Capital Account ..1139	§ 8. Widows' Pensions, and § 9. Un-
Australia's Balance of Payments on	employment, Sickness and Special
Current Account—Various Coun-	Benefits—
tries and Monetary Areas ..1140	General .. .. .1147
Australia's Balance of Payments with	Chapter XVI.—Population—
the Dollar Area .. .. .1141	§ 3. Growth and Distribution of Population—
Chapter XI.—Transport and Communication—	Growth of Population .. .. .1148
PART I.—TRANSPORT.	§ 4. Mean Population .. .. .1148
F. MOTOR VEHICLES—	§ 7. General Characteristics—
Motor Vehicle Registrations ..1142	Age Distribution .. .. .1148
G. ROAD TRAFFIC ACCIDENTS—	§ 12. Citizenship and Naturalization—
Total Accidents Recorded ..1142	Certificates Granted .. .. .1148

APPENDIX—*continued.*

	PAGE		PAGE
Chapter XVII.—Vital Statistics—		Chapter XX.—Private Finance—<i>continued.</i>	
§ 2. Marriages—		D. INSURANCE—	
Age and Conjugal Condition at		§ 2. Life Assurance—	
Marriage .. .. .	..1148	Life Assurance .. .. .	..1155
Celebration of Marriages ..	..1149		
§ 4. Fertility and Reproduction—		Chapter XXI.—Public Finance—	
Number of Live Births and Confinements .. .. .	..1150	A. COMMONWEALTH FINANCE—	
Masculinity of Live Births .. .. .	..1150	Consolidated Revenue Fund ..	..1156
Ex-nuptial Live Births .. .. .	..1150		
§ 5. Mortality—		C. COMMONWEALTH AND STATE FINANCE—	
Infant Deaths and Mortality Rates	1151	Revenue and Expenditure ..	..1157
Age Distribution .. .. .	..1151		
Causes of Death .. .. .	..1152	D. COMMONWEALTH AND STATE PUBLIC DEBT—	
Chapter XVIII.—Housing—		§ 3. Commonwealth and State Public Debt Outstanding—	
§ 3. Statistical Summary—New Building—		Public Debt and Annual Interest Payable .. .. .	..1157
New Houses .. .. .	..1153		
New Flats .. .. .	..1153	§ 4. Commonwealth Loan Raisings—	
Value of New Buildings .. .. .	..1153	Loans Raised .. .. .	..1159
Persons Engaged in New Building ..	..1154		
Chapter XX.—Private Finance—		Chapter XXII.—Agricultural Production—	
A. CURRENCY—		§ 3. Distribution, Production and Value of Crops—	
§ 2. Coinage—		Principal Crops .. .. .	..1160
Issues of Australian Coins ..	..1154		
§ 3. Notes—		Chapter XXIII.—Pastoral Production—	
The Australian Note Issue ..	..1154	Livestock and Meat Produced ..	..1160
B. BANKING—			
§ 1. Cheque-paying Banks—		Chapter XXIV.—Farmyard, Dairy and Bee Products—	
Commonwealth Bank .. .. .	..1154	Principal Farmyard, Dairy and Bee Products .. .. .	..1161
Commonwealth Trading Bank ..	..1154		
Private Trading Banks .. .. .	..1154	Chapter XXVI.—Mineral Industry—	
Classification of Advances within Australia—Commonwealth Trading Bank and Private Trading Banks .. .. .	..1155	§ 1. The Mineral Wealth of Australia—	
Clearing House Returns .. .. .	..1155	Quantity and Value of Production ..	..1161
Debits to Customers' Accounts—All Cheque-paying Banks .. .. .	..1155		
§ 2. Savings Banks—		§ 2. Gold, § 3. Silver, Lead, Zinc, § 4. Copper, § 5. Tin .. .. .	..1162
All Savings Banks .. .. .	..1155		

LIST OF SPECIAL ARTICLES AND MISCELLANEOUS MATTER CONTAINED IN PREVIOUS ISSUES (p. 1163).

GENERAL INDEX (p. 1168).

OFFICIAL YEAR BOOK

OF THE

COMMONWEALTH OF AUSTRALIA.

CHAPTER I.

DISCOVERY, COLONIZATION AND FEDERATION OF AUSTRALIA.

§ 1. Early Knowledge and Discovery of Australia.

1. **Introduction.**—The following paragraphs contain only a bare outline of the more important facts relating to the early history of Australian discovery. A more detailed summary of these facts may be found in Official Year Book No. 39 (*see* page 1) and earlier issues.

2. **Terra Australis.**—There was, apparently, an early Chaldean tradition as to the existence of an Austral land to the south of India and rumours to that effect found their way in the course of time to Europe. References to this *Terra Australis* are found in the works of Ælianus (A.D. 205–234), Manilius (probably a contemporary of Augustus or Tiberius Caesar), and Ptolemy (A.D. 107–161). Evidence pointing to knowledge of such a land appeared in maps and manuscripts of the Middle Ages and the fourteenth and fifteenth centuries, but there is no definite evidence connecting this so-called *Terra Australis* with Australia.

Reference by Marco Polo (1254–1324) to a land called Locac, and several indications on maps and globes in the fifteenth and sixteenth centuries have been assumed to relate to Australia, but little weight can now be attached to these suppositions. Cornelius Wytfliet's map of 1597, however, indicates roughly the eastern and western coasts of Australia, as well as the Gulf of Carpentaria, although the oft-quoted passage in his *Descriptionis Ptolemaicæ Augmentum* describing the *Australis Terra* has been considered to have had its origin in the voyages through the Straits of Magellan and the discovery of Tierra del Fuego rather than that of Australia.

3. **Discovery of Australia.**—(i) *The Spaniards.* Disregarding the suggestion, for which there is no evidence, that the Arabs had come to Australia long before the Portuguese, the Spaniards or the Dutch, and apart from the possibility that the Portuguese may have discovered part of the Australian coast before 1542, the coastal exploration of Australia may be taken as having begun with the Spaniards and the Dutch.

In 1606, the Spaniard Quiros, on reaching the island that has retained the name of Espiritu Santo (the largest island of the New Hebrides group), thought he had discovered the great land of the south, and therefore named the group *La Australia del Espiritu Santo*. After leaving the New Hebrides, Quiros sailed eastward, but Torres, his second-in-command, took a westerly course, and passed through the strait that now bears his name. In all probability he sighted the Australian continent, but no mention of it is made in his records. This voyage marks the close of Spanish activity in the work of discovery in the South Seas.

(ii) *The Dutch.* The Dutch discovered Australia when the Dutch East India Company sent the *Duyfken* from Bantam, Java, to explore the islands of New Guinea. During March, 1606, the *Duyfken* coasted along the southern shores of New Guinea, and followed the west coast of Cape York peninsula as far as Cape Keer-Weer (Turn Again).

During the following thirty years, there were nine visits of Dutch navigators to Australian waters; by 1636, through their efforts, the coast of Australia from Cape York westward around to the Great Australian Bight had been discovered.

In 1642, Abel Janszoon Tasman set out from Batavia to ascertain the extent of the great southern continent. He named Van Diemen's Land, imagining it to be part of Australia proper, and sailing north-easterly discovered New Zealand and returned to Batavia. In his second voyage in 1644, Tasman visited the northern coast of Australia, sailing round the Gulf of Carpentaria and along the north-west coast as far south as the tropic of Capricorn. This voyage of Tasman's may be said to have ended the period of Dutch discoveries, although there were subsequent visits by the Dutch to Australia (de Vlamingh in 1696 and Van Delft in 1705).

4. **Discoveries by the English.**—In the meantime, the English had made their first appearance on the Australian coast in 1688, when the north-westerly shores were visited by William Dampier, as supercargo of the *Cygnets*, a trading vessel whose crew had turned buccaneers. In 1699, he again visited Australia, in command of H.M.S. *Roebuck*, and on his return to England published an account in which a description is given of trees, flowers, birds and reptiles observed, and of encounters with natives.

At the end of the seventeenth century, it was uncertain whether Tasmania and New Zealand were parts of Australia, or whether they were separated from it, but themselves formed part of a great Antarctic Continent. Lieutenant (later Captain) James Cook's first voyage, though primarily undertaken for the purpose of observing the transit of Venus from Tahiti, had also the objective of ascertaining whether the unexplored part of the southern hemisphere was only an immense mass of water or contained another continent. In command of H.M.S. *Endeavour*, a barque of 370 tons burden, carrying about 85 persons, and accompanied by Sir Joseph Banks the botanist, Dr. Solander the naturalist, Green the astronomer, draughtsmen and servants, Cook, after observing the transit of Venus at Tahiti, turned towards New Zealand, sighting that land on 7th October, 1769, in the neighbourhood of Poverty Bay. Circumnavigating the North and South Islands, he proved that New Zealand was connected neither with the supposed Antarctic Continent nor with Australia, and took formal possession thereof in the name of the British Crown. On 20th April, 1770, at 6 a.m., Cook sighted the Australian mainland at a place he called Point Hicks, naming it after his first-lieutenant, who first saw it. Coasting northwards, Botany Bay was discovered on 29th April, 1770. The *Endeavour* dropped anchor and Cook landed on the same day. Cook sailed along the coast in a northerly direction for nearly 1,300 miles until 11th June, 1770, when the *Endeavour* was seriously damaged by striking a coral reef in the vicinity of Trinity Bay. Repairs occupied nearly two months and the *Endeavour* then again set her course to the north, sailing through Torres Strait and anchoring in the Downs on 13th July, 1771. In 1772, Cook was put in command of the ships *Resolution* and *Adventure*, with a view to ascertaining whether a great southern continent existed. Having satisfied himself that, even if it did, it lay so far to the south as to be useless for trade and settlement, he returned to England in 1774. Cook's last voyage was undertaken in 1776, and he met his death on 14th February, 1779, by which date practically the whole coast of Australia had been explored. The only remaining discovery of importance was the existence of a channel between Tasmania and Australia. This was made by Bass and Flinders in 1798.

§ 2. The Annexation of Australia.

1. **Annexation of Eastern Part of Australia, 1770.**—Although representatives of the nations mentioned in the previous section landed or claimed to have landed on the shores of Australia on various occasions during the sixteenth and seventeenth centuries, it was not until 23rd August, 1770 that the history of Australia was brought into definite political connexion with Western civilization. It was on that date that Captain Cook took possession "of the whole eastern coast, from latitude 38° to this place, latitude 10½° S., in right of His Majesty King George the Third." Cook, however, proclaimed British sovereignty over only what are now the eastern parts of New South Wales and Queensland, and formal possession, on behalf of the British Crown, of the whole of the eastern part of the Australian continent and Tasmania was not taken until 26th January, 1788. It was on this last date that Captain Phillip's commission, first issued to him on 12th October, 1786, and amplified on 2nd April, 1787, was read to the people whom he had brought with him in the "First Fleet."

A full historical account of the period referred to may be found in the *Historical Records of New South Wales* Vol. 1., parts 1 and 2.

2. **Original Extent of New South Wales.**—The commission appointed Phillip “ Captain-General and Governor-in-Chief in and over our territory called New South Wales, extending from the Northern Cape or extremity of the coast called Cape York, in the latitude of ten degrees thirty-seven minutes south, to the southern extremity of the said territory of New South Wales or South Cape, in the latitude of forty-three degrees thirty-nine minutes south, and of all the country inland westward as far as the one hundred and thirty-fifth degree of east longitude reckoning from the meridian of Greenwich, including all the islands adjacent in the Pacific Ocean within the latitudes aforesaid of ten degrees thirty-seven minutes south and forty-three degrees thirty-nine minutes south.”

Although in November, 1769, Captain Cook had taken possession of the North Island of New Zealand, and in January, 1770, also of the South Island, it is doubtful whether, at the time when Captain Phillip’s commission was drawn up, New Zealand was considered as one of the “ islands adjacent in the Pacific Ocean.” The fact that under the Supreme Court Act (Imperial) of 1823 British residents in New Zealand were brought under the jurisdiction of the Court at Sydney, and that in 1839 there was a proposal on the part of the British Government to appoint a consul in New Zealand, would leave this an open question, as nothing more than extra-territorial jurisdiction may have been intended. Various hoistings of flags notwithstanding, New Zealand does not appear to have become British territory unequivocally until 1840. In that year, on 29th January, Captain Hobson arrived at the Bay of Islands. On the following day, he read the commission, which extended the boundaries of the Colony of New South Wales so as to embrace and comprehend the islands of New Zealand. On 5th February, the Treaty of Waitangi, made with the native chiefs, was signed. Finally, on 21st May, British sovereignty over the islands of New Zealand was explicitly proclaimed.

3. **Extension of New South Wales Westward, 1825.**—On 17th February, 1824, Earl Bathurst notified Sir Thomas Brisbane that he had recommended to His Majesty the dispatch of a ship of war to the north-west coast of New Holland for the purpose of taking possession of the coast between the western coast of Bathurst Island and the eastern side of Coburg Peninsula. Captain James J. Gordon Bremer of H.M.S. *Tamar*, who was selected for the purpose, took possession on 20th September, 1824, of the coast from the 135th to the 129th degree of east longitude. On 16th July, 1825, the whole territory between those boundaries was described in Darling’s commission as being within the boundaries of New South Wales, thus increasing its area by 518,134 square miles, and making it, including New Zealand and excluding Tasmania, 2,076,308 square miles, or also excluding New Zealand, 1,972,446 square miles.

4. **Annexation of Western Australia, 1827.**—An expedition under Major Lockyer, sent by Lieutenant-General Sir Ralph Darling, then Governor of New South Wales, to found a settlement at King George Sound, sailed from Sydney on 9th November, 1826, landed at the Sound on 26th December following, and on 21st January, 1827, hoisted the British flag. Captain Stirling, in command of H.M.S. *Success*, arrived at Sydney a few weeks after the departure of the expedition to King George Sound. He obtained the Governor’s permission to visit Swan River with a view to seizing a position on the western coast and reporting upon its suitability as a place of settlement. Captain Stirling left Sydney on 17th January, 1827, and on his return in the following April submitted a glowing report on what he described as a “ rich and romantic country,” urging its occupation for the purpose of settlement. He left for England in July, 1827, continuing his advocacy— notwithstanding much discouragement—with unabated enthusiasm. He was at last successful, the result being mainly due to the formation of an association of prospective settlers having capital at their disposal. He was appointed Lieutenant-Governor and with a party of settlers arrived at Garden Island, near the Swan River, in the ship *Parmelia* in June, 1829. On the 2nd of the preceding month Captain Fremantle, in command of H.M.S. *Challenge*, arrived and hoisted the British flag on the south head of Swan River, again asserting possession of “ all that part of New Holland, which is not included within the territory of New South Wales.” Thus, before the middle of 1829, the whole territory now known as the Commonwealth of Australia had been constituted a dependency of the United Kingdom.

§ 3. The Exploration of Australia.

A summary of the more important facts relating to the exploration of Australia was embodied in this Chapter in issues of the Official Year Book up to and including No. 22.

§ 4. The Creation of the Several Colonies.

1. **New South Wales.**—In Governor Phillip's commission of 1786, the mainland of Australia was divided by the 135th meridian of east longitude into two parts. The earliest colonists believed that the present State of Tasmania was actually joined to the mainland, and it was not till 1798 that the contrary was known. In that year, Bass and Flinders proved that it was an island by sailing through Bass Strait. The territory of New South Wales, as originally constituted, and of New Zealand, which may be included although Cook's annexation was not properly given effect to until 1840, consisted of 1,584,389 square miles. A further area of 518,134 square miles was added in 1825, when the western boundary was extended to the 129th meridian. The territory was subsequently reduced by the separation of various areas to form the other colonies, and at the time of the establishment of the Commonwealth the area of New South Wales was 310,372 square miles.

Lord Howe Island, which is a dependency of New South Wales and for political purposes is included in one of the electorates of Sydney, is situated in latitude 31° 30' south, longitude 159° 5' east, about 436 miles north-east of Sydney, and has an area of 3,220 acres. The climate is mild and the rainfall abundant, but on account of the rocky formation of its surface only about 300 acres are suitable for cultivation, most of which are devoted to the production of *Kentia* palm seed. The land belongs to the Crown and is occupied rent-free on sufferance.

Discovered in 1788, the Island was first settled by a small party of Maoris in 1853; afterwards a colony was settled from Sydney. A Board of Control at Sydney manages the affairs of the Island and supervises the palm seed industry. The population was 278 at the Census of 30th June, 1954.

2. **Tasmania.**—In 1825, Van Diemen's Land, as Tasmania was then called, was politically separated from New South Wales, being constituted a separate colony on 14th June of that year. The area of the colony was 26,215 square miles.

Macquarie Island, about 1,000 miles south-east of Hobart, together with a few rocky islets nearby, has been a dependency of Tasmania since the nineteenth century. In December, 1911, five members of the Australian National Antarctic Expedition landed on the island and remained there until 1915. On 3rd March, 1948, another party was landed to man a new base and this has since been maintained as a scientific base. The island is about 21 miles long and 2 miles wide.

3. **Western Australia.**—The territory westward of the 129th meridian, comprising 975,920 square miles, was constituted a colony under the name of Western Australia in June, 1829. It was always distinct and independent of New South Wales, though until 1831 the settlement on King George Sound remained under that jurisdiction.

4. **South Australia.**—On 15th August, 1834, the Act 4 and 5 William IV., cap. 95, was passed, creating South Australia a "province," and towards the end of the year 1836 settlement took place. The first Governor, Captain Hindmarsh, R.N., arrived at Holdfast Bay on 28th December, 1836, and on the same day the new colony was officially proclaimed. The new colony embraced 309,850 square miles of territory, lying south of the 26th parallel of south latitude, and between the 141st and 132nd meridians of east longitude. On 10th December, 1861, by the authority of the Imperial Act 24 and 25 Vict., cap. 44, the western boundary of South Australia was extended to coincide with the eastern boundary of Western Australia, namely, the 129th meridian. The area of the extension was approximately 70,220 square miles. Nearly two years later, on 6th July, 1863, the Northern Territory comprising 523,620 square miles was, by letters patent, brought under the jurisdiction of South Australia, which thereupon controlled an area of 903,690 square miles.

5. **New Zealand.**—New Zealand, nominally annexed by Captain Cook and formally declared by proclamation in 1840 as a dependency of New South Wales, was, by letters patent of 16th November of that year, constituted a separate colony under the powers of the Act 3 and 4 Vict., cap. 62, of 7th August, 1840. Proclamation of the separation was made on 3rd May, 1841. The area of the colony was 103,862 square miles.

6. **Victoria.**—In 1851, what was known as the "Port Phillip District" of New South Wales was constituted the colony of Victoria, "bounded on the north and north-west by a straight line drawn from Cape Howe to the nearest source of the River Murray and thence by the course of that river to the eastern boundary of the colony of South Australia." The area of the new colony was 87,884 square miles, and its separate existence took effect from 1st July, 1851, upon the issuing of the writs for the first election of elective members of the Legislative Council.

7. **Queensland.**—The northern squatting districts of Moreton, Darling Downs, Burnett, Wide Bay, Maranoa, Leichhardt and Port Curtis, together with the reputed county of Stanley, were granted an independent administration and formed into a distinct colony

under the name of Queensland by letters patent dated 6th June, 1859, although separation from New South Wales was not completed until 10th December of the same year, upon the assumption of office of the first Governor. The territory comprised in the new colony was "so much of the colony of New South Wales as lies northwards of a line commencing on the sea-coast at Point Danger in latitude about 28° 8' south, running westward along the Macpherson and Dividing Ranges and the Dumaresq River to the MacIntyre River, thence downward to the 29th parallel of south latitude, and following that parallel westerly to the 141st meridian of east longitude, which is the eastern boundary of South Australia, together with all the adjacent islands, their members, and appurtenances in the Pacific Ocean". The area of the colony thus constituted was 554,300 square miles. By letters patent dated 13th March, 1861, forwarded by the Colonial Secretary to the Governor of Queensland on 12th April, 1862, the area of Queensland was increased by the annexation of "so much of the colony of New South Wales as lies to the northward of the 26th parallel of south latitude, and between the 141st and 138th meridians of east longitude, together with all and every the adjacent islands, their members, and appurtenances, in the Gulf of Carpentaria." With this addition the area of Queensland became 670,500 square miles.

§ 5. The Establishment of the Commonwealth of Australia.

1. **General.**—On 1st January, 1901, the colonies mentioned, with the exception of New Zealand, were federated under the name of the "Commonwealth of Australia," the designation of "Colonies"—except in the case of the Northern Territory, to which the designation "Territory" is applied—being at the same time changed into that of "States".

2. **Transfer of the Northern Territory to the Commonwealth.**—On 7th December, 1907, the Commonwealth and the State of South Australia entered into an agreement for the surrender to and acceptance by the Commonwealth of the Northern Territory, subject to approval by the Parliaments of the Commonwealth and the State. This approval was given by the South Australian Parliament under The Northern Territory Surrender Act 1907 (assented to on 14th May, 1908), and by the Commonwealth Parliament under the Northern Territory Acceptance Act 1910 (assented to on 16th November, 1910). The Territory was formally transferred to the Commonwealth on 1st January, 1911, and became the Northern Territory of Australia.

3. **Transfer of the Australian Capital Territory to the Commonwealth.**—On 18th October, 1909, the Commonwealth and the State of New South Wales entered into an agreement for the surrender to and acceptance by the Commonwealth of an area of 911 square miles as the Seat of Government of the Commonwealth. In December, 1909, Acts were passed by the Commonwealth and New South Wales Parliaments approving the agreement, and on 5th December, 1910, a proclamation was issued vesting the Territory in the Commonwealth on and from 1st January, 1911. By the Jervis Bay Territory Acceptance Act 1915, an area of 28 square miles at Jervis Bay, surrendered by New South Wales according to an agreement made in 1913, was accepted by the Commonwealth, and was transferred as from 4th September, 1915.

4. **Present Composition of the Commonwealth.**—The total area of the Commonwealth of Australia is 2,974,581 square miles. The dates of creation and the areas of its component States and Territories, as determined on the final adjustment of their boundaries, are shown below:—

THE COMMONWEALTH OF AUSTRALIA: AREA, ETC., OF COMPONENT STATES AND TERRITORIES.

State or Territory.	Year of Formation into Separate Colony or Territory.	Present Area in Square Miles.	State or Territory.	Year of Formation into Separate Colony or Territory.	Present Area in Square Miles.
New South Wales	1786	309,433	Northern Territory	1863	523,620
Victoria	1851	87,884	Australian Capital Territory ..	1911	939
Queensland ..	1859	670,500			
South Australia ..	1834	380,070			
Western Australia ..	1829	975,920			
Tasmania ..	1825	26,215	Commonwealth of Australia ..	..	2,974,581

§ 6. The Constitutions of the States and of the Commonwealth.

1. **General.**—Information regarding the development of the Constitutions of the various Colonies (now States), together with a brief history of the Federal movement in Australia, was embodied in this Chapter in issues of the Official Year Book up to No. 22.

2. **Commonwealth Constitution Act.**—The Commonwealth of Australia Constitution Act, 63 and 64 Vict., Chapter 12, namely: "An Act to constitute the Commonwealth of Australia," as amended by the Constitution Alteration (Senate Elections) 1906, the Constitution Alteration (State Debts) 1909, the Constitution Alteration (State Debts) 1928, and the Constitution Alteration (Social Services) 1946, is given *in extenso* hereunder, and the text contains all the alterations of the Constitution which have been made up to and including 31st December, 1956.

THE COMMONWEALTH OF AUSTRALIA CONSTITUTION ACT, 63 & 64 VICT., CHAPTER 12.

An Act to constitute the Commonwealth of Australia. [9th July, 1900.]

WHEREAS the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, humbly relying on the blessing of Almighty God, have agreed to unite in one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland, and under the Constitution hereby established:

And whereas it is expedient to provide for the admission into the Commonwealth of other Australial Colonies and possessions of the Queen:

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1. This Act may be cited as the Commonwealth of Australia Constitution Act.
2. The provisions of this Act referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom.
3. It shall be lawful for the Queen, with the advice of the Privy Council, to declare by proclamation that, on and after a day therein appointed, not being later than one year after the passing of this Act, the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, and also, if Her Majesty is satisfied that the people of Western Australia have agreed thereto, of Western Australia, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia. But the Queen may, at any time after the proclamation, appoint a Governor-General for the Commonwealth.
4. The Commonwealth shall be established, and the Constitution of the Commonwealth shall take effect, on and after the day so appointed. But the Parliaments of the several colonies may at any time after the passing of this Act make any such laws, to come into operation on the day so appointed, as they might have made if the Constitution had taken effect at the passing of this Act.
5. This Act, and all laws made by the Parliament of the Commonwealth under the Constitution, shall be binding on the courts, judges, and people of every State and of every part of the Commonwealth, notwithstanding anything in the laws of any State; and the laws of the Commonwealth shall be in force on all British ships, the Queen's ships of war excepted, whose first port of clearance and whose port of destination are in the Commonwealth.

6. "The Commonwealth" shall mean the Commonwealth of Australia as established under this Act.

"The States" shall mean such of the colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the northern territory of South Australia, as for the time being are parts of the Commonwealth, and such colonies or territories as may be admitted into or established by the Commonwealth as States; and each of such parts of the Commonwealth shall be called "a State."

"Original States" shall mean such States as are parts of the Commonwealth at its establishment.

7. The Federal Council of Australasia Act, 1885, is hereby repealed, but so as not to affect any laws passed by the Federal Council of Australasia and in force at the establishment of the Commonwealth.

Any such law may be repealed as to any State by the Parliament of the Commonwealth, or as to any colony not being a State by the Parliament thereof.

8. After the passing of this Act the Colonial Boundaries Act, 1895, shall not apply to any colony which becomes a State of the Commonwealth; but the Commonwealth shall be taken to be a self-governing colony for the purposes of that Act.

9. The Constitution of the Commonwealth shall be as follows:—

THE CONSTITUTION.

This Constitution is divided as follows:—

- Chapter I.—The Parliament:
 - Part I.—General:
 - Part II.—The Senate:
 - Part III.—The House of Representatives:
 - Part IV.—Both Houses of the Parliament:
 - Part V.—Powers of the Parliament:
- Chapter II.—The Executive Government:
- Chapter III.—The Judicature:
- Chapter IV.—Finance and Trade:
- Chapter V.—The States:
- Chapter VI.—New States:
- Chapter VII.—Miscellaneous:
- Chapter VIII.—Alteration of the Constitution.
- The Schedule.

CHAPTER I.—THE PARLIAMENT.

PART I.—GENERAL.

1. The legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives, and which is hereinafter called “The Parliament,” or “The Parliament of the Commonwealth.”

2. A Governor-General appointed by the Queen shall be Her Majesty’s representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen’s pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him.

3. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salary of the Governor-General, an annual sum which, until the Parliament otherwise provides, shall be ten thousand pounds.

The salary of a Governor-General shall not be altered during his continuance in office.

4. The provisions of this Constitution relating to the Governor-General extend and apply to the Governor-General for the time being, or such person as the Queen may appoint to administer the Government of the Commonwealth; but no such person shall be entitled to receive any salary from the Commonwealth in respect of any other office during his administration of the Government of the Commonwealth.

5. The Governor-General may appoint such times for holding the sessions of the Parliament as he thinks fit, and may also from time to time, by Proclamation or otherwise, prorogue the Parliament, and may in like manner dissolve the House of Representatives.

After any general election the Parliament shall be summoned to meet not later than thirty days after the day appointed for the return of the writs.

The Parliament shall be summoned to meet not later than six months after the establishment of the Commonwealth.

6. There shall be a session of the Parliament once at least in every year, so that twelve months shall not intervene between the last sitting of the Parliament in one session and its first sitting in the next session.

PART II.—THE SENATE.

7. The Senate shall be composed of senators for each State, directly chosen by the people of the State, voting, until the Parliament otherwise provides, as one electorate.

But until the Parliament of the Commonwealth otherwise provides, the Parliament of the State of Queensland, if that State be an Original State, may make laws dividing the State into divisions and determining the number of senators to be chosen for each division, and in the absence of such provision the State shall be one electorate.

Until the Parliament otherwise provides there shall be six senators for each Original State.* The Parliament may make laws increasing or diminishing the number of senators for each State, but so that equal representation of the several Original States shall be maintained and that no Original State shall have less than six senators.

The senators shall be chosen for a term of six years, and the names of the senators chosen for each State shall be certified by the Governor to the Governor-General.

8. The qualification of electors of senators shall be in each State that which is prescribed by this Constitution, or by the Parliament, as the qualification for electors of members of the House of Representatives; but in the choosing of senators each elector shall vote only once.

9. The Parliament of the Commonwealth may make laws prescribing the method of choosing senators, but so that the method shall be uniform for all the States. Subject to any such law, the Parliament of each State may make laws prescribing the method of choosing the senators for that State.

The Parliament of a State may make laws for determining the times and places of elections of senators for the State.

10. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State, for the time being, relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections of senators for the State.

11. The Senate may proceed to the despatch of business, notwithstanding the failure of any State to provide for its representation in the Senate.

12. The Governor of any State may cause writs to be issued for elections of senators for the State. In case of the dissolution of the Senate the writs shall be issued within ten days from the proclamation of such dissolution.

13. As soon as may be after the Senate first meets, and after each first meeting of the Senate following a dissolution thereof, the Senate shall divide the senators chosen for each State into two classes, as nearly equal in number as practicable; and the places of the senators of the first class shall become vacant at the expiration of [the third year] *three years*.† and the places of those of the second class at the expiration of [the sixth year] *six years*.† from the beginning of their term of service; and afterwards the places of senators shall become vacant at the expiration of six years from the beginning of their term of service.

The election to fill vacant places shall be made [in the year at the expiration of which] *within one year before*† the places are to become vacant.

For the purposes of this section the term of service of a senator shall be taken to begin on the first day of [January] *July*† following the day of his election, except in the cases of the first election and of the election next after any dissolution of the Senate, when it shall be taken to begin on the first day of [January] *July*† preceding the day of his election.

14. Whenever the number of senators for a State is increased or diminished, the Parliament of the Commonwealth may make such provision for the vacating of the places of senators for the State as it deems necessary to maintain regularity in the rotation.

15. If the place of a senator becomes vacant before the expiration of his term of service, the Houses of Parliament of the State for which he was chosen shall, sitting and voting together, choose a person to hold the place until the expiration of the term, or until the election of a successor as hereinafter provided, whichever first happens. But if the Houses of Parliament of the State are not in session at the time when the vacancy is notified,

* The Parliament has otherwise provided, by means of the Representation Act 1948, that the number of senators shall be ten for each State, from the first meeting of Parliament after the first dissolution of the House of Representatives occurring after the commencement of the Act (18th May, 1948).

† As amended by Section 2 of the Constitution Alteration (Senate Elections) 1906. The words in square brackets have been repealed; amendments are shown in italics.

the Governor of the State, with the advice of the Executive Council thereof, may appoint a person to hold the place until the expiration of fourteen days after the beginning of the next session of the Parliament of the State, or until the election of a successor, whichever first happens.

At the next general election of members of the House of Representatives, or at the next election of senators for the State, whichever first happens, a successor shall, if the term has not then expired, be chosen to hold the place from the date of his election until the expiration of the term.

The name of any senator so chosen or appointed shall be certified by the Governor of the State to the Governor-General.

16. The qualifications of a senator shall be the same as those of a member of the House of Representatives.

17. The Senate shall, before proceeding to the despatch of any other business, choose a senator to be the President of the Senate; and as often as the office of President becomes vacant the Senate shall again choose a senator to be the President.

The President shall cease to hold his office if he ceases to be a senator. He may be removed from office by a vote of the Senate, or he may resign his office or his seat by writing addressed to the Governor-General.

18. Before or during any absence of the President, the Senate may choose a senator to perform his duties in his absence.

19. A senator may, by writing addressed to the President, or to the Governor-General if there is no President or if the President is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

20. The place of a senator shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the Senate, fails to attend the Senate.

21. Whenever a vacancy happens in the Senate, the President, or if there is no President or if the President is absent from the Commonwealth the Governor-General, shall notify the same to the Governor of the State in the representation of which the vacancy has happened.

22. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the senators shall be necessary to constitute a meeting of the Senate for the exercise of its powers.

23. Questions arising in the Senate shall be determined by a majority of votes, and each senator shall have one vote. The President shall in all cases be entitled to a vote; and when the votes are equal the question shall pass in the negative.

PART III.—THE HOUSE OF REPRESENTATIVES.

24. The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.

The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until the Parliament otherwise provides, be determined, whenever necessary, in the following manner:—

- (i) A quota shall be ascertained by dividing the number of the people of the Commonwealth, as shown by the latest statistics of the Commonwealth, by twice the number of the senators;
- (ii) The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.

But notwithstanding anything in this section five members at least shall be chosen in each Original State.

25. For the purposes of the last section, if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous House of the Parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted.

26. Notwithstanding anything in section twenty-four, the number of members to be chosen in each State at the first election shall be as follows:—

New South Wales ..	23	South Australia ..	6
Victoria ..	20	Tasmania ..	5
Queensland ..	8		

Provided that if Western Australia is an Original State, the numbers shall be as follows:—

New South Wales ..	26	South Australia ..	7
Victoria ..	23	Western Australia ..	5
Queensland ..	9	Tasmania ..	5

27. Subject to this Constitution, the Parliament may make laws for increasing or diminishing the number of the members of the House of Representatives.

28. Every House of Representatives shall continue for three years from the first meeting of the House, and no longer, but may be sooner dissolved by the Governor-General.

29. Until the Parliament of the Commonwealth otherwise provides, the Parliament of any State may make laws for determining the divisions in each State for which members of the House of Representatives may be chosen, and the number of members to be chosen for each division. A division shall not be formed out of parts of different States.

In the absence of other provision, each State shall be one electorate.

30. Until the Parliament otherwise provides, the qualification of electors of members of the House of Representatives shall be in each State that which is prescribed by the law of the State as the qualification of electors of the more numerous House of Parliament of the State; but in the choosing of members each elector shall vote only once.*

31. Until the Parliament otherwise provides, but subject to this Constitution, the laws in force in each State for the time being relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections in the State of members of the House of Representatives.

32. The Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives.

After the first general election, the writs shall be issued within ten days from the expiry of a House of Representatives or from the proclamation of a dissolution thereof.

33. Whenever a vacancy happens in the House of Representatives, the Speaker shall issue his writ for the election of a new member, or if there is no Speaker or if he is absent from the Commonwealth the Governor-General in Council may issue the writ.

34. Until the Parliament otherwise provides, the qualifications of a member of the House of Representatives shall be as follows:—

(i) He must be of the full age of twenty-one years, and must be an elector entitled to vote at the election of members of the House of Representatives, or a person qualified to become such elector, and must have been for three years at the least a resident within the limits of the Commonwealth as existing at the time when he is chosen:

(ii) He must be a subject of the Queen, either natural-born or for at least five years naturalized under a law of the United Kingdom, or of a Colony which has become or becomes a State, or of the Commonwealth, or of a State.†

35. The House of Representatives shall, before proceeding to the despatch of any other business, choose a member to be the Speaker of the House, and as often as the office of Speaker becomes vacant the House shall again choose a member to be the Speaker.

The Speaker shall cease to hold his office if he ceases to be a member. He may be removed from office by a vote of the House, or he may resign his office or his seat by writing addressed to the Governor-General.

36. Before or during any absence of the Speaker, the House of Representatives may choose a member to perform his duties in his absence.

* The Parliament has otherwise provided, by means of the Commonwealth Electoral Act 1918-1949, Section 39 (repealing an earlier provision made by the Commonwealth Franchise Act 1902). For present qualifications see Chapter III.—General Government.

† The Parliament has otherwise provided, by means of the Commonwealth Electoral Act 1918-1949, Section 69. For present qualifications see Chapter III.—General Government.

37. A member may by writing addressed to the Speaker, or to the Governor-General if there is no Speaker or if the Speaker is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

38. The place of a member shall become vacant if for two consecutive months of any session of the Parliament he, without the permission of the House, fails to attend the House.

39. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the members of the House of Representatives shall be necessary to constitute a meeting of the House for the exercise of its powers.

40. Questions arising in the House of Representatives shall be determined by a majority of votes other than that of the Speaker. The Speaker shall not vote unless the numbers are equal, and then he shall have a casting vote.

PART IV.—BOTH HOUSES OF THE PARLIAMENT.

41. No adult person who has or acquires a right to vote at elections for the more numerous House of the Parliament of a State shall, while the right continues, be prevented by any law of the Commonwealth from voting at elections for either House of the Parliament of the Commonwealth.

42. Every senator and every member of the House of Representatives shall before taking his seat make and subscribe before the Governor-General, or some person authorized by him, an oath or affirmation of allegiance in the form set forth in the schedule to this Constitution.

43. A member of either House of the Parliament shall be incapable of being chosen or of sitting as a member of the other House.

44. Any person who—

- (i) Is under any acknowledgment of allegiance, obedience, or adherence to a foreign power, or is a subject or a citizen or entitled to the rights or privileges of a subject or a citizen of a foreign power: or
- (ii) Is attainted of treason, or has been convicted and is under sentence, or subject to be sentenced, for any offence punishable under the law of the Commonwealth or of a State by imprisonment for one year or longer: or
- (iii) Is an undischarged bankrupt or insolvent: or
- (iv) Holds any office of profit under the Crown, or any pension payable during the pleasure of the Crown out of any of the revenues of the Commonwealth: or
- (v) Has any direct or indirect pecuniary interest in any agreement with the Public Service of the Commonwealth otherwise than as a member and in common with the other members of an incorporated company consisting of more than twenty-five persons:

shall be incapable of being chosen or of sitting as a senator or a member of the House of Representatives.

But sub-section iv. does not apply to the office of any of the Queen's Ministers of State for the Commonwealth, or of any of the Queen's Ministers of a State, or to the receipt of pay, half-pay, or a pension by any person as an officer or member of the Queen's navy or army, or to the receipt of pay as an officer or member of the naval or military forces of the Commonwealth by any person whose services are not wholly employed by the Commonwealth.

45. If a senator or member of the House of Representatives—

- (i) Becomes subject to any of the disabilities mentioned in the last preceding section: or
- (ii) Takes the benefit, whether by assignment, composition, or otherwise, of any law relating to bankrupt or insolvent debtors: or
- (iii) Directly or indirectly takes or agrees to take any fee or honorarium for services rendered to the Commonwealth, or for services rendered in the Parliament to any person or State:

his place shall thereupon become vacant.

46. Until the Parliament otherwise provides, any person declared by this Constitution to be incapable of sitting as a senator or as a member of the House of Representatives shall, for every day on which he so sits, be liable to pay the sum of one hundred pounds to any person who sues for it in any court of competent jurisdiction.

47. Until the Parliament otherwise provides, any question respecting the qualification of a senator or of a member of the House of Representatives, or respecting a vacancy in either House of the Parliament, and any question of a disputed election to either House shall be determined by the House in which the question arises.

48. Until the Parliament otherwise provides, each senator and each member of the House of Representatives shall receive an allowance of four hundred pounds a year, to be reckoned from the day on which he takes his seat.*

49. The powers, privileges, and immunities of the Senate and of the House of Representatives, and of the members and the committees of each House, shall be such as are declared by the Parliament, and until declared shall be those of the Commons House of Parliament of the United Kingdom, and of its members and committees, at the establishment of the Commonwealth.

50. Each House of the Parliament may make rules and orders with respect to—

- (i) The mode in which its powers, privileges, and immunities may be exercised and upheld;
- (ii) The order and conduct of its business and proceedings either separately or jointly with the other House.

PART V.—POWERS OF THE PARLIAMENT.†

51. The Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to:—

- (i) Trade and commerce with other countries, and among the States;
- (ii) Taxation; but so as not to discriminate between States or parts of States;
- (iii) Bounties on the production or export of goods, but so that such bounties shall be uniform throughout the Commonwealth;
- (iv) Borrowing money on the public credit of the Commonwealth;
- (v) Postal, telegraphic, telephonic, and other like services;
- (vi) The naval and military defence of the Commonwealth and of the several States, and the control of the forces to execute and maintain the laws of the Commonwealth;
- (vii) Lighthouses, lightships, beacons and buoys;
- (viii) Astronomical and meteorological observations;
- (ix) Quarantine;
- (x) Fisheries in Australian waters beyond territorial limits;
- (xi) Census and statistics;
- (xii) Currency, coinage, and legal tender;
- (xiii) Banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money;
- (xiv) Insurance, other than State insurance; also State insurance extending beyond the limits of the State concerned;
- (xv) Weights and measures;
- (xvi) Bills of exchange and promissory notes;
- (xvii) Bankruptcy and insolvency;
- (xviii) Copyrights, patents of inventions and designs, and trade marks;
- (xix) Naturalization and aliens;
- (xx) Foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth;
- (xxi) Marriage:

* The Parliamentary allowance was increased to £600 per annum in 1907 (except in the cases of Ministers, the Presiding Officers of the two Houses, and the Chairman of Committees, whose allowances remained at £400 in addition to the emoluments of office), and to £1,000 per annum in 1920 (Ministers, etc., £800). Under financial emergency legislation Parliamentary salaries and allowances were reduced generally, the lowest level reached in respect of the Parliamentary allowance being £750 per annum in 1932. Subsequently there was a gradual restoration to former levels, the allowance reaching £1,000 per annum again in 1938, when, also, the proviso for the reduced allowance to Ministers, etc. was removed. In 1947 the Parliamentary allowance was increased to £1,500 per annum, and in 1952 to £1,750. In 1920 additional allowances of £200 and £400 per annum, respectively, were granted to the Leaders of the Opposition in the Senate and the House of Representatives, and in 1947 they were increased to £300 and £600 respectively. In 1947, also, an additional allowance of £400 per annum was granted to the Leader in the House of Representatives (other than the Leader of the Opposition) of a recognized political party which has not less than ten members in the House of Representatives, and of which no member is a Minister.

† Particulars of proposed laws which were submitted to referenda are referred to in Chapter III.—General Government.

- (xxii) Divorce and matrimonial causes; and in relation thereto, parental rights, and the custody and guardianship of infants:
- (xxiii) Invalid and old-age pensions:
- (xxiiiA) **The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances:*
- (xxiv) The service and execution throughout the Commonwealth of the civil and criminal process and the judgments of the courts of the States:
- (xxv) The recognition throughout the Commonwealth of the laws, the public Acts and records, and the judicial proceedings of the States:
- (xxvi) The people of any race, other than the aboriginal race in any State, for whom it is deemed necessary to make special laws:
- (xxvii) Immigration and emigration:
- (xxviii) The influx of criminals:
- (xxix) External affairs:
- (xxx) The relations of the Commonwealth with the islands of the Pacific:
- (xxxi) The acquisition of property on just terms from any State or person for any purpose in respect of which the Parliament has power to make laws:
- (xxxii) The control of railways with respect to transport for the naval and military purposes of the Commonwealth:
- (xxxiii) The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State:
- (xxxiv) Railway construction and extension in any State with the consent of that State:
- (xxxv) *Conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State:*
- (xxxvi) Matters in respect of which this Constitution makes provision until the Parliament otherwise provides:
- (xxxvii) Matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliaments the matter is referred, or which afterwards adopt the law:
- (xxxviii) The exercise within the Commonwealth, at the request or with the concurrence of the Parliaments of all the States directly concerned, of any power which can at the establishment of this Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia:
- (xxxix) Matters incidental to the execution of any power vested by this Constitution in the Parliament or in either House thereof, or in the Government of the Commonwealth, or in the Federal Judicature, or in any department or officer of the Commonwealth.

52. The Parliament shall, subject to this Constitution, have exclusive power to make laws for the peace, order, and good government of the Commonwealth with respect to—

- (i) The seat of Government of the Commonwealth, and all places acquired by the Commonwealth for public purposes:
- (ii) Matters relating to any department of the public service the control of which is by this Constitution transferred to the Executive Government of the Commonwealth:
- (iii) Other matters declared by this Constitution to be within the exclusive power of the Parliament.

53. Proposed laws appropriating revenue or moneys, or imposing taxation, shall not originate in the Senate. But a proposed law shall not be taken to appropriate revenue or moneys, or to impose taxation, by reason only of its containing provisions for the imposition or appropriation of fines or other pecuniary penalties, or for the demand or payment or appropriation of fees for licences, or fees for services under the proposed law.

The Senate may not amend proposed laws imposing taxation, or proposed laws appropriating revenue or moneys for the ordinary annual services of the Government.

The Senate may not amend any proposed law so as to increase any proposed charge or burden on the people.

* Under Section 2 of the Constitution Alteration (Social Services) 1946, the Constitution was amended by the insertion of this paragraph.

The Senate may at any stage return to the House of Representatives any proposed law which the Senate may not amend, requesting, by message, the omission or amendment of any items or provisions therein. And the House of Representatives may, if it thinks fit, make any of such omissions or amendments, with or without modifications.

Except as provided in this section, the Senate shall have equal power with the House of Representatives in respect of all proposed laws.

54. The proposed law which appropriates revenue or moneys for the ordinary annual services of the Government shall deal only with such appropriation.

55. Laws imposing taxation shall deal only with the imposition of taxation, and any provision therein dealing with any other matter shall be of no effect.

Laws imposing taxation, except laws imposing duties of customs or of excise, shall deal with one subject of taxation only; but laws imposing duties of customs shall deal with duties of customs only, and laws imposing duties of excise shall deal with duties of excise only.

56. A vote, resolution, or proposed law for the appropriation of revenue or moneys shall not be passed unless the purpose of the appropriation has in the same session been recommended by message of the Governor-General to the House in which the proposal originated.

57. If the House of Representatives passes any proposed law, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, and if after an interval of three months the House of Representatives, in the same or the next session, again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may dissolve the Senate and the House of Representatives simultaneously. But such dissolution shall not take place within six months before the date of the expiry of the House of Representatives by effluxion of time.

If after such dissolution the House of Representatives again passes the proposed law, with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may convene a joint sitting of the members of the Senate and of the House of Representatives.

The members present at the joint sitting may deliberate and shall vote together upon the proposed law as last proposed by the House of Representatives, and upon amendments, if any, which have been made therein by one House and not agreed to by the other, and any such amendments which are affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives shall be taken to have been carried, and if the proposed law, with the amendments, if any, so carried is affirmed by an absolute majority of the total number of members of the Senate and House of Representatives, it shall be taken to have been duly passed by both Houses of the Parliament, and shall be presented to the Governor-General for the Queen's assent.

58. When a proposed law passed by both Houses of the Parliament is presented to the Governor-General for the Queen's assent, he shall declare, according to his discretion, but subject to this Constitution, that he assents in the Queen's name, or that he withholds assent, or that he reserves the law for the Queen's pleasure.

The Governor-General may return to the House in which it originated any proposed law so presented to him, and may transmit therewith any amendments which he may recommend, and the Houses may deal with the recommendation.

59. The Queen may disallow any law within one year from the Governor-General's assent, and such disallowance on being made known by the Governor-General by speech or message to each of the Houses of the Parliament, or by Proclamation, shall annul the law from the day when the disallowance is so made known.

60. A proposed law reserved for the Queen's pleasure shall not have any force unless and until within two years from the day on which it was presented to the Governor-General for the Queen's assent the Governor-General makes known, by speech or message to each of the Houses of the Parliament, or by Proclamation, that it has received the Queen's assent.

CHAPTER II.—THE EXECUTIVE GOVERNMENT.

61. The executive power of the Commonwealth is vested in the Queen and is exercisable by the Governor-General as the Queen's representative, and extends to the execution and maintenance of this Constitution, and of the laws of the Commonwealth.

62. There shall be a Federal Executive Council to advise the Governor-General in the government of the Commonwealth, and the members of the Council shall be chosen and summoned by the Governor-General and sworn as Executive Councillors, and shall hold office during his pleasure.

63. The provisions of this Constitution referring to the Governor-General in Council shall be construed as referring to the Governor-General acting with the advice of the Federal Executive Council.

64. The Governor-General may appoint officers to administer such departments of State of the Commonwealth as the Governor-General in Council may establish.

Such officers shall hold office during the pleasure of the Governor-General. They shall be members of the Federal Executive Council, and shall be the Queen's Ministers of State for the Commonwealth.

After the first general election no Minister of State shall hold office for a longer period than three months unless he is or becomes a senator or a member of the House of Representatives.

65. Until the Parliament otherwise provides, the Ministers of State shall not exceed seven in number, and shall hold such offices as the Parliament prescribes, or, in the absence of provision, as the Governor-General directs.*

66. There shall be payable to the Queen, out of the Consolidated Revenue Fund of the Commonwealth, for the salaries of the Ministers of State, an annual sum which until the Parliament otherwise provides, shall not exceed twelve thousand pounds a year.*

67. Until the Parliament otherwise provides, the appointment and removal of all other officers of the Executive Government of the Commonwealth shall be vested in the Governor-General in Council, unless the appointment is delegated by the Governor-General in Council or by a law of the Commonwealth to some other authority.

68. The command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

69. On a date or dates to be proclaimed by the Governor-General after the establishment of the Commonwealth the following departments of the public service in each State shall become transferred to the Commonwealth:—

Posts, telegraphs, and telephones:	Lighthouses, lightships, beacons, and buoys:
Naval and military defence:	Quarantine.

But the Departments of customs and of excise in each State shall become transferred to the Commonwealth on its establishment.

70. In respect of matters which, under this Constitution, pass to the Executive Government of the Commonwealth, all powers and functions which at the establishment of the Commonwealth are vested in the Governor of a Colony, or in the Governor of a Colony with the advice of his Executive Council, or in any authority of a Colony, shall vest in the Governor-General, or in the Governor-General in Council, or in the authority exercising similar powers under the Commonwealth, as the case requires.

* The Ministers of State were increased to eight in 1915, to nine in 1917, to ten in 1935, to eleven in 1938, and to nineteen in 1941, a special war-time provision during the continuance in operation of the National Security Act which was extended in 1946 on the expiry of that Act. The number was increased to twenty in 1951 and to twenty-two in 1956. The annual appropriation for Ministers' salaries received in addition to their allowances as Members (see page 13) was increased to £13,650 in 1915 and to £15,300 in 1917. Under financial emergency legislation, in addition to the reductions in Members' allowances the appropriation for Ministers was also reduced, in 1932 reaching the level of £10,710. The reductions were removed gradually, and finally in 1938 when the appropriation was £16,950. At the same time, an additional allowance of £1,500 per annum was granted to the Prime Minister, and the proviso for the reduced Parliamentary allowance to Ministers was removed. In 1941 the annual appropriation for Ministers was increased, as a war-time provision, to £21,250. This was extended in 1946. In 1947 the appropriation was increased to £27,650, in 1951 to £29,000, in 1952 to £41,000, and in 1956 to £46,500.

CHAPTER III.—THE JUDICATURE.

71. The judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and in such other federal courts as the Parliament creates, and in such other courts as it invests with federal jurisdiction. The High Court shall consist of a Chief Justice, and so many other Justices, not less than two, as the Parliament prescribes.*

72. The Justices of the High Court and of the other Courts created by the Parliament—

- (i) Shall be appointed by the Governor-General in Council:
- (ii) Shall not be removed except by the Governor-General in Council, on an address from both Houses of the Parliament in the same session, praying for such removal on the ground of proved misbehaviour or incapacity:
- (iii) Shall receive such remuneration as the Parliament may fix; but the remuneration shall not be diminished during their continuance in office.*

73. The High Court shall have jurisdiction, with such exceptions and subject to such regulations as the Parliament prescribes, to hear and determine appeals from all judgments, decrees, orders, and sentences—

- (i) Of any Justice or Justices exercising the original jurisdiction of the High Court:
 - (ii) Of any other federal court, or court exercising federal jurisdiction; or of the Supreme Court of any State, or of any other court of any State from which at the establishment of the Commonwealth an appeal lies to the Queen in Council:
 - (iii) Of the Inter-State Commission, but as to questions of law only:
- and the judgment of the High Court in all such cases shall be final and conclusive.

But no exception or regulation prescribed by the Parliament shall prevent the High Court from hearing and determining any appeal from the Supreme Court of a State in any matter in which at the establishment of the Commonwealth an appeal lies from such Supreme Court to the Queen in Council.

Until the Parliament otherwise provides, the conditions of and restrictions on appeals to the Queen in Council from the Supreme Courts of the several States shall be applicable to appeals from them to the High Court.

74. No appeal shall be permitted to the Queen in Council from a decision of the High Court upon any question, howsoever arising, as to the limits *inter se* of the Constitutional powers of the Commonwealth and those of any State or States, or as to the limits *inter se* of the Constitutional powers of any two or more States, unless the High Court shall certify that the question is one which ought to be determined by Her Majesty in Council.

The High Court may so certify if satisfied that for any special reason the certificate should be granted, and thereupon an appeal shall lie to Her Majesty in Council on the question without further leave.

Except as provided in this section, this Constitution shall not impair any right which the Queen may be pleased to exercise by virtue of Her Royal prerogative to grant special leave of appeal from the High Court to Her Majesty in Council. The Parliament may make laws limiting the matters in which such leave may be asked, but proposed laws containing any such limitation shall be reserved by the Governor-General for Her Majesty's pleasure.

75. In all matters—

- (i) Arising under any treaty:
- (ii) Affecting consuls or other representatives of other countries:
- (iii) In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party:
- (iv) Between States, or between residents of different States, or between a State and a resident of another State:
- (v) In which a writ of Mandamus or prohibition or an injunction is sought against an officer of the Commonwealth:

the High Court shall have original jurisdiction.

* The Judiciary Act 1903 provided for a Chief Justice and two other Justices. Subsequent amendments to the Act increased the number of other Justices to four and later six, and then reduced it to five. In 1946 the number was again increased to six. The Judiciary Act 1903 also provided for the payment of a salary of £3,500 per annum to the Chief Justice and of £3,000 per annum to each other Justice. In 1947 these salaries were increased respectively to £4,500 and £4,000 per annum, in 1950 to £5,000 and £4,500 per annum, and in 1955 to £8,000 and £6,500 per annum.

76. The Parliament may make laws conferring original jurisdiction on the High Court in any matter—

- (i) Arising under this Constitution, or involving its interpretation:
- (ii) Arising under any laws made by the Parliament:
- (iii) Of Admiralty and maritime jurisdiction:
- (iv) Relating to the same subject-matter claimed under the laws of different States.

77. With respect to any of the matters mentioned in the last two sections the Parliament may make laws—

- (i) Defining the jurisdiction of any federal court other than the High Court:
- (ii) Defining the extent to which the jurisdiction of any federal court shall be exclusive of that which belongs to or is invested in the courts of the States:
- (iii) Investing any court of a State with federal jurisdiction.

78. The Parliament may make laws conferring rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power.

79. The federal jurisdiction of any court may be exercised by such number of judges as the Parliament prescribes.

80. The trial on indictment of any offence against any law of the Commonwealth shall be by jury, and every such trial shall be held in the State where the offence was committed, and if the offence was not committed within any State the trial shall be held at such place or places as the Parliament prescribes.

CHAPTER IV.—FINANCE AND TRADE.

81. All revenues or moneys raised or received by the Executive Government of the Commonwealth shall form one Consolidated Revenue Fund, to be appropriated for the purposes of the Commonwealth in the manner and subject to the charges and liabilities imposed by this Constitution.

82. The costs, charges, and expenses incident to the collection, management, and receipt of the Consolidated Revenue Fund shall form the first charge thereon; and the revenue of the Commonwealth shall in the first instance be applied to the payment of the expenditure of the Commonwealth.

83. No money shall be drawn from the Treasury of the Commonwealth except under appropriation made by law.

But until the expiration of one month after the first meeting of the Parliament the Governor-General in Council may draw from the Treasury and expend such moneys as may be necessary for the maintenance of any department transferred to the Commonwealth and for the holding of the first elections for the Parliament.

84. When any department of the public service of a State becomes transferred to the Commonwealth, all officers of the department shall become subject to the control of the Executive Government of the Commonwealth.

Any such officer who is not retained in the service of the Commonwealth shall, unless he is appointed to some other office of equal emolument in the public service of the State, be entitled to receive from the State any pension, gratuity, or other compensation, payable under the law of the State on the abolition of his office.

Any such officer who is retained in the service of the Commonwealth shall preserve all his existing and accruing rights, and shall be entitled to retire from office at the time, and on the pension or retiring allowance, which would be permitted by the law of the State if his service with the Commonwealth were a continuation of his service with the State. Such pension or retiring allowance shall be paid to him by the Commonwealth; but the State shall pay to the Commonwealth a part thereof, to be calculated on the proportion which his term of service with the State bears to his whole term of service, and for the purpose of the calculation his salary shall be taken to be that paid to him by the State at the time of the transfer.

Any officer who is, at the establishment of the Commonwealth, in the public service of a State, and who is, by consent of the Governor of the State with the advice of the Executive Council thereof, transferred to the public service of the Commonwealth, shall have the same rights as if he had been an officer of a department transferred to the Commonwealth and were retained in the service of the Commonwealth.

85. When any department of the public service of a State is transferred to the Commonwealth—

- (i) All property of the State of any kind, used exclusively in connexion with the department, shall become vested in the Commonwealth; but, in the case of the departments controlling customs and excise and bounties, for such time only as the Governor-General in Council may declare to be necessary:
- (ii) The Commonwealth may acquire any property of the State, of any kind used, but not exclusively used in connexion with the department; the value thereof shall, if no agreement can be made, be ascertained in, as nearly as may be, the manner in which the value of land, or of an interest in land, taken by the State for public purposes is ascertained under the law of the State in force at the establishment of the Commonwealth:
- (iii) The Commonwealth shall compensate the State for the value of any property passing to the Commonwealth under this section; if no agreement can be made as to the mode of compensation, it shall be determined under laws to be made by the Parliament:
- (iv) The Commonwealth shall, at the date of the transfer, assume the current obligations of the State in respect of the department transferred.

86. On the establishment of the Commonwealth, the collection and control of duties of customs and of excise, and the control of the payment of bounties, shall pass to the Executive Government of the Commonwealth.

87. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall, in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on debts of the several States taken over by the Commonwealth.

88. Uniform duties of customs shall be imposed within two years after the establishment of the Commonwealth.

89. Until the imposition of uniform duties of customs—

- (i) The Commonwealth shall credit to each State the revenues collected therein by the Commonwealth.
- (ii) The Commonwealth shall debit to each State—
 - (a) The expenditure therein of the Commonwealth incurred solely for the maintenance or continuance, as at the time of transfer, of any department transferred from the State to the Commonwealth;
 - (b) The proportion of the State, according to the number of its people, in the other expenditure of the Commonwealth.
- (iii) The Commonwealth shall pay to each State month by month the balance (if any) in favour of the State.

90. On the imposition of uniform duties of customs the power of the Parliament to impose duties of customs and of excise, and to grant bounties on the production or export of goods, shall become exclusive.

On the imposition of uniform duties of customs all laws of the several States imposing duties of customs or of excise, or offering bounties on the production or export of goods, shall cease to have effect, but any grant of or agreement for any such bounty lawfully made by or under the authority of the Government of any State shall be taken to be good if made before the thirtieth day of June, one thousand eight hundred and ninety-eight, and not otherwise.

91. Nothing in this Constitution prohibits a State from granting any aid to or bounty on mining for gold, silver, or other metals, nor from granting, with the consent of both Houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods.

92. On the imposition of uniform duties of customs, trade, commerce, and intercourse among the States, whether by means of internal carriage or ocean navigation, shall be absolutely free.

But notwithstanding anything in this Constitution, goods imported before the imposition of uniform duties of customs into any State, or into any Colony which, whilst the goods remain therein, becomes a State, shall, on thence passing into another State within two

years after the imposition of such duties, be liable to any duty chargeable on the importation of such goods into the Commonwealth, less any duty paid in respect of the goods on their importation.

93. During the first five years after the imposition of uniform duties of customs, and thereafter until the Parliament otherwise provides—

- (i) The duties of customs chargeable on goods imported into a State and afterwards passing into another State for consumption, and the duties of excise paid on goods produced or manufactured in a State and afterwards passing into another State for consumption, shall be taken to have been collected not in the former but in the latter State.
- (ii) Subject to the last sub-section, the Commonwealth shall credit revenue, debit expenditure, and pay balances to the several States as prescribed for the period preceding the imposition of uniform duties of customs.

94. After five years from the imposition of uniform duties of customs, the Parliament may provide, on such basis as it deems fair, for the monthly payment to the several States of all surplus revenue of the Commonwealth.

95. Notwithstanding anything in this Constitution, the Parliament of the State of Western Australia, if that State be an Original State, may, during the first five years after the imposition of uniform duties of customs, impose duties of customs on goods passing into that State and not originally imported from beyond the limits of the Commonwealth; and such duties shall be collected by the Commonwealth.

But any duty so imposed on any goods shall not exceed during the first of such years the duty chargeable on the goods under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years respectively, four-fifths, three-fifths, two-fifths, and one-fifth of such latter duty, and all duties imposed under this section shall cease at the expiration of the fifth year after the imposition of uniform duties.

If at any time during the five years the duty on any goods under this section is higher than the duty imposed by the Commonwealth on the importation of the like goods, then such higher duty shall be collected on the goods when imported into Western Australia from beyond the limits of the Commonwealth.

96. During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

97. Until the Parliament otherwise provides, the laws in force in any Colony which has become or becomes a State with respect to the receipt of revenue and the expenditure of money on account of the Government of the Colony, and the review and audit of such receipt and expenditure, shall apply to the receipt of revenue and the expenditure of money on account of the Commonwealth in the State in the same manner as if the Commonwealth, or the Government or an officer of the Commonwealth, were mentioned whenever the Colony, or the Government or an officer of the Colony, is mentioned.

98. The power of the Parliament to make laws with respect to trade and commerce extends to navigation and shipping, and to railways the property of any State.

99. The Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof.

100. The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

101. There shall be an Inter-State Commission, with such powers of adjudication and administration as the Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this Constitution relating to trade and commerce, and of all laws made thereunder.

102. The Parliament may by any law with respect to trade or commerce forbid, as to railways, any preference or discrimination by any State, or by any authority constituted under a State, if such preference or discrimination is undue and unreasonable, or unjust to any State; due regard being had to the financial responsibilities incurred by any State in connexion with the construction and maintenance of its railways. But no preference or discrimination shall, within the meaning of this section, be taken to be undue and unreasonable, or unjust to any State, unless so adjudged by the Inter-State Commission.

103. The members of the Inter-State Commission—

- (i) Shall be appointed by the Governor-General in Council:
- (ii) Shall hold office for seven years, but may be removed within that time by the Governor-General in Council, on an address from both Houses of the Parliament in the same session praying for such removal on the ground of proved misbehaviour or incapacity:
- (iii) Shall receive such remuneration as the Parliament may fix; but such remuneration shall not be diminished during their continuance in office.

104. Nothing in this Constitution shall render unlawful any rate for the carriage of goods upon a railway, the property of a State, if the rate is deemed by the Inter-State Commission to be necessary for the development of the territory of the State, and if the rate applies equally to goods within the State and to goods passing into the State from other States.

105. The Parliament may take over from the States their public debts [as existing at the establishment of the Commonwealth],* or a proportion thereof according to the respective numbers of their people as shown by the latest statistics of the Commonwealth, and may convert, renew, or consolidate such debts, or any part thereof; and the States shall indemnify the Commonwealth in respect of the debts taken over, and thereafter the interest payable in respect of the debts shall be deducted and retained from the portions of the surplus revenue of the Commonwealth payable to the several States, or if such surplus is insufficient, or if there is no surplus, then the deficiency or the whole amount shall be paid by the several States.

105A.† (1.) *The Commonwealth may make agreements with the States with respect to the public debts of the States, including—*

- (a) *the taking over of such debts by the Commonwealth;*
- (b) *the management of such debts;*
- (c) *the payment of interest and the provision and management of sinking funds in respect of such debts;*
- (d) *the consolidation, renewal, conversion, and redemption of such debts;*
- (e) *the indemnification of the Commonwealth by the States in respect of debts taken over by the Commonwealth; and*
- (f) *the borrowing of money by the States or by the Commonwealth, or by the Commonwealth for the States.*

(2.) *The Parliament may make laws for validating any such agreement made before the commencement of this section.*

(3.) *The Parliament may make laws for the carrying out by the parties thereto of any such agreement.*

(4.) *Any such agreement may be varied or rescinded by the parties thereto.*

(5.) *Every such agreement and any such variation thereof shall be binding upon the Commonwealth and the States parties thereto notwithstanding anything contained in this Constitution or the Constitution of the several States or in any law of the Parliament of the Commonwealth or of any State.*

(6.) *The powers conferred by this section shall not be construed as being limited in any way to the provisions of section one hundred and five of this Constitution.*

CHAPTER V.—THE STATES.

106. The Constitution of each State of the Commonwealth shall, subject to this Constitution, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be, until altered in accordance with the Constitution of the State.

107. Every power of the Parliament of a Colony which has become or becomes a State, shall, unless it is by this Constitution exclusively vested in the Parliament of the Commonwealth or withdrawn from the Parliament of the State, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be.

* Under Section 2 of the Constitution Alteration (State Debts) 1909, the words in square brackets are omitted.

† Under Section 2 of the Constitution Alteration (State Debts) 1928, the Constitution was amended by the insertion of this section.

108. Every law in force in a Colony which has become or becomes a State, and relating to any matter within the powers of the Parliament of the Commonwealth, shall, subject to this Constitution, continue in force in the State: and, until provision is made in that behalf by the Parliament of the Commonwealth, the Parliament of the State shall have such powers of alteration and of repeal in respect of any such law as the Parliament of the Colony had until the Colony became a State.

109. When a law of a State is inconsistent with a law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid.

110. The provisions of this Constitution relating to the Governor of a State extend and apply to the Governor for the time being of the State, or other chief executive officer or administrator of the government of the State.

111. The Parliament of a State may surrender any part of the State to the Commonwealth; and upon such surrender, and the acceptance thereof by the Commonwealth, such part of the State shall become subject to the exclusive jurisdiction of the Commonwealth.

112. After uniform duties of customs have been imposed, a State may levy on imports or exports, or on goods passing into or out of the State, such charges as may be necessary for executing the inspection laws of the State; but the net produce of all charges so levied shall be for the use of the Commonwealth; and any such inspection laws may be annulled by the Parliament of the Commonwealth.

113. All fermented, distilled, or other intoxicating liquids passing into any State or remaining therein for use, consumption, sale, or storage, shall be subject to the laws of the State as if such liquids had been produced in the State.

114. A State shall not, without the consent of the Parliament of the Commonwealth, raise or maintain any naval or military force, or impose any tax on property of any kind belonging to the Commonwealth, nor shall the Commonwealth impose any tax on property of any kind belonging to a State.

115. A State shall not coin money, nor make anything but gold and silver coin a legal tender in payment of debts.

116. The Commonwealth shall not make any law for establishing any religion, or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

117. A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

118. Full faith and credit shall be given, throughout the Commonwealth, to the laws, the public Acts and records, and the judicial proceedings of every State.

119. The Commonwealth shall protect every State against invasion and, on the application of the Executive Government of the State, against domestic violence.

120. Every State shall make provision for the detention in its prisons of persons accused or convicted of offences against the laws of the Commonwealth, and for the punishment of persons convicted of such offences, and the Parliament of the Commonwealth may make laws to give effect to this provision.

CHAPTER VI.—NEW STATES.

121. The Parliament may admit to the Commonwealth or establish new States, and may upon such admission or establishment make or impose such terms and conditions, including the extent of representation in either House of the Parliament, as it thinks fit.

122. The Parliament may make laws for the government of any territory surrendered by any State to and accepted by the Commonwealth, or of any territory placed by the Queen under the authority of and accepted by the Commonwealth, or otherwise acquired by the Commonwealth, and may allow the representation of such territory in either House of the Parliament to the extent and on the terms which it thinks fit.

123. The Parliament of the Commonwealth may, with the consent of the Parliament of a State, and the approval of the majority of the electors of the State voting upon the question, increase, diminish, or otherwise alter the limits of the State, upon such terms and conditions as may be agreed on, and may, with the like consent, make provision respecting the effect and operation of any increase or diminution or alteration of territory in relation to any State affected.

124. A new State may be formed by separation of territory from a State, but only with the consent of the Parliament thereof, and a new State may be formed by the union of two or more States or parts of States, but only with the consent of the Parliaments of the States affected.

CHAPTER VII.—MISCELLANEOUS.

125. The seat of Government of the Commonwealth shall be determined by the Parliament, and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and shall be in the State of New South Wales, and be distant not less than one hundred miles from Sydney.

Such territory shall contain an area of not less than one hundred square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

The Parliament shall sit at Melbourne until it meet at the Seat of Government.

126. The Queen may authorize the Governor-General to appoint any person, or any persons jointly or severally, to be his deputy or deputies within any part of the Commonwealth, and in that capacity to exercise during the pleasure of the Governor-General such powers and functions of the Governor-General as he thinks fit to assign to such deputy or deputies, subject to any limitations expressed or directions given by the Queen; but the appointment of such deputy or deputies shall not affect the exercise by the Governor-General himself of any power or function.

127. In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted.

CHAPTER VIII.—ALTERATION OF THE CONSTITUTION.

128. This Constitution shall not be altered except in the following manner:—

The proposed law for the alteration thereof must be passed by an absolute majority of each House of the Parliament, and not less than two nor more than six months after its passage through both Houses the proposed law shall be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives.

But if either House passes any such proposed law by an absolute majority, and the other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, and if after an interval of three months the first-mentioned House in the same or the next session again passes the proposed law by an absolute majority with or without any amendment which has been made or agreed to by the other House, and such other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, the Governor-General may submit the proposed law as last proposed by the first-mentioned House, and either with or without any amendments subsequently agreed to by both Houses, to the electors in each State qualified to vote for the election of the House of Representatives.

When a proposed law is submitted to the electors the vote shall be taken in such manner as the Parliament prescribes. But until the qualification of electors of members of the House of Representatives becomes uniform throughout the Commonwealth, only one-half the electors voting for and against the proposed law shall be counted in any State in which adult suffrage prevails.

And if in a majority of the States a majority of the electors voting approve the proposed law, and if a majority of all the electors voting also approve the proposed law, it shall be presented to the Governor-General for the Queen's assent.

No alteration diminishing the proportionate representation of any State in either House of the Parliament, or the minimum number of representatives of a State in the House of Representatives, or increasing, diminishing, or otherwise altering the limits of the State, or in any manner affecting the provisions of the Constitution in relation thereto, shall become law unless the majority of the electors voting in that State approve the proposed law.

SCHEDULE.

OATH.

I, *A.B.*, do swear that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law. SO HELP ME GOD!

AFFIRMATION.

I, *A.B.*, do solemnly and sincerely affirm and declare that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors according to law.

(NOTE.—*The name of the King or Queen of the United Kingdom of Great Britain and Ireland for the time being is to be substituted from time to time.*)

3. **The Royal Proclamation.**—The preceding Act received the Royal assent on the 9th July, 1900. This made it lawful to declare that the people of Australia should be united in a Federal Commonwealth. This proclamation, made on the 17th September, 1900, constituted the Commonwealth as from the 1st January, 1901; it read as follows:—

BY THE QUEEN.
A PROCLAMATION.

(Signed) VICTORIA R.

WHEREAS by an Act of Parliament passed in the Sixty-third and Sixty-fourth Years of Our Reign, intituled “*An Act to constitute the Commonwealth of Australia.*” it is enacted that it shall be lawful for the Queen, with the advice of the Privy Council, to declare by Proclamation, that, on and after a day therein appointed, not being later than One year after the passing of this Act, the people of *New South Wales, Victoria, South Australia, Queensland, and Tasmania*, and also, if Her Majesty is satisfied that the people of *Western Australia* have agreed thereto, of *Western Australia*, shall be united in a Federal Commonwealth under the name of the Commonwealth of Australia.

And whereas We are satisfied that the people of *Western Australia* have agreed thereto accordingly.

We therefore, by and with the advice of Our Privy Council, have thought fit to issue this Our Royal Proclamation, and We do hereby declare that on and after the First day of *January* One thousand nine hundred and one, the people of *New South Wales, Victoria, South Australia, Queensland, Tasmania, and Western Australia* shall be united in a Federal Commonwealth under the name of the Commonwealth of *Australia*.

Given at Our Court at *Balmoral* this Seventeenth day of *September*, in the Year of Our Lord One thousand nine hundred, and in the Sixty-fourth Year of Our Reign.

GOD SAVE THE QUEEN.

§ 7. The External Territories of Australia.

1. **Transfer of Norfolk Island.**—In 1856, Norfolk Island was created a distinct and separate settlement under the jurisdiction of New South Wales. Later, in 1896, it was made a dependency under the Governor of that colony and finally by the passage of the Norfolk Island Act 1913 it was accepted as a Territory of the Commonwealth of Australia. The island is situated in latitude 29° 3' 3" S., longitude 167° 57' 5" E., and comprises an area of 8,528 acres.

2. **Transfer of British New Guinea or Papua.**—Under the administration of the Commonwealth, but not included in it, is British New Guinea or Papua, finally annexed by the British Government in 1884. This Territory was for a number of years administered by the Queensland Government, but was transferred to the Commonwealth by proclamation on 1st September, 1906, under the authority of the Papua Act (Commonwealth) of 16th November, 1905. The area of Papua is about 90,540 square miles.

3. **Territory of New Guinea.**—In 1919, it was agreed by the Principal Allied and Associated Powers that a mandate should be conferred on Australia for the government of the former German territories and islands situated in latitude between the Equator and 8° S., and in longitude between 141° E. and 159° 25' E. The mandate was issued

by the League of Nations on 17th December, 1920. The Governor-General of the Commonwealth was authorized to accept the mandate by the New Guinea Act 1920, which also declared the area to be a Territory under the authority of the Commonwealth by the name of the Territory of New Guinea. The Territory comprises about 93,000 square miles, and the administration under the mandate dated from 9th May, 1921. New Guinea is now administered under a Trusteeship Agreement with the United Nations, approved 13th December, 1946.

4. **Nauru.**—In 1919, the Governments of the United Kingdom, Australia and New Zealand entered into an agreement to make provision for the exercise of the mandate conferred on the British Empire for the administration of the island of Nauru, and for the mining of the phosphate deposits thereon. The island is situated in latitude $0^{\circ} 32'$ south of the Equator and longitude $166^{\circ} 55'$ east of Greenwich, and comprises about 5,263 acres. The agreement provided that the administration of the island should be vested in an administrator, the first appointment to be made by the Commonwealth Government, and thereafter in such manner as the three Governments decided. The agreement was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and a supplementary agreement of 30th May, 1923, which gave the Government immediately responsible for the administration greater powers of control over the Administrator, was approved in 1932. The administration under the mandate operated from 17th December, 1920, until 1st November, 1947, and so far the administrators have been appointed by the Commonwealth Government. As with the Territory of New Guinea, Nauru is now administered under a Trusteeship Agreement with the United Nations.

5. **Territory of Ashmore and Cartier Islands.**—By Imperial Order in Council, dated 23rd July, 1931, Ashmore Islands, known as Middle, East and West Islands, and Cartier Island, situated in the Indian Ocean off the north-west coast of Australia, were placed under the authority of the Commonwealth. The islands were accepted by the Commonwealth in the Ashmore and Cartier Islands Acceptance Act 1933 under the name of the Territory of Ashmore and Cartier Islands on 10th May, 1934. The Act authorized the Governor of Western Australia to make ordinances having the force of law in and in relation to the Territory. An amendment to the Act in July, 1938, annexed the islands to the Northern Territory, whose laws, ordinances and regulations, wherever applicable, thereupon applied.

6. **Australian Antarctic Territory.**—An Imperial Order in Council of 7th February, 1933, placed under Australian authority "all the islands and territories other than Adélie Land which are situated south of the 60th degree of South Latitude and lying between the 160th degree of East Longitude and the 45th degree of East Longitude."

The Order came into force with a proclamation issued by the Governor-General on 24th August, 1936, after the Commonwealth Parliament had passed the Australian Antarctic Territory Acceptance Act on 13th June, 1933. The boundaries of Adélie Land were definitely fixed by a decree of 1st April, 1938, as latitude 60° S., longitude 136° E. and longitude 142° E.

7. **Territory of Heard and McDonald Islands.**—Heard and McDonald Islands, about 2,500 miles south-west of Fremantle, were transferred from United Kingdom to Australian control as from 26th December, 1947. The laws of the Australian Capital Territory were declared to be in force in the Territory of Heard and McDonald Islands by the Heard and McDonald Islands Act 1953.

8. **Territory of Cocos (Keeling) Islands.**—The Cocos (Keeling) Islands Act 1955 provided for the acceptance of the Cocos Islands, in the Indian Ocean, as a Territory under the authority of the Commonwealth of Australia and was parallel to an Act of the United Kingdom Parliament transferring authority over the islands to the Commonwealth. Consequent on the passing of these Acts Her Majesty, by Order in Council, specified 23rd November, 1955, as the date of transfer. From that date the islands came under Australian administration and an Official Representative of Australia was appointed to take charge of the local administration of the islands.

CHAPTER II.

PHYSIOGRAPHY.

§ 1. General Description of Australia.

1. **Geographical Position.**—(i) *General.* The Australian Commonwealth, which includes the island continent of Australia proper and the island of Tasmania, is situated in the Southern Hemisphere, and comprises in all an area of about 2,974,581 square miles, the mainland alone containing about 2,948,366 square miles. Bounded on the west and east by the Indian and Pacific Oceans respectively, it lies between longitudes 113° 9' E. and 153° 39' E., while its northern and southern limits are the parallels of latitude 10° 41' S. and 43° 39' S., or, excluding Tasmania, 39° 8' S. On its north are the Timor and Arafura Seas and Torres Strait, on its south the Southern Ocean. The extreme points are Steep Point on the west, Cape Byron on the east, Cape York on the north, and South-East Cape or, if Tasmania be excluded, Wilson's Promontory, on the south.

(ii) *Tropical and Temperate Regions.* Of the total area of Australia, nearly 40 per cent. lies within the tropics. Assuming, as is usual, that the latitude of the Tropic of Capricorn is 23° 30' S., the areas within the tropical and temperate zones are approximately as follows:—

AUSTRALIA: AREAS OF TROPICAL AND TEMPERATE REGIONS. (Square miles.)

Area.	N.S.W. (a)	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	N. Terr.	Total.
Within Tropical Zone ..			359,000		364,000		426,320	1,149,320
" Temperate Zone	310,372	87,884	311,500	380,070	611,920	26,215	97,300	1,825,261
Total Area	310,372	87,884	670,500	380,070	975,920	26,215	523,620	2,974,581

(a) Includes Australian Capital Territory (939 square miles).

Fifty-four per cent. of Queensland lies within the tropical zone and 46 per cent. in the temperate zone; 37 per cent. of Western Australia is tropical and 63 per cent. temperate; while 81 per cent. of the Northern Territory is tropical and 19 per cent. temperate. All of the remaining States lie within the temperate zone. The tropical part of Australia thus comprises about 39 per cent. of the whole of the continent, and about 53 per cent. of the three territories which have areas within the tropical zone.

2. **Area of Australia compared with Areas of other Countries.**—The area of Australia is almost as great as that of the United States of America, four-fifths of that of Canada, nearly three-quarters of the whole area of Europe, and about 25 times as large as Great Britain and Ireland. The areas of Australia and of certain other countries are shown in the table on the following page.

AREA OF AUSTRALIA AND OF OTHER COUNTRIES, *circa* 1954.

('000 square miles.)

Country.	Area.	Country.	Area
Continental Divisions—		Africa—<i>continued.</i>	
Europe (<i>a</i>)	1,903	Rhodesia and Nyasaland Federation	490
Asia (<i>a</i>)	10,443	Angola	481
U.S.S.R. (Europe and Asia)	8,599	Union of South Africa	472
Africa	11,693	Ethiopia and Eritrea	457
North and Central America and West Indies	9,354	Egypt	386
South America	6,892	Tanganyika Territory	363
Oceania	3,304	Nigeria and Protectorate	339
<i>Total, excluding Arctic and Antarctic Conts.</i>	<i>52,188</i>	South-West Africa	318
Europe (<i>a</i>)—		Mozambique	298
France	213	Bechuanaland Protectorate	275
Spain (incl. possessions)	194	Madagascar	228
Sweden	173	Kenya Colony and Protectorate	225
Germany	136	Other	1,164
Finland	130	<i>Total</i>	<i>11,693</i>
Norway	125	North and Central America—	
Poland	120	Canada	3,845
Italy	116	United States of America	3,022
Yugoslavia	99	Greenland	840
United Kingdom	94	Mexico	760
Romania	92	Alaska	586
Other	411	Nicaragua	57
<i>Total (<i>a</i>)</i>	<i>1,903</i>	Cuba	44
Asia (<i>a</i>)—		Honduras	43
China and Dependencies	3,759	Other	157
India and Nepal	1,231	<i>Total</i>	<i>9,354</i>
Iran	629	South America—	
Saudi Arabia	618	Brazil	3,287
Mongolian People's Republic	591	Argentina	1,084
Indonesia	576	Peru	506
Pakistan	364	Colombia (excl. of Panama)	439
Turkey	300	Bolivia	424
Burma	262	Venezuela	352
Afghanistan	251	Chile	286
Thailand	198	Paraguay	157
Iraq	172	Ecuador	105
Other	1,492	Other	252
<i>Total (<i>a</i>)</i>	<i>10,443</i>	<i>Total</i>	<i>6,892</i>
U.S.S.R.	8,599	Oceania—	
Africa—		Commonwealth of Australia	2,975
French West Africa	1,831	New Zealand	103
French Equatorial Africa	969	New Guinea (<i>b</i>)	93
Anglo-Egyptian Sudan	967	Papua	91
Belgian Congo	905	Other	42
Algeria	846	<i>Total</i>	<i>3,304</i>
Libya	679		

(a) Excludes U.S.S.R., shown below.*(b)* Australian Trust Territory.

The areas shown in the table are obtained from the *Demographic Yearbook*, 1955 published by the Statistical Office of the United Nations and the countries have been arranged in accordance with the continental groups used therein.

3. Areas of States and Territories, Coastal Configuration and Standard Times.—As already stated, Australia consists of six States and the Northern and Australian Capital Territories. Particulars of areas, coastline and standard times are shown in the following table:—

AUSTRALIA: AREAS OF STATES AND TERRITORIES, COASTLINE AND STANDARD TIMES.

State or Territory.	Area.	Proportion of Total Area.	Coastline.	Area per Mile of Coastline.	Standard Times.	
					Meridian Selected.	Ahead of G.M.T.
	Sq. miles.	%	Miles.	Sq. miles.		Hours.
New South Wales ..	309,433	10.40	(a) 700	(a) 443	150° E.	10
Victoria ..	87,884	2.96	680	129	150° E.	10
Queensland ..	670,500	22.54	3,000	223	150° E.	10
South Australia ..	380,070	12.78	1,540	247	142°30' E.	9½
Western Australia ..	975,920	32.81	4,350	224	120° E.	8
Northern Territory ..	523,620	17.60	1,040	503	142°30' E.	9½
Australian Capital Territory ..	939	0.03	..	..	150° E.	10
<i>Mainland</i> ..	<i>2,948,366</i>	<i>99.12</i>	<i>11,310</i>	<i>261</i>	..	..
Tasmania ..	26,215	0.88	900	29	150° E.	10
Australia ..	2,974,581	100.00	12,210	244	..	..

(a) Includes Australian Capital Territory.

There are no striking features in the configuration of the coast; the most remarkable indentations are the Gulf of Carpentaria on the north and the Great Australian Bight on the south. The Cape York Peninsula on the extreme north is the only other remarkable feature in the outline. In Official Year Book No. 1 an enumeration was given of the features of the coastline of Australia (*see pp. 60-68*).

Prior to 1895, the official time adopted in the several colonies was for most purposes the mean solar time of the capital city of each. In 1894 and 1895, after several conferences had been held, legislation was enacted by each of the colonies whereby the mean solar times of the meridians of east longitude 120° (Western Australia), 135° (South Australia and Northern Territory) and 150° (Queensland, New South Wales, Victoria and Tasmania) were adopted. In 1898, however, the South Australian legislature amended its earlier provision and adopted the mean solar time of the meridian 142° 30' E. longitude as the standard time for that colony. For further information on this subject, *see Official Year Book No. 39, p. 65*.

4. Geographical Features of Australia.—(i) *General*. The following description is only a broad summarization of the main physical characteristics of the Australian continent. For greater detail of particular geographical elements, earlier issues of the Official Year Book should be consulted. The list of special articles, etc., at the end of this volume indicates the nature of the information available and its position in the various issues.

(ii) *Orography of Australia*. (a) *General Description of the Surface*. Owing to the absence of any very high mountain chains, and to the great depression in the centre of Australia, the average elevation of the Australian continent above the level of the surrounding oceans is less than that of any of the other continents. Three-quarters of the land-mass lies between the 600 and 1,500 feet contours in the form of a huge plateau.

A section through the continent from east to west, at the point of its greatest breadth, shows first a narrow belt of coastal plain. This plain, extending north and south along the whole eastern coast, is well watered by rivers. It is of variable width, seldom more than sixty or seventy miles, and occasionally only a few miles, the average being roughly about forty to fifty miles. From this plain, the Great Dividing Range, extending from the north of Queensland to the south of New South Wales, and thence sweeping westward through Victoria, rises, often abruptly, and frequently presents bold escarpments on its eastern face. The descent on its western slopes is gradual, until, in the country to the north of Spencer's Gulf, the plain is not above sea-level, and occasionally even below it. Thence there is another almost imperceptible rise until the mountain ranges of Western Australia are reached, and beyond these lies another coastal plain.

The great central plain or plateau is the most distinctive feature of the Australian continent and its climatic peculiarities can probably be largely ascribed thereto.

(b) *Mountain Systems.* The main mountain feature of Australia is the Great Dividing Range, which runs along the whole eastern coast of the continent and can be traced over the islands of Torres Strait to New Guinea, while in the south one branch sweeps westwards towards the boundary of Victoria and South Australia, and the other, the main branch, terminates in Tasmania.

This mountain system is at no place more than 250 miles from the eastern coastline and it approaches to less than 30 miles. On the whole, it is much closer to the coast in both New South Wales and Victoria than it is in Queensland, the corresponding average distances being about 70, 65 and 130 miles respectively. There is no connexion between the mountains of the eastern and other States of Australia.

The mountains of Australia are relatively low. Thus, in Queensland, the Great Dividing Range reaches a height above sea-level of less than 5,500 feet, the highest peak being Mount Bartle Frere. Mount Kosciusko, in New South Wales, is only about 7,300 feet, and Mount Bogong, in Victoria, about 6,500 feet high. In South Australia and Western Australia, heights of three and four thousand feet are attained. In Tasmania the greatest height is only a little more than 5,000 feet. This fact, that there are no high mountains in Australia, is also of considerable importance in considering the climate of Australia.

It may be of interest to observe that at one time Tasmania was probably connected with the mainland. As the Great Dividing Range can, in the north, be traced from Cape York across Torres Strait to New Guinea, so its main axis can be similarly followed across the shallow waters of Bass Strait and its islands from Wilson's Promontory to Tasmania, which may be said to be completely occupied by ramifications of the chain. The central part of the island is occupied by an elevated plateau, roughly triangular in shape, and presenting bold fronts to the east, west and north. This does not extend in any direction more than about 60 miles. The plateau rests upon a more extensive tableland, the contour of which closely follows the coastline, and occasionally broadens out into low-lying tracts not much above sea-level. The extreme south of the island is rugged in character.

(iii) *Hydrology of Australia.* (a) *Rainfall.* On the whole, Australia is a country with a limited rainfall. This is immediately evident on studying its river systems, its lakes, and its artesian areas. Its one large river system is that of the Murray and Darling Rivers, of which the former stream is the larger and more important. Many of the rivers of the interior run only after heavy rains. Depending almost entirely on rainfall, a consequence of the absence of high mountains, they drain large areas with widely varying relation as between rainfall and flow. Thus it has been estimated that not more than 10 per cent. of the rainfall on the catchment area of the Darling River above Bourke (New South Wales) discharges itself past that town. The rate of fall is often very slight.

(b) *Rivers.* The rivers of Australia may be divided into two major classes, those of the coastal plains with moderate rates of fall; and those of the central plains with very slight fall. Of the former not many are navigable for any distance from their mouths, and bars make many of them difficult of access or inaccessible from the sea.

The two longest rivers of the northern part of the eastern coast are the Burdekin, discharging into Upstart Bay, with a catchment area of 53,500 square miles, and the Fitzroy, which reaches the sea at Keppel Bay and drains about 55,600 square miles.

The Hunter is the largest coastal river of New South Wales, draining about 11,000 square miles before it reaches the sea at Newcastle. The Murray River, with its great tributary the Darling, drains a considerable part of Queensland, the major part of New South Wales and a large part of Victoria. It debouches into the arm of the sea known as Lake Alexandrina, on the eastern side of the South Australian coast. The total length of the Murray is about 1,600 miles, 400 being in South Australia and 1,200 constituting

the boundary between New South Wales and Victoria. The total length of the Darling-Murray from the source of the Darling to the mouth of the Murray is about 2,300 miles. In good seasons the river is navigable for a considerable proportion of its length.

The rivers of the north-west coast of Australia (Western Australia) are of considerable size, e.g., the Murchison, Gascoyne, Ashburton, Fortesque, De Grey, Fitzroy, Drysdale and Ord. So also are those in the Northern Territory, e.g., the Victoria and Daly. The former of these, estimated to drain 90,000 square miles, is said to be navigable for 50 miles.

The rivers on the Queensland side of the Gulf of Carpentaria, such as the Gregory, Leichhardt, Cloncurry, Gilbert and Mitchell, are also of considerable size.

Owing to the small amount of fall of many of the interior rivers, they may flood hundreds of miles of country in wet seasons, while in dry seasons they form a mere succession of waterholes or are entirely dry. It is this fact that explains the apparently conflicting reports of the early explorers, one regarding the interior as an inland sea, and another as a desert.

The rivers of Tasmania have short and rapid courses, as might be expected from the configuration of the territory.

(c) *Lakes.* The "lakes" of Australia may be divided into three classes, true permanent lakes; lakes which, being very shallow, become mere morasses in dry seasons or even dry up and finally present a cracked surface of salt and dry mud; and lakes which are really inlets of the ocean, opening out into a lake-like expanse.

The second class is the only one which seems to demand special mention. These are a characteristic of the great central plain of Australia. Some of them, such as Lake Torrens, Gairdner, Eyre and Frome, are of considerable extent.

(d) *Artesian Areas.* A considerable tract of the plain country of New South Wales and Queensland carries a water-bearing stratum, usually at a great depth. A large number of artesian bores have been put down, from which there is a considerable flow. These are of great value and render usable large areas which otherwise would be difficult to occupy even for pastoral purposes.

For further information on this subject, see Chapter IX.—Water Conservation and Irrigation.

5. *Fauna, Flora, Geology and Seismology of Australia.*—Special articles dealing with these features have appeared in previous issues of the Official Year Book, but limits of space naturally preclude their repetition in each volume. The nature and location of these articles can be readily ascertained from the special index preceding the general index at the end of this issue.

§ 2. Climate and Meteorology of Australia.

NOTE.—This Section has been prepared by the Director, Commonwealth Meteorological Bureau, and the various States and Territories have been arranged in the standard order adopted by that Bureau.

1. *Introductory.*—Previous issues of the Official Year Book, notably No. 3, pp. 79–83, and No. 4, pp. 84 and 87, contained outlines of the history of Australian meteorology and the creation and organization of the Commonwealth Bureau of Meteorology. Official Year Book No. 38, pp. 30–32, contained paragraphs devoted to (i) Organization of the Meteorological Service; (ii) Meteorological Publications; (iii) Equipment; and (iv) Meteorological Divisions.

By reason of its insular geographical position and the absence of striking physical features, whether in marine gulfs or in important mountains, Australia is, on the whole, less subject to extremes of weather than are regions of similar area in other parts of the globe, and latitude for latitude Australia is generally more temperate.

The average elevation of the surface of the land is low, probably close to 900 feet above the sea. The altitudes range up to a little more than 7,300 feet, hence the Australian climate displays a great many features, from the characteristically tropical to what is essentially alpine, a fact indicated in some measure by the name Australian Alps given to the southern portion of the Great Dividing Range.

On the coast, the rainfall is often abundant and the atmosphere moist, but in some portions of the interior it is very limited, and the atmosphere dry. The distribution of forest, therefore, with its climatic influence, is very uneven. In the interior, in places, there are fine belts of trees, but there are also large areas which are treeless, and here the air is hot and parching in summer. Again, on the coast, even so far south as latitude 35°, the vegetation is tropical in its luxuriance, and to some extent also in character.

2. *Temperature.*—(i) *Effective Temperature.* When a meteorologist speaks of temperature, he means the temperature of the air indicated by a thermometer sheltered from precipitation, from direct rays of the sun and from radiation of heat from the ground

and neighbouring objects, yet freely exposed to the circulation of the air. In other words, he means temperature measured under conditions standardized as near as possible in a Stevenson Screen, which is the standard housing for meteorological thermometers.

This shade temperature as measured by a "dry bulb" thermometer shows only the actual temperature experienced by dry inorganic substances, not the *sensible* temperatures felt by organic bodies. In the case of human beings, sensible temperature is affected by the rate of conduction of heat to or from the body by moving air and also by the rate of cooling due to evaporation from the skin and respiratory passages. The wind and humidity therefore determine the sensible temperature.

The humidity (relative humidity) is determined from the readings of the dry and wet bulb thermometers. Of late years, however, with increasing interest in human comfort in tropical climates, another term, *effective* temperature, has come into use. It may be defined as "the temperature of a still, saturated atmosphere which would on the average produce the same feeling of warmth or cold as the atmosphere in question".*

The 80° F. isotherm is confined to a very narrow tract of country on the north-west coast of Western Australia. The 75° F. isotherm extends, broadly, from Onslow on the north-west coast of Western Australia to Daly Waters to Camooweal to Moreton in Cape York Peninsula following in a general way the coastline of Northern Australia but from 100 to 300 miles inland.

Later investigations have established "comfort zones"† bounded by limits of effective temperature within which people will feel comfortable. American research workers have determined the following figures ‡:—

COMFORT ZONES: EFFECTIVE TEMPERATURES.

Season.	No subjects feel comfortable below—	Fifty per cent. of subjects feel comfortable between—	No subjects feel comfortable above—
Winter.. ..	60° F.	63° and 71° F.	74° F.
Summer	64° F.	66° and 75° F.	79° F.

Queensland investigators§ in recent years have divided some towns of Queensland into three classes on the basis of deviation from comfort:—

Class 1 (Sub-tropics).—Quite suitable for Caucasian habitation—Rockhampton, Bundaberg, Brisbane, Longreach, Charleville.

Class 2 (Marginal tropics).—Suitable for Caucasian habitation, but requires adaptation in summer—Mackay, Townsville.

Class 3 (Tropics).—(a) Permissible for Caucasian habitation but requires selection and marked adaptation—Cardwell, Cairns, Cloncurry. (b) Not suitable for continuous Caucasian habitation—Cape York, Burketown.

These results of recent years bear out investigations made previously in Australia|| in which the atmospheric vapour pressure was used as a measure of comfort, its value for this purpose being that it has equal effect in both indoor and outdoor climates. The limits of comfort range from .2 to .5 inch of vapour pressure. After drawing isopleths for effective temperature (not corrected for altitude), mean vapour pressure reduced to a logarithmic scale, and mean wet bulb temperature, it is found that there is close agreement in defining zones of relative discomfort.

(ii) *Seasons*. The Australian seasons are:—Summer, December to February; autumn, March to May; winter, June to August; spring, September to November. In most parts of Australia, January is the hottest month, but in Tasmania and southern Victoria, February is the hottest; in the tropical north, probably because the cooling "monsoon" rains occur in late summer, December is the hottest month, and at Darwin, November.

On a rainfall basis, in the tropical north the year is divisible into "wet" and "dry" seasons, but on the basis of temperatures and physical comfort the "dry" season can be further sub-divided into two parts—"cool dry" and "warm dusty".¶

(a) "*Cool dry*" Season. From May to August. The average maximum temperature ranges from 80° to 85° F., the relative humidity is low and in inland areas cold nights are experienced when the temperature drops to 40° F. The skies generally are cloudless, but in about one year in three during June or July one to two inches of rain fall.

* Houghton, F. C., Teague, W. W. and Miller, W. E. (1926) Amer. Soc. Heat. Vent. Engns. † Yaglou, C. P. (1926) J. Industr. Hyg. ‡ Yaglou, C. P. (1927) Ibid. § Lee, D. H. K. Trans. Roy. Soc. Trop. Med. and Hyg. (1940) Vol. XXXII. || Barkley, H. Zones of Relative Physical Comfort in Australia, Met. Bull. 20, 1934. ¶ Maze, W. H. Austrn. Geog. June, 1945. Settlement in E. Kimberleys.

(b) "*Warm dusty*" Season. From the end of August temperatures rise and reach a maximum in October or the beginning of November. Temperatures of over 120° F. have been recorded.

(c) "*Wet*" Season. After the first of the heavy storms, the maximum temperatures fall but still remain high with high relative humidity. At Wyndham during January, 1944 the minimum temperature did not drop below 75° F. for fourteen consecutive days. A maximum of over 100° F. was recorded on each rainless day.

In Central and Northern Australia, during the hottest months, the average temperatures range from 80° to 85° F., whereas in Southern Australia they vary from 65° to 70° (see maps pp. 33, 34).

Throughout Australia, the coldest month is July, when only a very narrow strip of the northern sea-board has an average temperature as high as 75°. Over the southern half of the continent, July temperatures range from 55° to 45° at elevations below 1,500 feet and fall as low as 35° on the Australian Alps (see maps pp. 35, 36). Here the temperature seldom, if ever, reaches 100° even in the hottest of seasons. Hotham Heights (6,100 feet above Mean Sea Level) recorded the highest maximum of 82.0° on 20th January, 1935. In winter, readings slightly below zero are occasionally recorded on the extreme heights.

Tasmania, as a whole, enjoys a moderate and equable range of temperature throughout the year, although occasionally hot winds may cause the temperature to rise to 100° in the eastern part of the State.

(iii) *Comparisons with other Countries.* In respect of Australian temperatures generally, it may be pointed out that the mean annual isotherm for 70° F. extends in South America and South Africa as far south as latitude 33°, while in Australia it reaches only as far south as latitude 30°, thus showing that, on the whole, Australia has, latitude for latitude, a more temperate climate than other places in the Southern Hemisphere.

The comparison is even more favourable when the Northern Hemisphere is included, for in the United States of America the 70° isotherm extends in several of the western States as far north as latitude 41°. In Europe, the same isotherm reaches almost to the southern shores of Spain, passing afterwards, however, along the northern shores of Africa till it reaches the Red Sea, when it bends northward along the eastern shore of the Mediterranean till it reaches Syria. In Asia, nearly the whole of the land area south of latitude 40° N. has a mean annual temperature higher than 70°.

The extreme range of temperature is less than 100° over practically the whole of Australia, that figure being only slightly exceeded at a very few places; it is mostly 70° to 90° over inland areas, and somewhat less on the coast. In parts of Asia and North America, the extreme range exceeds 130° and 150° in some localities.

Along the northern shores of Australia, the temperatures are very equable. At Darwin, for example, the difference in the means for the hottest and coldest month is only 8.4°, and the extreme readings for the year, or the highest maximum on record and the lowest minimum, show a difference of under 50°.

The highest temperature recorded in Australia was 127.5° F. at Cloncurry on 16th January, 1889. The world's highest (136° F.) was recorded at Azizia (Tripoli) on 13th August, 1922. The lowest temperature ever recorded in Australia was -8° F. at Charlotte Pass on 14th June, 1945, and again on 22nd July, 1947, as contrasted with the world's lowest recorded temperature of -90° F. at Verkhoyansk (Siberia) on 5th and 7th February, 1892.

A comparison of the mean temperatures and the range from the extreme maximum to the extreme minimum temperatures (in whole degrees) of the capital cities of Australia with those of the main cities of some other countries was presented in tabular form in Official Year Book No. 38, p. 42.

(iv) *Hottest and Coldest Parts.* A comparison of the temperatures recorded at coast and inland stations shows that, in Australia, as in other continents, the range increases, within certain limits, with increasing distance from the coast.

In the interior of Australia, and during exceptionally dry summers, the temperature occasionally reaches or exceeds 120° in the shade. The hottest area of the continent is situated in the northern part of Western Australia about the Marble Bar and Nullagine goldfields, where the maximum shade temperature during the summer sometimes exceeds 100° continuously for days and weeks. The longest recorded period was 160 days from 31st October, 1923 to 7th April, 1924.

The area affected and the period of duration of the longest heat waves in Australia are shown in the map and diagram on page 37.

(v) *Tabulated Data for Selected Climatological Stations in Australia.* Tables showing normal mean temperature, extreme temperatures and normal rainfall for each month for

selected climatological stations in each State and the Northern Territory appeared in Official Year Book No. 40, pp. 16–23, and similar data for other selected stations in the Commonwealth in Official Year Book No. 39, pp. 41–48. Pages 53–60 of this issue contain this information in respect of Canberra, Darwin and the six State capitals.

(vi) *Frosts*.* The Observer's Handbook of the Meteorological Office, London, gives the following definition:—"Injury to the tissues of growing plants is not caused until the temperature has fallen considerably below the freezing point of water (32° F.) and a 'ground frost' is regarded as having occurred when the thermometer on the grass has fallen to 30.4° F. or below".

In Australia, this definition is adopted for stations equipped with terrestrial minimum thermometers. However, these are few in number, so although many rainfall observers record "hoar frost" when seen, for statistical purposes a screen temperature of 36° F. is taken as indicating light frosts at ground level. For heavy frosts, a screen temperature of 32° F. is taken.

In America, a "killing" frost is defined as a frost "that is generally destructive of vegetation". A "black frost" is the phenomenon arising out of a combination of low temperature and low humidity causing rupturing of plant cells by expansion, when freezing takes place, of the water which they contain, though frost crystals are not formed on the ground.

The parts of Australia most subject to low temperature are the eastern highlands from about Omeo in Victoria northward to Cambooya and Bybera in Queensland. Most stations in this region experience more than ten nights per month with readings of 32° F. or under for three to five months of the year. In Tasmania, districts on the Central Plateau are subject to such conditions for three to six months of the year. Minimum temperatures of 32° F. are comparatively infrequent in Western Australia except in parts of the south and south-west. In South Australia, the Yongala district is much more subject to such temperatures than other parts of the State. Much of the south-east of Queensland has a higher frequency of such readings than South Australia. Generally speaking, the frequency is controlled mainly by altitude, latitude and, to a lesser degree, by proximity to the sea.

Frosts may occur within a few miles of the coastline over the whole continent, except in the Northern Territory and a considerable area of Northern Queensland. Regions subject to frost in all months of the year comprise portions of the tablelands of New South Wales, the Eastern Highlands and parts of the Central Divide and Western district in Victoria, practically the whole of Tasmania and a small area in the south-west of Western Australia.

A map showing the average annual number of frost-free days (i.e., days on which the temperature does not fall below 36° F.) appears on page 39.

Over most of the interior of the continent, and on the Highlands in Queensland as far north as the Atherton Plateau frosts appear in April and end in September, but they are infrequent in these months. Minimum temperatures of 32° F. are experienced in most of the sub-tropical interior in June and July.

3. *Humidity*.—After temperature, humidity is the most important element of climate particularly as regards its effects on human comfort, rainfall supply and conservation and related problems.

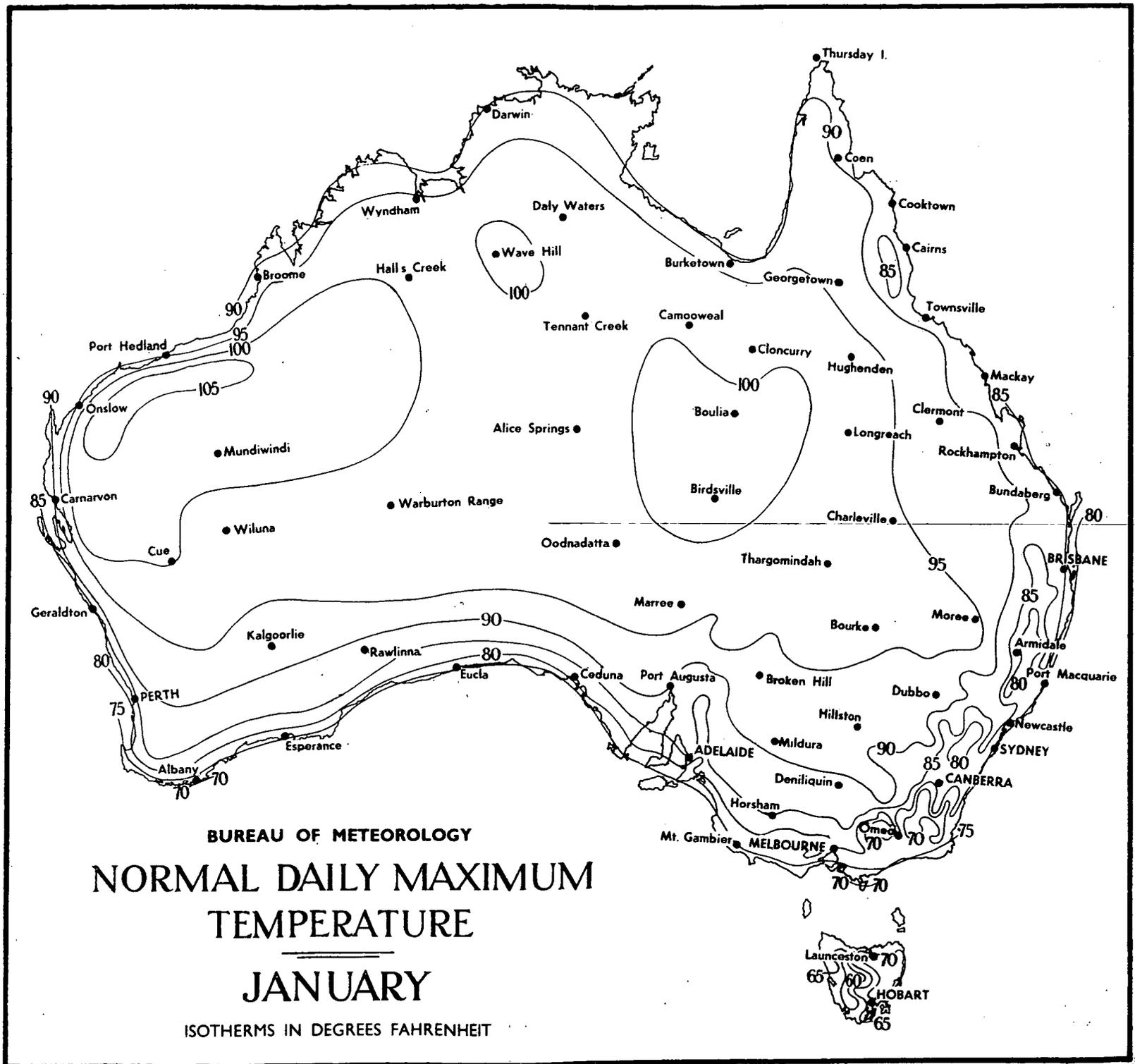
"Vapour pressure" is the pressure exerted by the water vapour in the atmosphere. At any given temperature there is a definite upper limit to the amount of water that can exist as vapour in the atmosphere. When this limit is reached, the air is said to be saturated and the pressure of the water vapour is equal to the "saturation vapour pressure".

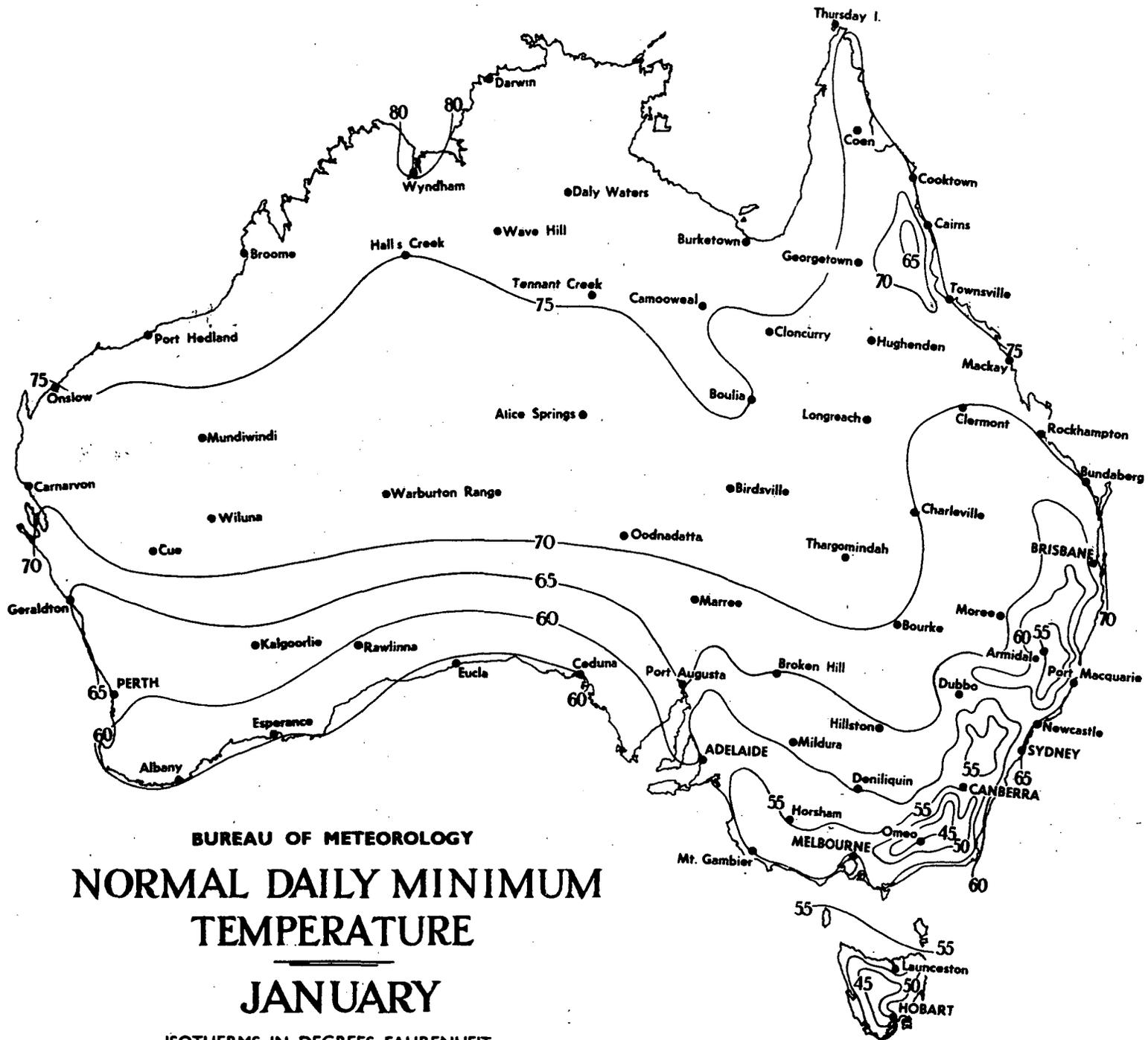
In this publication, the humidity of the air has been expressed by the relative humidity, which is the quotient of the vapour pressure divided by the saturation vapour pressure and multiplied by one hundred. The mean 9 a.m. relative humidity, as well as its highest and lowest recorded mean values at 9 a.m., are shown in the tables of climatological data for the capital cities (see pp. 53–60). The mean monthly vapour pressure has also been added to these tables.

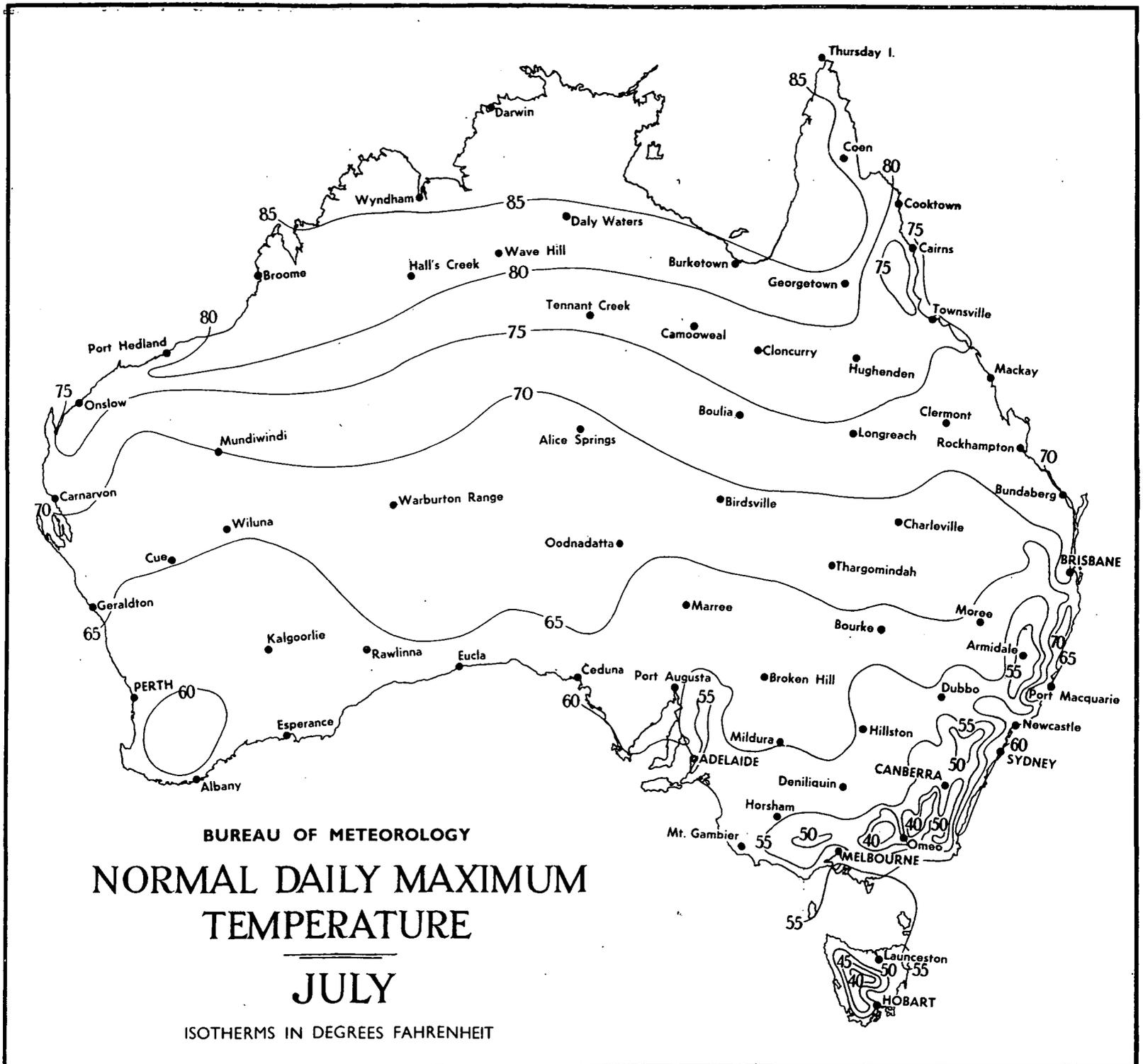
The annual curve of vapour pressure derived from the normal monthly values for this element is comparable with the maximum and minimum temperature curves, but the relative humidities, consisting as they do of the extremes for each month, do not show the normal annual fluctuation which would be approximately midway between the extremes.

The order of stations in descending values of 9 a.m. vapour pressure is Darwin, Brisbane, Sydney, Perth, Melbourne, Adelaide, Canberra, Hobart and Alice Springs, while the relative humidity at 9 a.m. diminishes in the order, Melbourne, Sydney, Darwin, Brisbane, Canberra, Hobart, Perth, Adelaide and Alice Springs.

* Foley, J. C. Frost in the Australian Region (Bull. 32, 1945).





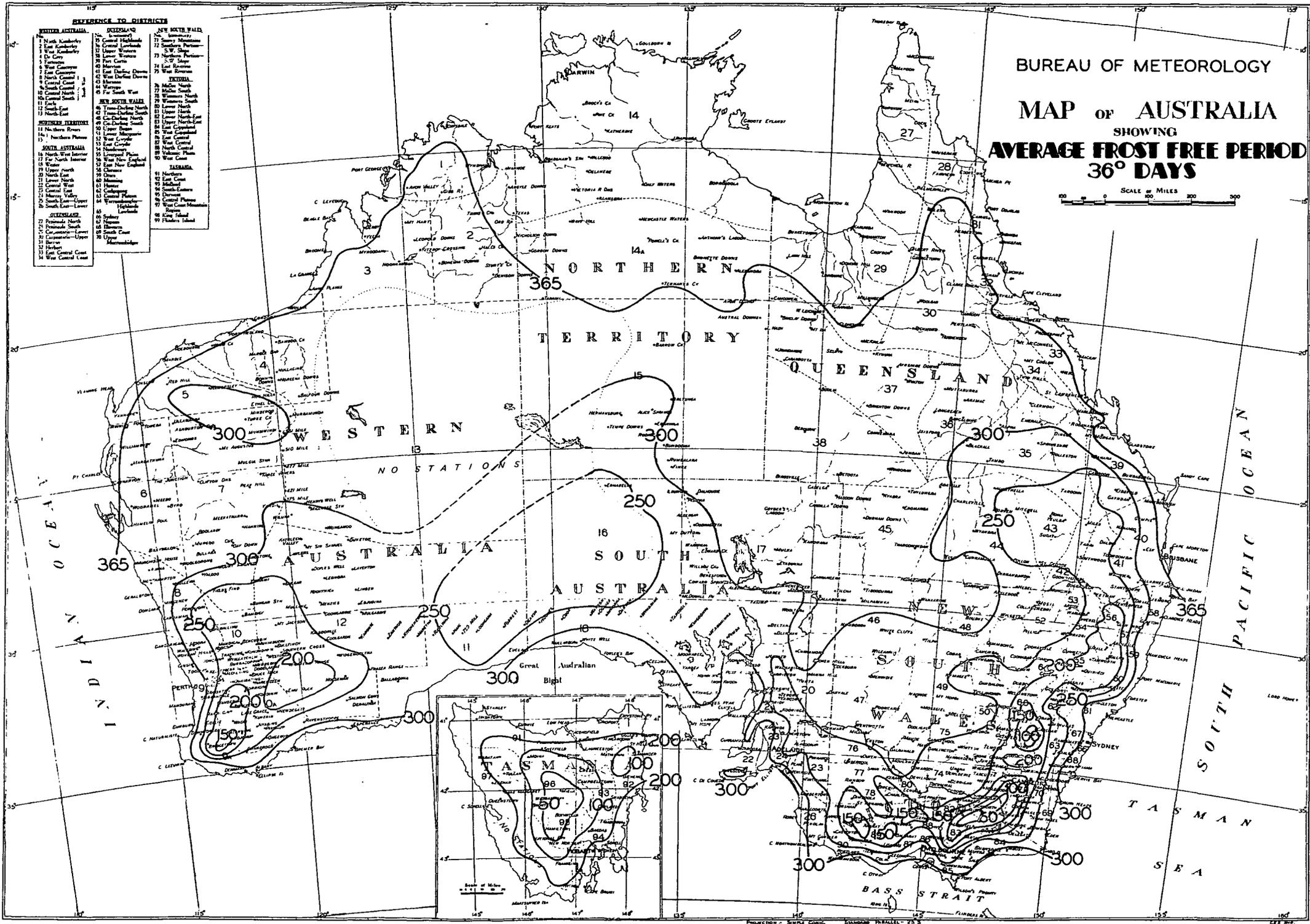


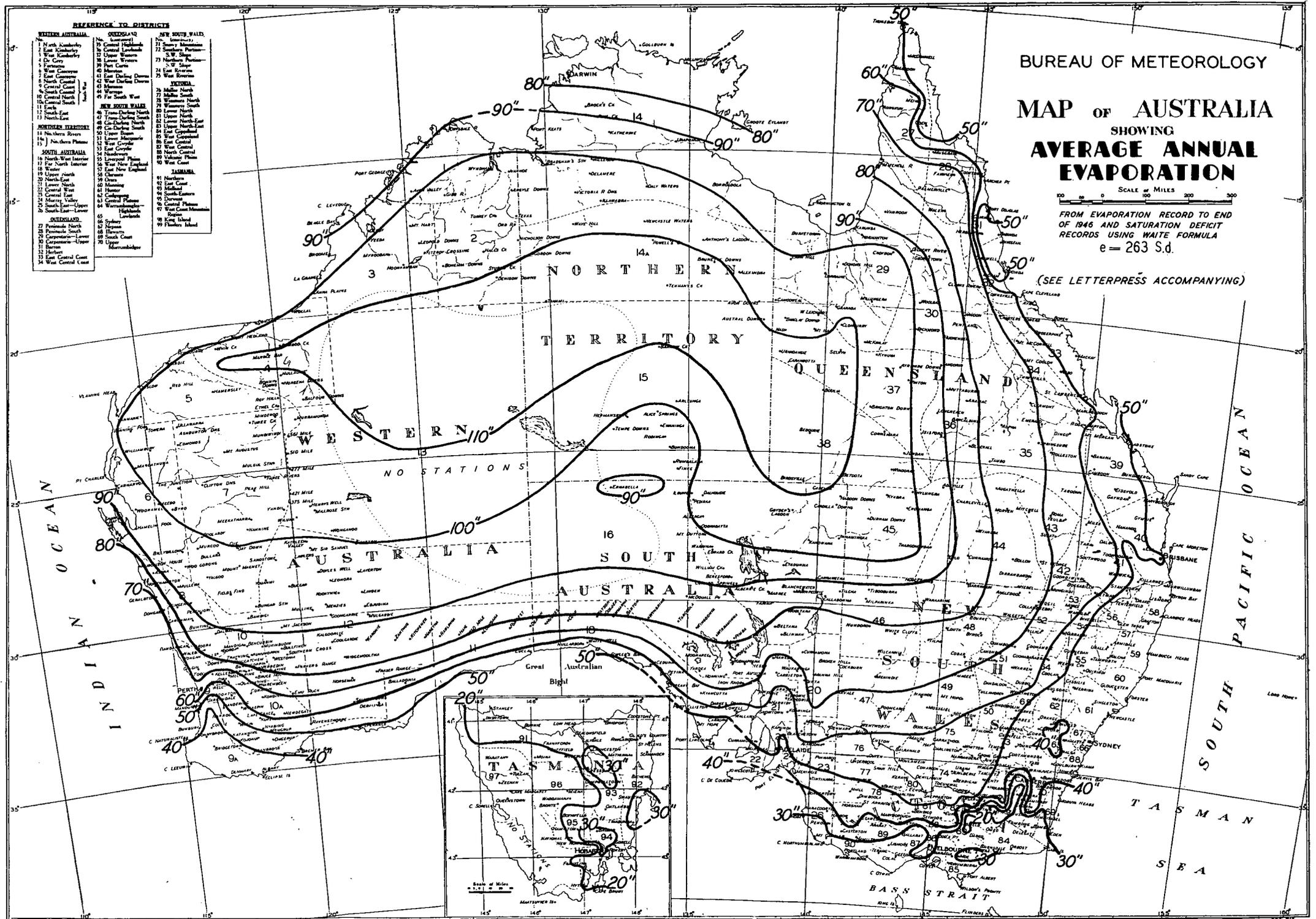
BUREAU OF METEOROLOGY
MAP OF AUSTRALIA
 SHOWING
AVERAGE FROST FREE PERIOD
36° DAYS

SCALE OF MILES
 0 100 200 300

REFERENCE TO DISTRICTS

WESTERN AUSTRALIA		TASMANIA	
1 North Kimberley	21 Geraldton	91 Northern	92 Eastern
2 East Kimberley	22 Central Kimberley	93 Southern	94 Western
3 West Kimberley	23 Upper North	95 North	95 Southern
4 Goldfields	24 Lower North	96 Central	96 Southern
5 Peel	25 Upper South	97 Eastern	97 Southern
6 South Coast	26 Lower South	98 Western	98 Southern
7 Inland	27 Upper North-East	99 Eastern	99 Southern
8 East Coast	28 Lower North-East		
9 South Coast	29 Upper South-East		
10 Central Coast	30 Lower South-East		
11 West Coast	31 Upper West		
12 Central West	32 Lower West		
13 North-West	33 Upper East		
14 South-West	34 Lower East		
15 East	35 Upper North		
16 North-East	36 Lower North		
17 South-East	37 Upper South		
18 North	38 Lower South		
19 North-West	39 Upper North-East		
20 South-West	40 Lower North-East		
21 Central	41 Upper South-East		
22 South	42 Lower South-East		
23 East	43 Upper West		
24 West	44 Lower West		
25 North	45 Upper East		
26 South	46 Lower East		
27 East	47 Upper North		
28 West	48 Lower North		
29 North	49 Upper South		
30 South	50 Lower South		
31 East	51 Upper North-East		
32 West	52 Lower North-East		
33 North	53 Upper South-East		
34 South	54 Lower South-East		
35 East	55 Upper West		
36 West	56 Lower West		
37 North	57 Upper East		
38 South	58 Lower East		
39 East	59 Upper North		
40 West	60 Lower North		
41 North	61 Upper South		
42 South	62 Lower South		
43 East	63 Upper North-East		
44 West	64 Lower North-East		
45 North	65 Upper South-East		
46 South	66 Lower South-East		
47 East	67 Upper West		
48 West	68 Lower West		
49 North	69 Upper East		
50 South	70 Lower East		
51 East	71 Upper North		
52 West	72 Lower North		
53 North	73 Upper South		
54 South	74 Lower South		
55 East	75 Upper North-East		
56 West	76 Lower North-East		
57 North	77 Upper South-East		
58 South	78 Lower South-East		
59 East	79 Upper West		
60 West	80 Lower West		
61 North	81 Upper East		
62 South	82 Lower East		
63 East	83 Upper North		
64 West	84 Lower North		
65 North	85 Upper South		
66 South	86 Lower South		
67 East	87 Upper North-East		
68 West	88 Lower North-East		
69 North	89 Upper South-East		
70 South	90 Lower South-East		





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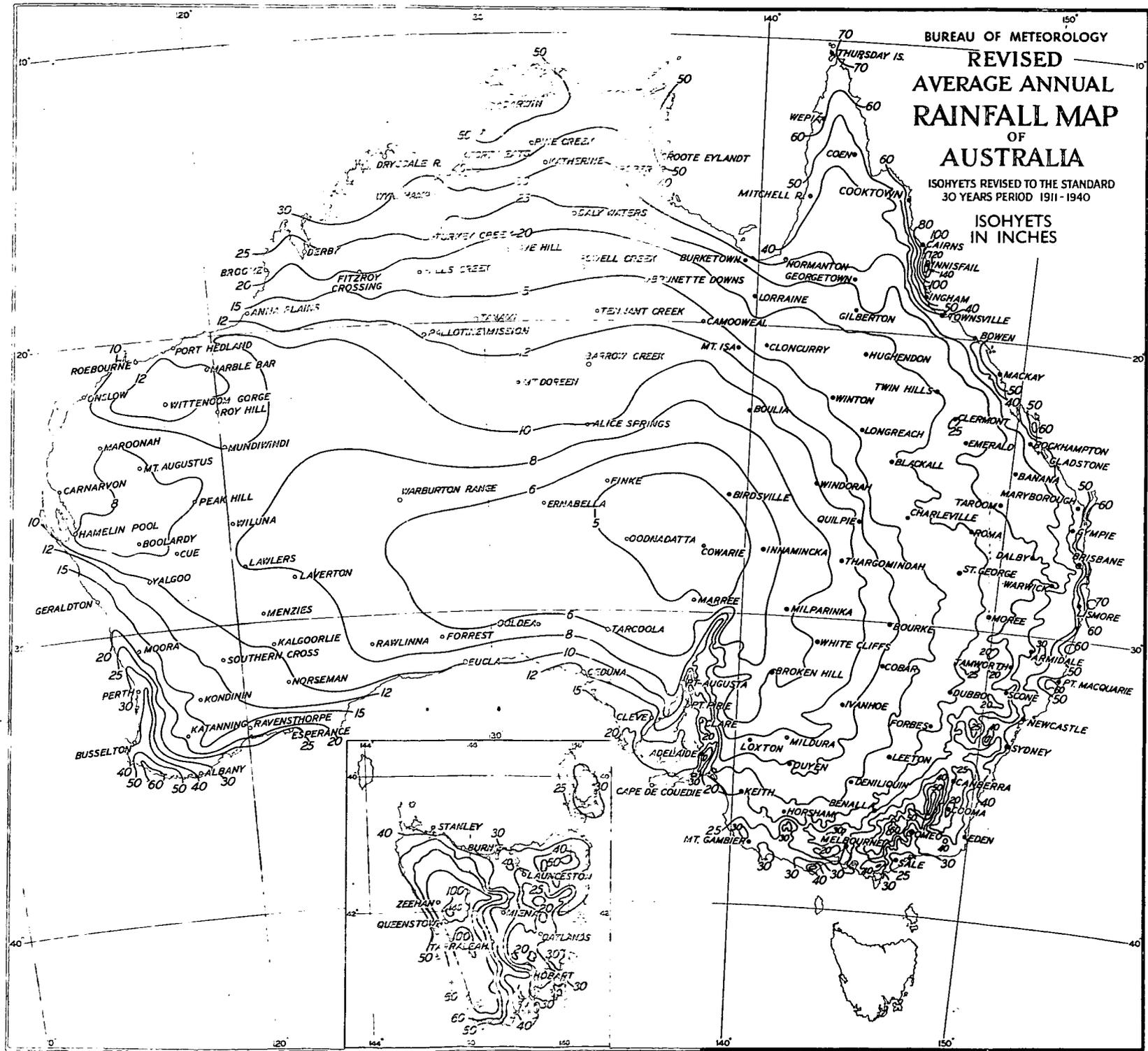
MAP OF AUSTRALIA

SHOWING AVERAGE ANNUAL EVAPORATION

SCALE OF MILES 0 100 200 300

FROM EVAPORATION RECORD TO END OF 1946 AND SATURATION DEFICIT RECORDS USING WAITE FORMULA
 $e = 263 S.d.$

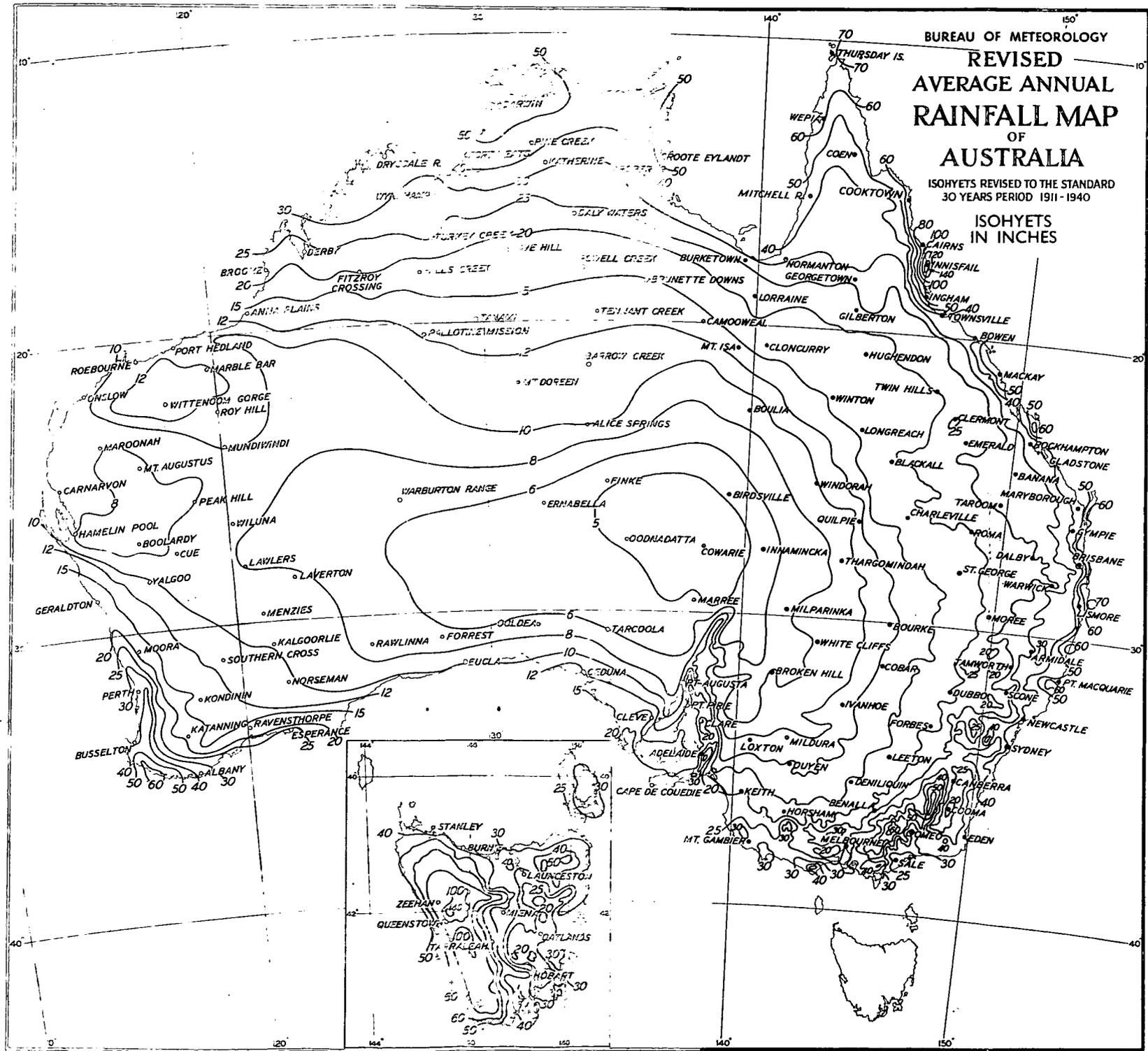
(SEE LETTERPRESS ACCOMPANYING)



BUREAU OF METEOROLOGY
**REVISED
AVERAGE ANNUAL
RAINFALL MAP
OF
AUSTRALIA**

ISOHYETS REVISED TO THE STANDARD
30 YEARS PERIOD 1911-1940

**ISOHYETS
IN INCHES**

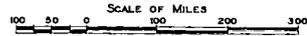


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ISOHYETS REVISED TO THE STANDARD
30 YEARS PERIOD 1911-1940

**ISOHYETS
IN INCHES**

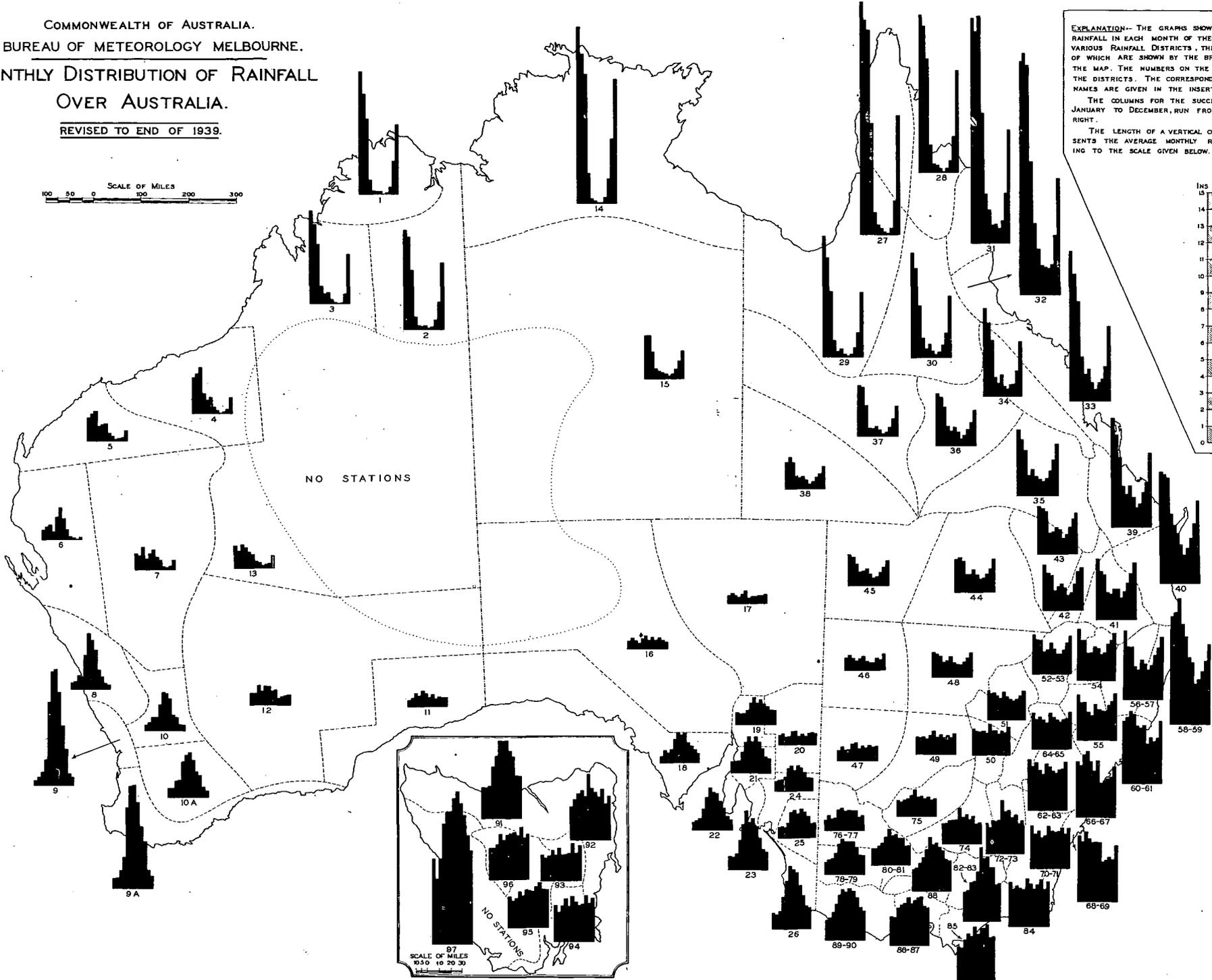
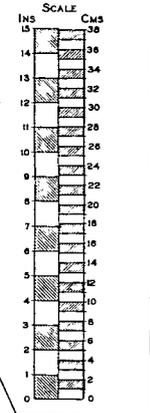
COMMONWEALTH OF AUSTRALIA.
 BUREAU OF METEOROLOGY MELBOURNE.
**MONTHLY DISTRIBUTION OF RAINFALL
 OVER AUSTRALIA.**
 REVISED TO END OF 1939.



EXPLANATION—The graphs show the average rainfall in each month of the year in the various rainfall districts, the boundaries of which are shown by the broken lines on the map. The numbers on the map refer to the districts. The corresponding district names are given in the insert on page 39.

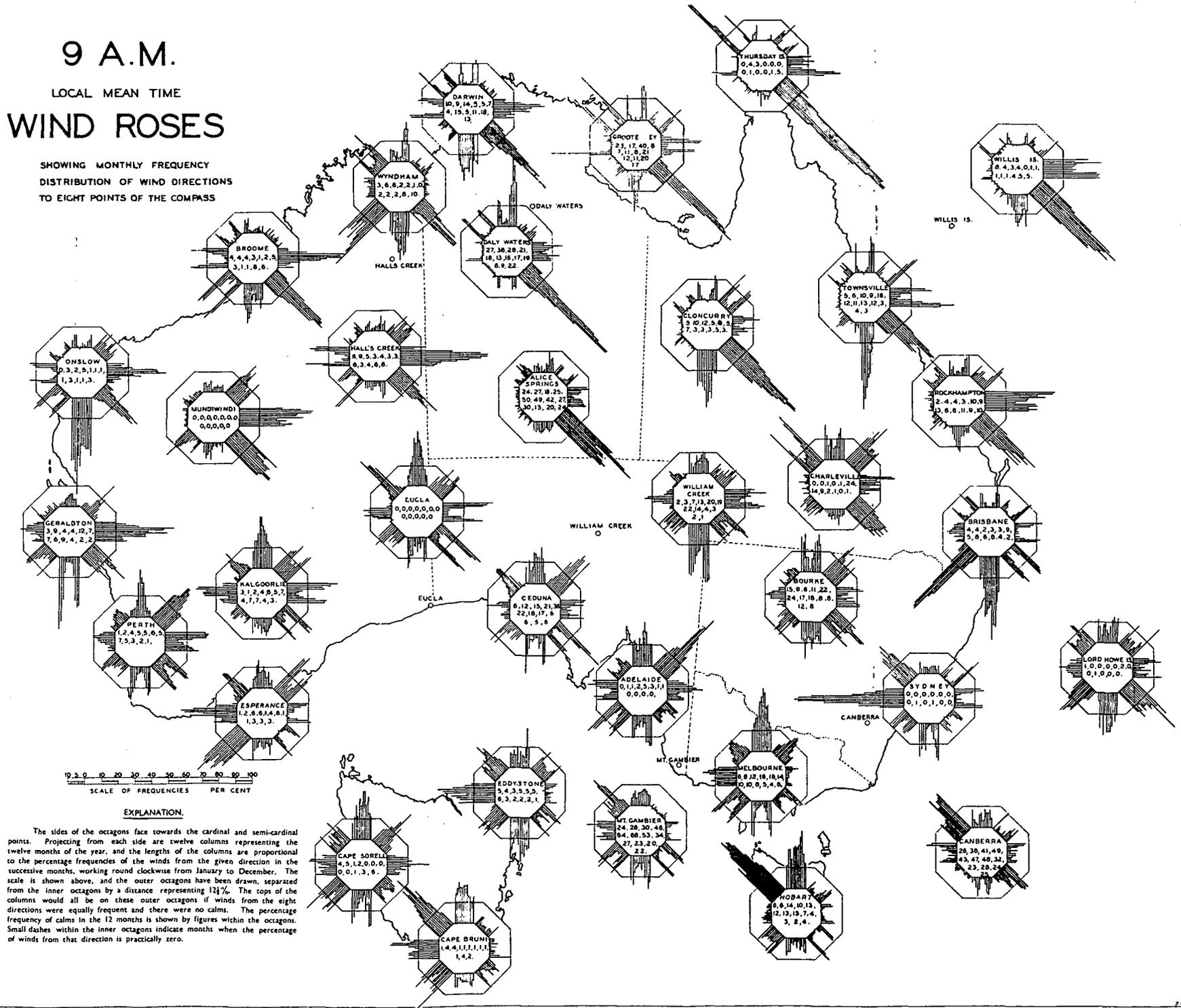
The columns for the successive months, January to December, run from left to right.

The length of a vertical column represents the average monthly rainfall according to the scale given below.



9 A.M. LOCAL MEAN TIME WIND ROSES

SHOWING MONTHLY FREQUENCY
DISTRIBUTION OF WIND DIRECTIONS
TO EIGHT POINTS OF THE COMPASS



Further reference to humidity will be found in the section on effective temperature (see page 29).

4. **Evaporation.**—(i) *General.* The rate and quantity of evaporation in any territory is influenced by the prevailing temperature, and by atmospheric humidity, pressure and wind movement. In Australia, the question is, perhaps, of more than ordinary importance, since in its drier regions water has often to be conserved in tanks and dams. The magnitude of the economic loss by evaporation will be appreciated from the map reproduced herein (see page 40) which shows that the yearly amount varies from about 20 inches over western Tasmania to more than 100 inches over the central and north-western parts of Australia. Over an area of 70 per cent. of the continent, comprising most inland districts and extending to the coast in the North-West and Eucla divisions of Western Australia, the rainfall does not exceed the evaporation during any month of the year. The central and north-western portions of the continent, comprising 46 per cent. of the total land mass, experience evaporation more than twice as great as their rainfall; it is noteworthy that the vegetation over most of this region is characterized by acacia, semi-desert, shrub steppe and porcupine grass. Since the loss by evaporation depends largely on the exposed area, tanks and dams so designed that the surface shall be a minimum are advantageous. Further, the more they are protected from the direct rays of the sun and from winds by means of suitable tree planting, the less will be the loss by evaporation. These matters are naturally of more than ordinary concern in the drier districts of Australia.

(ii) *Comments on Map of Average Annual Evaporation.* The map of average annual evaporation in Australia (see page) has been compiled on the basis of records obtained from a number of evaporimeters supplemented by estimates derived from records of saturation deficit by applying the Waite Institute factor of 263.* Some modification of the latter values was found to be necessary in comparison with recordings of evaporimeters.

The standard evaporation tank used in Australia is cylindrical in form and is 36 inches in diameter and 36 inches deep. It is surrounded by a 6-inch water jacket and the whole is sunk into the ground so that the water surface is approximately at ground level.

Saturation deficit is obtained from readings of dry and wet bulb thermometers exposed in a standard Stevenson thermometer shelter. Saturation deficit is the difference between the vapour pressure indicated by the dry and wet bulb readings, and the saturation vapour pressure corresponding to the dry bulb temperature.

The Waite formula, $e = 263 \text{ s.d.}$, is not an exact relationship, but it takes account of one of the major factors in evaporation, i.e., the difference between saturation vapour pressures at the mean dew point and at the mean air temperature. Errors in the formula are found to be fairly consistent in considerable areas of Australia and corrections have been applied accordingly. No evaporation records are available north of latitude 20°, and corrections have been extrapolated for these areas. The evaporation stations on which estimates for the tropics have been based are Alice Springs (Northern Territory) and Winton (Queensland), and to a lesser degree Blackall (Queensland) and Marble Bar (Western Australia).

The map thus presents an estimate of evaporation for which allowance should be made for a certain margin of error (perhaps 10 per cent. or so) on the conservative side. In the absence of definite information, such a map should serve a useful purpose as a basis for many climatic studies.

For graphs and tables of mean monthly evaporation and rainfall at certain selected stations, see Official Year Book No. 37, pp. 34–35.

5. **Rainfall.**—(i) *General.* The rainfall of any region is determined mainly by the direction and route of the prevailing winds, by the varying temperatures of the earth's surface over which they blow, and by its physiographical features.

Australia lies within the zones of the south-east trades and "prevailing" westerly winds. The southern limit of the south-east trades strikes the eastern shores at about 30° south latitude, and, with very few exceptions, the heaviest rains of the Australian continent are precipitated along the Pacific slopes to the north of that latitude, the varying quantities being more or less regulated by the differences in elevation of the shores and of the chain of mountains from the New South Wales northern border to Thursday Island, upon which the rain-laden winds blow. The converse effect is exemplified on the north-west coast of Western Australia, where the prevailing winds, blowing from the interior of the continent instead of from the ocean, result in the lightest coastal rain in Australia.

The westerly winds, which skirt the southern shores, are responsible for the reliable, generally light to moderate rains enjoyed by the south-western portion of Western Australia, the agricultural areas of South Australia, a great part of Victoria, and the whole of Tasmania.

* Prescott, J. A. "Atmospheric Saturation Deficit in Australia" (Trans. Royal Society, S.A. Vol. LV., 1931).

(ii) *Distribution of Rainfall.* The average annual rainfall map of Australia (see page 41) shows that the heaviest yearly falls occur on the north coast of Queensland (up to more than 160 inches) and in western Tasmania (up to 140 inches), while from 50 to over 60 inches are received on parts of the eastern seaboard from Jervis Bay to the northern part of Cape York Peninsula, also around Darwin, on the West Kimberley coast, near Cape Leeuwin, about the Australian Alps in eastern Victoria and New South Wales, and on the north-eastern highlands in Tasmania. A great part of the interior of the continent, stretching from the far west of New South Wales and the south-west of Queensland to the vicinity of Shark Bay in Western Australia, has a very low average rainfall of less than 10 inches a year. Between these two regions of heavy and very low rainfall are the extensive areas which experience useful to good rains, and in the southern and eastern parts of which are found the best country and most of the population and primary production.

(iii) *Factors Determining Occurrence, Intensity and Seasonal Distribution of Rainfall.* Reference has already been made to the frequent rains occurring in the north-eastern coastal districts of Queensland with the prevailing south-east trade winds and to similar rains in the west of Tasmania with the prevailing westerly winds. Other rains in Australia are associated mainly with tropical and southern depressions.

The former chiefly affect the northern, eastern, and to some extent the central parts of the continent and operate in an irregular manner during the warmer half of the year, but principally from December to March. They vary considerably in activity and scope from year to year, occasionally developing into severe storms off the east and north-west coasts. Tropical rainstorms sometimes cover an extensive area, half of the continent on occasions receiving moderate to very heavy falls during a period of a few days. Rain is also experienced, with some regularity, with thunderstorms in tropical areas, especially near the coast. All these tropical rains, however, favour mostly the northern and eastern parts of the area referred to; the other parts further inland receive lighter, less frequent and less reliable rainfall. With the exception of districts near the east coast, where some rain falls in all seasons, the tropical parts of the continent receive useful rains only on rare occasions from May to September.

The southern depressions are most active in the winter—June to August—and early spring months. The rains associated with them are fairly reliable and frequent over southern Australia and Tasmania, and provide during that period the principal factor in the successful growing of wheat. These depressions also operate with varying activity during the remainder of the year, but the accompanying rains are usually lighter. The southern rains favour chiefly the south-west of Western Australia, the agricultural districts of South Australia, Victoria, Tasmania, and the southern parts of New South Wales. They sometimes extend into the drier regions of the interior, but only infrequently and irregularly.

The map showing mean monthly distribution of rainfall over Australia (see page 42) gives, in graphic form, information on the amount and occurrence of rain.

(iv) *Wettest and Driest Regions.* The wettest known part of Australia is on the north-east coast of Queensland, between Port Douglas and Cardwell, where Deeral on the north coast-line has an average annual rainfall of 172.26 inches and Tully on the Tully River 179.26 inches. In addition, three stations situated on, or adjacent to, the Johnstone and Russell Rivers have an average annual rainfall of between 144 and 169 inches. The maximum and minimum annual amounts there, in inches, are:—Deeral, 287.18 in 1945 and 94.65 in 1951, a range of 192.53 inches; Tully, 310.92 in 1950 and 104.98 in 1943, a range of 205.94 inches; Goondi, 241.53 in 1894 and 67.88 in 1915, a range of 173.65 inches; Innisfail, 232.06 in 1950 and 69.87 in 1902, a range of 162.19 inches; Harvey Creek, 254.77 in 1921 and 80.47 in 1902, a range of 174.30 inches.

On five occasions, more than 200 inches have been recorded at Goondi, the last of these being in 1950, when 204.97 inches were registered. The records at this station cover a period of 67 years.

In twenty-seven years of record, Tully has exceeded 200 inches on ten occasions, and in 28 complete years of record Harvey Creek has exceeded this figure four times.

In Tasmania, the wettest part is in the West Coast region, the average annual rainfall at Lake Margaret being 146.51 inches, with a maximum of 177.30 inches in 1948.

The driest known part of the continent is in an area of approximately 180,000 square miles surrounding Lake Eyre in South Australia, where the annual average is between 4 and 6 inches and where the fall rarely exceeds 10 inches in twelve months.

Records at stations have at times been interrupted, but of the 23 stations in this region which have an annual average of less than 5 inches, six have complete records extending from 30 to 55 years. Of these Mulka has the lowest average of 4.05 inches (34 years), followed by Troudaninna with an average of 4.15 inches in 42 years. Troudaninna in the period 1893 to 1936 had only one year in which the total exceeded 9 inches (11.07 inches in 1894). There have been protracted periods when the average has even been less

than 3 inches. From 1895 to 1903 Troudaninna received the following annual totals:— 2.78, 0.99, 5.71, 3.04, 3.18, 2.83, 1.80, 1.11, 4.87, an average of 2.91 inches. From 1918 to 1929 the average was only 2.65 inches, and in this period from December, 1924 to November, 1929 the average was only 1.70 inches.

Mulka since 1918 has only once exceeded 10 inches for the annual total (11.72 inches in 1920), and on 16 occasions in 34 years the annual total has been less than 3 inches. In one particular period from October, 1926 to September, 1930, the average was only 1.26 inches (505 points in 48 months). However, at Kanowana, an even lower four-year average of 1.12 inches was recorded between 1896 and 1899 with yearly totals of 43, 225, 87 and 94 points. An even smaller yearly total was recorded at Mungeranie in 1889 when only 39 points were recorded on five days.

The average number of days of rain per month in this region is only 1 to 2 and the annual number ranges between 10 and 20. Oodnadatta (standard 30 years' average rainfall equal to 4.44 inches) has an average of 20 days of rain per year, while Cordillo Downs in the extreme north-east corner of the State of South Australia receives 5.16 inches on twelve days per year, averaging about one day of rain each month in the thirty years period 1911–1940.

No part of the earth, so far as is known, is absolutely rainless, and although at Arica, in northern Chile, the rainfall over a period of 15 years was nil, a further two years in which there were three measurable showers made the "average" for 17 years 0.02 inches.

(v) *Quantities and Distribution of Rainfall.* The general distribution is best seen from the rainfall map (see page 41) which shows the areas subject to average annual rainfalls lying between certain limits. The proportions of the total area of each State and of Australia as a whole enjoying varying quantities of rainfall determined from the latest available information are shown in the following table:—

AVERAGE ANNUAL RAINFALL DISTRIBUTION.
(Per Cent.)

Average Annual Rainfall.	W. Aust.	N. Terr.	S. Aust.	Q'land.	N.S.W. (a)	Vic.	Tas. (b)	Total.
Under 10 inches ..	58.0	24.7	82.8	13.0	19.7	Nil	Nil	37.6
10 and under 15 ins.	22.4	32.4	9.4	14.4	23.5	22.4	Nil	19.9
15 and under 20 ..	6.8	9.7	4.5	19.7	17.5	15.2	0.7	10.9
20 and under 25 ..	3.7	6.6	2.2	18.8	14.2	17.9	11.0	9.1
25 and under 30 ..	3.7	9.3	0.8	11.6	9.1	18.0	11.4	7.3
30 and under 40 ..	3.3	4.7	0.3	11.1	9.9	16.1	20.4	6.6
40 inches and over ..	2.1	12.6	Nil	11.4	6.1	10.4	56.5	8.6
Total ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Includes Australian Capital Territory. are available.

(b) Over an area of 2,777 square miles no records

Referring first to the capital cities, the records of which are given in the next table, it will be seen that Sydney, with an average rainfall of 44.80 inches, occupies the chief place; Brisbane, Perth, Melbourne, Hcbart and Canberra follow in that order, Adelaide with 21.09 inches being the driest. The extreme range from the wettest to the driest year is greatest at Brisbane (72.09 inches) and least at Adelaide (19.46 inches).

In order to show how the rainfall is distributed throughout the year in various parts of the continent, average figures for the various climatological districts have been selected (see map on page 42). The figures for Northern Rivers (District 14), show that nearly the whole of the rainfall occurs there in the summer months, while little or none falls in the middle of the year. The figures for the Central Coast, south-west of Western Australia (District 9), are the reverse, for while the summer months are dry, the winter months are very wet. In the districts containing Melbourne and Hcbart, the rain is fairly well distributed throughout the twelve months, with a maximum in October for both districts. In Queensland, the heaviest rains fall in the summer months, but good averages are also maintained during the other seasons in eastern parts.

On the coast of New South Wales, the first half of the year is the wettest, with heaviest falls in the autumn; the averages during the last six months are fair, and moderately uniform. Generally, it may be said that approximately one-third of the area of the continent, principally in the eastern and northern parts, enjoys an annual average rainfall of from 20 to 50 inches or more, the remaining two-thirds averaging from 5 to 20 inches.

(vi) *Tables of Rainfall.* The following table of rainfall for a fairly long period of years for each of the Australian capitals affords information as to the variability of the fall in successive years, and the list which follows in the next paragraph of the more remarkable falls furnishes information as to what may be expected on particular occasions.

RAINFALL: AUSTRALIAN CAPITAL CITIES.

Year.	PERTH.		ADELAIDE.		BRISBANE.		SYDNEY.		CANBERRA.(a)		MELBOURNE.		HOBART.(b)	
	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.	Amount.	No. of Days.
1925 ..	31.41	126	21.91	118	53.10	139	50.35	145	..	..	17.57	144	22.67	170
1926 ..	49.22	167	22.20	116	30.82	111	37.07	127	..	..	20.51	149	25.79	187
1927 ..	36.59	133	16.92	101	62.08	130	48.56	138	..	..	17.98	135	20.13	185
1928 ..	44.88	140	19.43	107	52.64	145	40.07	130	18.59	90	24.09	151	30.23	205
1929 ..	36.77	132	17.51	119	39.78	118	57.90	129	23.12	70	28.81	168	26.55	194
1930 ..	39.80	129	18.65	116	41.22	144	44.47	141	17.33	82	25.41	145	19.38	152
1931 ..	39.18	118	22.26	145	66.72	136	49.22	153	24.02	103	28.63	164	27.17	179
1932 ..	39.40	121	25.04	141	24.79	97	37.47	146	20.18	118	31.08	179	30.29	155
1933 ..	32.47	116	22.12	130	49.71	118	42.71	153	20.78	96	22.28	139	23.18	182
1934 ..	40.61	120	20.24	125	54.26	117	64.91	183	35.58	131	33.53	157	23.17	194
1935 ..	32.28	129	23.45	140	34.64	111	30.97	131	23.78	95	29.98	183	32.22	196
1936 ..	30.64	118	19.34	121	21.77	101	30.22	130	26.24	108	24.30	187	19.60	178
1937 ..	32.28	120	23.01	128	34.79	111	52.00	157	20.46	82	21.45	144	20.65	160
1938 ..	29.64	111	19.26	119	43.49	110	39.17	132	19.26	79	17.63	131	31.32	169
1939 ..	45.70	123	23.29	139	41.43	122	33.67	127	27.63	116	33.11	166	27.23	188
1940 ..	20.00	98	16.16	116	42.37	93	39.34	125	17.38	64	19.83	126	17.17	135
1941 ..	34.74	122	22.56	126	31.50	105	26.74	129	19.55	91	31.78	157	23.49	145
1942 ..	39.24	140	25.04	133	44.01	125	48.29	121	25.76	104	29.79	148	19.42	163
1943 ..	31.46	117	17.84	135	50.68	126	50.74	136	24.59	123	18.80	150	20.84	149
1944 ..	27.39	123	17.13	114	27.85	100	31.04	115	12.05	75	21.32	143	26.23	151
1945 ..	52.67	137	17.85	105	48.16	130	46.47	136	22.35	100	19.22	152	16.92	157
1946 ..	41.47	122	22.59	135	38.66	83	36.05	111	22.31	94	29.80	177	39.45	193
1947 ..	43.42	137	21.89	146	60.30	146	41.45	137	27.95	135	30.47	163	38.61	181
1948 ..	34.75	126	21.40	122	41.54	106	38.83	131	32.11	101	20.98	155	23.42	178
1949 ..	27.15	126	18.23	119	47.18	121	66.26	149	27.71	100	31.41	163	22.85	157
1950 ..	32.27	122	16.06	91	63.93	152	86.33	183	43.35	132	26.18	147	19.25	131
1951 ..	34.14	122	25.44	135	33.89	87	53.15	143	22.00	103	29.85	155	24.57	163
1952 ..	39.28	123	19.99	128	33.49	122	59.19	130	37.87	141	34.39	177	30.35	165
1953 ..	37.14	119	20.00	121	43.60	101	40.86	110	19.40	102	28.38	148	28.06	162
1954 ..	28.05	112	16.73	109	61.36	142	41.29	134	18.81	82	33.53	139	27.20	143
1955 ..	46.52	138	24.58	134	50.41	136	72.46	160	30.85	124	30.70	160	22.32	168
Average No. of Years Stand-ard 30 years* Nor- mal(c)	35.04	122	21.00	121	44.91	125	42.70	151	24.32	102	25.90	143	24.70	167
	80	80	117	117	104	104	97	97	28	28	100	100	73	73
	35.99	128	21.09	122	40.09	117	44.80	143	..	..	25.89	156	25.03	180

(a) Commonwealth Forestry Bureau; records in issues of the Official Year Book prior to No. 36 were for the station at Acton which closed down in 1939. (b) Records taken from present site commenced 1883. (c) 1911-1940.

6. Remarkable Falls of Rain.—The following are the most notable falls of rain which have occurred within a period of twenty-four hours in the various States and Territories. For other very heavy falls at various localities, reference may be made to Official Year Book No. 14, pp. 60-64, No. 22, pp. 46-48 and No. 29, pp. 43, 44 and 51.

HEAVY RAINFALLS: WESTERN AUSTRALIA, UP TO 1955 INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Whim Creek ..	3 Apr., 1898	29.41	Pilbara ..	2 Apr., 1898	14.04
Fortesque ..	3 May, 1890	23.36	Roebuck Plains ..	5 Jan., 1917	14.01
Roebuck Plains ..	6 Jan., 1917	22.36	Broome ..	6 Jan., 1917	14.00
Widjip ..	1 Apr., 1934	19.54	Carlton Hill ..	7 Feb., 1942	12.75
Derby ..	7 Jan., 1917	16.47	Towrana ..	1 Mar., 1943	12.16
Boodarie ..	21 Mar., 1899	14.53	Marble Bar ..	2 Mar., 1941	12.00
Balla Balla ..	21 Mar., 1899	14.40	Jimba Jimba ..	1 Mar., 1943	11.54
Winderrrie ..	17 Jan., 1923	14.23			

HEAVY RAINFALLS: NORTHERN TERRITORY, UP TO 1955, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Brocks Creek ..	24 Dec., 1915	14.33	Cape Don ..	13 Jan., 1935	13.58
Groote Eylandt ..	9 Apr., 1931	14.29	Bathurst Island		
Borroloola ..	14 Mar., 1899	14.00	Mission ..	7 Apr., 1925	11.85
Timber Creek ..	5 Feb., 1942	13.65	Darwin ..	7 Jan., 1897	11.67

HEAVY RAINFALLS: SOUTH AUSTRALIA, UP TO 1955, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Ardrossan ..	18 Feb., 1946	8.10	Wilmington ..	1 Mar., 1921	7.12
Carpa ..	18 Feb., 1946	7.83	Port Victoria ..	18 Feb., 1946	7.08
Wynbring ..	28 Feb., 1921	7.70	Mannum ..	25 Jan., 1941	6.84
Edithburg ..	18 Feb., 1946	7.46	Wirrabarra ..	7 Mar., 1910	6.80
Hesso ..	18 Feb., 1946	7.36	Cape Willoughby	18 Feb., 1946	6.80
Maitland ..	18 Feb., 1946	7.21	Torrens Vale ..	25 Jan., 1941	6.77

HEAVY RAINFALLS: QUEENSLAND, UP TO 1955, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Crohamhurst ..	2 Feb., 1893	35.71	Flat Top Island ..	21 Jan., 1918	25.18
Port Douglas ..	1 Apr., 1911	31.53	Landsborough ..	2 Feb., 1893	25.15
Yarrabah ..	2 Apr., 1911	30.65	Babinda (Cairns)	2 Mar., 1935	24.14
Kuranda ..	2 Apr., 1911	28.80	Goondi ..	30 Jan., 1913	24.10
Harvey Creek ..	3 Jan., 1911	27.75	Banyan (Cardwell)	12 Feb., 1927	24.00
Sarina ..	26 Feb., 1913	27.75	Carruchan ..	24 Jan., 1934	24.00
Plane Ck. (Mackay)	26 Feb., 1913	27.73	Tully Mill ..	12 Feb., 1927	23.86
Deeral ..	2 Mar., 1935	27.60	Macnade Mill ..	6 Feb., 1901	23.33
Springbrook ..	24 Jan., 1947	27.07	Woodlands (Yep- pooon) ..	3 Jan., 1893	23.07
Buderim Mountain	11 Jan., 1898	26.20			

HEAVY RAINFALLS: NEW SOUTH WALES, UP TO 1955, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Dorrigo ..	24 June, 1950	25.04	Viaduct Creek ..	15 Mar., 1936	20.00
Cordeaux River ..	14 Feb., 1898	22.58	Buladelah ..	16 Apr., 1927	19.80
Morpeth ..	9 Mar., 1893	21.52	Madden's Creek ..	13 Jan., 1911	18.68
Broger's Creek ..	13 Jan., 1911	20.83	Condong ..	27 Mar., 1887	18.66
South Head (Sydney Harbour) ..	16 Oct., 1844	20.41	Candelo ..	27 Feb., 1919	18.58
"	29 Apr., 1841	20.12	Mt. Kembla ..	13 Jan., 1911	18.25
Mount Pleasant ..	5 May, 1925	20.10	Bega ..	27 Feb., 1919	17.88
Broger's Creek ..	14 Feb., 1898	20.05	Kembla Heights	13 Jan., 1911	17.46
Towamba ..	5 Mar., 1893	20.00	Foxground ..	11 Sept., 1950	17.04
			Orara Upper ..	22 Feb., 1954	16.56

HEAVY RAINFALL: AUSTRALIAN CAPITAL TERRITORY, UP TO 1955, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Cotter Junction ..	27 May, 1925	7.13	Uriarra (Woodside)	27 May, 1925	6.57
Canberra (Acton)	27 May, 1925	6.84	Land's End ..	27 May, 1925	6.35

HEAVY RAINFALLS: VICTORIA, UP TO 1955, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Balook	18 Feb., 1951	10.81	Blackwood (Greenhill)	26 Jan., 1941	8.98
Hazel Park ..	1 Dec., 1934	10.50	Tambo Crossing ..	13 July, 1925	8.89
Kalorama ..	1 Dec., 1934	10.05	Corinella	28 June, 1948	8.75
Cann River ..	16 Mar., 1938	9.94	Erica	1 Dec., 1934	8.66
Tonghi Creek ..	27 Feb., 1919	9.90	Mt. Buffalo .. .	6 June, 1917	8.53
Cann River ..	27 Feb., 1919	9.56	Korumburra .. .	1 Dec., 1934	8.51
Olanda	1 Dec., 1934	9.10			

HEAVY RAINFALLS: TASMANIA, UP TO 1955, INCLUSIVE.

Name of Town or Locality.	Date.	Amt.	Name of Town or Locality.	Date.	Amt.
		in.			in.
Mathinna .. .	5 Apr., 1929	13.25	Riana	5 Apr., 1929	11.08
Cullenswood ..	5 Apr., 1929	11.12	Triabunna .. .	5 June, 1923	10.20

7. **Snowfall.**—Light snow has been known to fall occasionally as far north as latitude 31° S., and from the western to the eastern shores of the continent. During exceptional seasons, it has fallen simultaneously over two-thirds of New South Wales, and has extended at times along the whole of the Great Dividing Range, from its southern extremity in Victoria as far north as Toowoomba in Queensland. During the winter, for several months, snow covers the ground to a great extent on the Australian Alps, where the temperature falls below zero Fahrenheit during the night. In the ravines around Mt. Kosciusko and similar localities the snow never entirely disappears after a severe winter.

8. **Hail.**—Hail falls most frequently along the southern shores of the continent in the winter, and over eastern Australia during the summer months. The size of the hailstones generally increases with distance from the coast. A summer rarely passes without some station experiencing a fall of stones exceeding in size an ordinary hen egg and many riddled sheets of light-gauge galvanized iron bear evidence of the weight and penetrating power of the stones.

The hailstones occur most frequently when the barometric readings indicate a flat and unstable condition of pressure. Tornadoes or tornadic tendencies are almost invariably accompanied by hail, and on the east coast the clouds from which the stones fall are frequently of a remarkable sepia-coloured tint.

9. **Barometric Pressures.**—The mean annual barometric pressure (corrected to sea level and standard gravity) in Australia varies from 29.80 inches on the north coast to 29.92 inches over the central and 30.03 inches in the southern parts of the continent. In January, the mean pressure ranges from 29.70 inches in the northern and central areas to 29.95 inches in the southern. The July mean pressure ranges from 29.90 inches at Darwin to 30.12 inches at Alice Springs. Barometer readings corrected to mean sea level and standard gravity have, under anticyclonic conditions, ranged as high as 30.935 inches (at Hobart on 13th July, 1846) and have fallen as low as 27.55 inches. This record low was registered at Mackay during a tropical hurricane on 21st January, 1918. An almost equally abnormal reading of 27.88 inches was recorded at Innisfail during a similar storm on 10th March, 1918. For graphs of Mean Barometric Pressure at Capital Cities, see Official Year Book No. 37, p. 35.

10. **Wind.**—(i) *Trade Winds.* The two distinctive wind currents in Australia are, as previously stated, the south-east trade and the "prevailing" westerly winds. As the belt of the earth's atmosphere in which they blow apparently follows the sun's ecliptic path north and south of the equator, so the area of the continent affected by these winds varies at different seasons of the year. During the summer months, the anticyclonic belt travels in high latitudes, thereby bringing the south-east trade winds as far south

as 30° south latitude. The "prevailing" westerly winds retreat a considerable distance to the south of Australia, and are less in evidence in the hot months. When the sun passes to the north of the equator, the south-east trade winds follow it, and only operate to the north of the tropics for the greater part of the winter. The westerly winds come into lower latitudes during the same period of the year. They sweep across the southern areas of the continent from Cape Leeuwin to Cape Howe, and during some seasons are remarkably persistent and strong, and occasionally penetrate to almost tropical latitudes.

(ii) *North-west Monsoon.* As the belt of south-east trade winds retreats southward during the summer, it is replaced in the north and north-west of Australia first by a sequence of light variable winds and then by the north-west monsoon. In Australia, the north-west monsoon has not the persistence nor regularity of the Indian south-west monsoon but is sufficiently characteristic for the summer in the north of Australia to be called the "North-west Season". In central and eastern Queensland, the north-west monsoon in the summer has comparatively little effect and the trade winds, albeit weakened, are still dominant winds. With the migration of the sun northward in the autumn, the north-west monsoon is replaced first by light variable winds and then by the trade winds.

Further particulars of Australian wind conditions and meteorology will be found in Official Year Book No. 38, pp. 58-61.

(iii) *Cyclones and Storms.* The "elements" in Australia are ordinarily peaceful, and while destructive cyclones have visited various parts, more especially coastal areas, such visitations are rare, and may be properly described as erratic.

During the winter months, the southern shores of the continent are subject to deep depressions of the southern low-pressure belt. They are felt most severely over the south-western parts of Western Australia, to the south-east of South Australia, in Bass Strait, including the coastline of Victoria, and on the west coast of Tasmania. Apparently the more violent wind pressures from these disturbances are experienced in their northern half, or in that part of them which has a north-westerly to a south-westerly circulation.

The north-east coast of Queensland is occasionally visited by hurricanes from the north-east tropics. During the first four months of the year, these hurricanes appear to have their origin in the neighbourhood of the South Pacific Islands, their path being a parabolic curve first to the south-west and finally towards the south-east.

Very severe cyclones, locally known as "willy willies," are peculiar to the north-west coast of Western Australia from the months of November to April, inclusive. They usually originate over the ocean to the north or north-west of Australia, and travel in a south-westerly direction with continually increasing force, displaying their greatest energy near Cossack and Onslow, between latitudes 20° and 22° South. The winds in these storms, like those from the north-east tropics, are very violent and destructive. The greatest velocities are usually to be found in the south-eastern quadrant of the cyclones, with north-east to east winds. After leaving the north-west coast, these storms either travel southwards, following the coast-line, or cross the continent to the Great Australian Bight. When they take the latter course, their track is marked by torrential rains, as much as 29.41 inches, for example, being recorded in 24 hours at Whim Creek from one such occurrence. Falls of 10 inches and over have frequently been recorded in the northern interior of Western Australia from similar storms.

Some further notes on severe cyclones and on "southerly bursters", a characteristic feature of the eastern part of Australia, appeared in early issues of the Official Year Book (see No. 6, pp. 84-86), and a special article dealing with "Australian Hurricanes and Related Storms" appeared in Official Year Book No. 16, pp. 80-84.

Depressions vary considerably in their isobaric forms, intensity and other characteristics. Some bring rain in variable quantities, some heat and others mainly wind. A common type in southern Australia is the "Λ" shaped trough with an abrupt "backing" of the wind or "line squall" as it passes. The cold front is most frequently found through the centre of the "trough" because it is along this line, and extending into the upper levels of the atmosphere, that the demarcation of different air masses is so well defined. The best rains in inland Australia occur when extensive masses of warm moist tropical air move into the interior and are forced to rise by convergence of flow or by impact with a cold air stream.

The speed of low pressure systems is very variable, but in general in southern latitudes the movement is of the order of 500 to 700 miles per day.

11. Influences affecting Australian Climate.—(i) *General.* Australian history does not cover a sufficient period, nor is the country sufficiently occupied, to ascertain whether or not the advance of settlement has materially affected the climate as a whole. Local changes have, however, taken place, a fact which suggests that settlement and the treatment of the land have a distinct effect on local conditions. For example, low-lying lands on the north coast of New South Wales, which originally were seldom subject to frosts, have, with the deforestation of the surrounding hills experienced annual visitations, the probable explanation being that through the absence of trees the cold air of the highlands now flows unchecked and untempered down the sides of the hills to the valleys and lower lands.

(ii) *Influence of Forests on Climate.* As already indicated, forests doubtless exercise a great influence on local climate, and hence, to the extent that forestal undertakings will allow, the weather can be controlled by human agency. The direct action of forests is an equalizing one; thus, especially in equatorial regions, and during the warmest portion of the year, they considerably reduce the mean temperature of the air. They also reduce the diurnal extremes of shade temperatures by altering the extent of radiating surface by evaporation, and by checking the movement of air, and while decreasing evaporation from the ground, they increase the relative humidity. Vegetation greatly diminishes the rate of flow-off of rain and the washing away of surface soil, and when a region is protected by trees a steadier water supply is ensured, and the rainfall is better conserved. In regions of snowfall, the supply of water to rivers is similarly regulated, and without this and the sheltering influence of ravines and "gullies," watercourses supplied mainly by melting snow would be subject to alternate periods of flooding and dryness. This is borne out in the case of the inland rivers, the River Murray, for example, which has never been known to become dry, deriving its steadiness of flow mainly through the causes indicated.

(iii) *Direct Influence of Forests on Rainfall.* Whether forests have a direct influence on rainfall is a debatable question, some authorities alleging that precipitation is undoubtedly induced by forests, while others take the opposite view.

Sufficient evidence exists, however, to prove that, even if the rainfall is not increased, the beneficial climatic effect of forest lands more than warrants their protection and extension. Rapid rate of evaporation, induced by both hot and cold winds, injures crops and makes life uncomfortable on the plains, and, while it may be doubted that the forest aids in increasing precipitation, it must be admitted that it does check winds and the rapid evaporation due to them. Trees as wind-breaks have been successfully planted in central parts of the United States of America, and there is no reason why similar experiments should not be successful in many parts of the treeless interior of Australia. The belts should be planted at right angles to the direction of the prevailing parching winds, and if not more than half a mile apart will afford shelter to the enclosed areas.

12. Rainfall and Temperatures, Various Cities.—Official Year Book No. 34, p. 28, shows rainfall and temperature and No. 38, p. 42, temperature, for various important cities throughout the world and for the Australian capitals.

13. Climatological Tables.—The averages and extremes for a number of climatological elements, which have been determined from long series of observations at the Australian capitals up to and including the year 1955, are given on the following eight pages.

NOTE.—The following points apply throughout:—

- (i) Where records are available, mean or average values have been calculated on a standard period of 30 years from 1911 to 1940.
- (ii) Extreme values have been extracted from all available years of actual record, but the number of years quoted does not include intervening periods when observations were temporarily discontinued.

CLIMATOLOGICAL DATA: PERTH, WESTERN AUSTRALIA.
(LAT. 31° 57' S., LONG. 115° 51' E. HEIGHT ABOVE M.S.L. 210 FT.)
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. Mh. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.				Prevaling Direction.		Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m., 9 p.m.(a).	No. of Clear Days.
		(Height of Anemometer 71 feet.)				9 a.m.	3 p.m.				
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).							
No. of years of observations.	30(b)	30(b)	56	42	30(b)	30(b)	30(b)	30(b)	30(b)	30(b)	
January ..	29.897	10.1	33.2	27/98	49	E	SSW	10.37	2	2.9	14
February ..	29.922	9.9	27.1	6/08	54	ENE	SSW	8.63	2	3.1	13
March ..	29.976	9.4	27.1	6/13	66	E	SSW	7.52	2	3.5	12
April ..	30.071	7.9	39.8	25/00	61	ENE	SSW	4.62	2	4.2	9
May ..	30.062	7.8	34.4	29/32	73	NE	WSW	2.80	3	5.4	6
June ..	30.068	7.8	38.1	17/27	80	N	NW	1.82	2	5.9	5
July ..	30.082	8.2	42.3	20/26	73	NNE	W	1.76	2	5.6	5
August ..	30.084	8.7	40.3	15/03	77	N	WNW	2.37	2	5.6	6
September ..	30.073	8.7	36.0	11/05	75	ENE	SSW	3.44	1	4.9	8
October ..	30.033	9.3	33.7	6/16	65	SE	SW	5.38	1	4.8	8
November ..	29.989	9.9	32.4	18/97	63	E	SW	7.65	2	3.9	9
December ..	29.923	10.2	32.3	6/22	64	E	SSW	9.69	2	3.2	13
Year { Totals ..	30.015	9.0	—	—	—	E	SSW	66.05	23	—	108
{ Averages	—	—	—	—	—	—	—	—	—	—	—
{ Extremes	—	—	42.3	20/7/26	80	—	—	—	—	4.4	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940).

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.				
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.					
										30(a)	30(a)	59	59	57	30(a)
No. of years over which observation extends.	30(a)	30(a)	30(a)	59	59	59	57	57	30(a)				
January ..	84.6	63.3	73.9	110.2	12/34	48.6	20/25	61.6	177.3	22/14	39.5	20/25	10.4
February ..	85.1	63.5	74.3	112.2	8/33	47.7	1/02	64.5	173.7	4/34	39.8	1/13	9.8
March ..	81.3	61.5	71.4	106.4	14/22	45.8	8/03	60.6	175.9	23/47	36.7	8/03	8.8
April ..	76.3	57.4	66.8	99.7	9/10	39.3	20/14	60.4	157.0	8/16	31.0	20/14	7.5
May ..	69.0	52.8	60.9	81.4	2/07	34.9	11/14	56.1	146.0	4/25	25.3	11/14	5.7
June ..	64.4	49.8	57.1	81.7	2/14	34.9	22/55	46.8	135.5	9/14	26.3	11/37	4.8
July ..	62.8	48.0	55.4	76.4	21/21	34.2	7/16	42.2	133.2	13/15	25.1	30/20	5.4
August ..	63.8	48.4	56.1	82.0	21/40	35.3	31/08	46.7	145.1	29/21	26.7	24/35	6.0
September ..	66.8	50.4	58.6	95.3	30/18	37.6	8/52	53.3	153.6	29/16	27.2	8/52	7.2
October ..	69.7	52.6	61.1	95.3	30/22	40.0	16/31	55.3	157.5	31/36	29.8	16/31	8.1
November ..	76.7	57.3	67.0	104.6	24/13	42.0	1/04	62.6	167.0	30/25	35.5	(b)	9.6
December ..	81.2	60.9	71.0	107.9	20/04	47.9	10/55	60.0	168.8	11/27	39.0	12/20	10.4
Year { Averages	73.5	55.5	64.5	112.2	8/2/33	34.2	7/7/16	78.0	177.3	22/11/14	25.1	30/7/20	7.8
{ Extremes	—	—	—	—	—	—	—	—	—	—	—	—	—

(a) Standard 30 years' normal (1911-1940). (b) 6/10 and 14/12.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).				Fog.				
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.					
										30(a)	30(a)	59	59
No. of years over which observation extends.	30(a)	30(a)	59	59	30(a)	30(a)	80	80	80	30(a)			
January ..	0.438	51	61	41	0.33	3	2.17	1879	Nil	(b)	1.74	27/73	0
February ..	0.434	51	65	43	0.50	3	6.55	1955	Nil	(b)	3.43	17/55	0
March ..	0.432	57	66	46	0.90	5	5.71	1934	Nil	(b)	3.03	9/34	0
April ..	0.397	61	73	51	1.75	8	5.85	1926	Nil	1920	2.62	30/04	1
May ..	0.365	70	81	61	5.14	15	12.13	1879	0.98	1903	3.00	17/42	2
June ..	0.337	75	83	68	7.55	17	18.75	1945	2.16	1877	3.90	10/29	2
July ..	0.322	76	84	69	7.08	19	12.28	1926	2.42	1876	3.00	4/91	2
August ..	0.316	71	83	62	5.78	19	12.53	1945	0.46	1902	2.91	14/45	1
September ..	0.341	66	75	58	3.37	15	7.84	1923	0.34	1916	1.82	4/31	0
October ..	0.345	60	75	52	2.30	12	7.87	1890	0.15	1946	1.74	3/33	0
November ..	0.374	52	63	41	0.75	7	2.78	1916	Nil	1891	1.40	15/48	0
December ..	0.409	51	63	44	0.54	5	3.05	1888	Nil	(c)	1.72	1/83	0
Year { Totals	—	—	—	—	35.99	128	—	—	—	—	—	—	8
{ Averages	0.370	62	—	—	—	—	—	—	—	—	—	—	—
{ Extremes	—	84	41	—	—	—	18.75	6/1945	Nil	Various months	3.90	10/6/20	—

(a) Standard 30 years' normal (1911-1940). (b) Various years. (c) 1886 and 1924.

CLIMATOLOGICAL DATA; DARWIN, NORTHERN TERRITORY.
(LAT. 12° 28' S., LONG. 130° 51' E. HEIGHT ABOVE M.S.L. 97 FT.)
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. Min. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m., 9 p.m. (g)	No. of Clear Days.
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of years of observations.	30	14	—	—	—	—	—	30	30	30
January ..	29.706	6.1	—	—	—	NW & S	W & NW	16	7.1	1
February ..	29.728	6.7	—	—	—	W & S	W & NW	16	7.0	1
March ..	29.751	5.3	—	—	—	SE	W & NW	14	6.2	3
April ..	29.809	6.1	—	—	—	SE	E	6	3.5	11
May ..	29.859	6.5	—	—	—	SE	E	1	2.1	19
June ..	29.892	6.5	—	—	—	SE	E & SE	0	1.6	22
July ..	29.911	6.2	—	—	—	SE	E & SE	0	1.4	23
August ..	29.914	5.9	—	—	—	SE	NW & N	0	1.3	23
September ..	29.886	6.2	—	—	—	SE & S	NW & N	1	2.0	18
October ..	29.850	6.2	—	—	—	S	NW & N	8	3.2	10
November ..	29.797	5.5	—	—	—	W & S	NW & N	17	4.8	4
December ..	29.738	6.2	—	—	—	NW & S	NW & N	17	6.0	2
Year { Totals ..	29.820	6.1	—	—	—	SE	NW	96	—	137
Extremes ..	—	—	—	—	—	—	—	—	3.9	—

(a) Scale 0-10.

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.
	Mean	Mean	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of years over which observation extends.	30	30	30	39(a)	39(a)	—	25	—	—
January ..	89.9	77.3	83.6	99.1 8/28	69.2 21/44	—	168.0 26/42	—	—
February ..	89.8	77.1	83.4	97.0 13/37	63.0 25/49	—	163.6 23/38	—	—
March ..	90.2	77.1	83.6	100.0 8/31	66.6 31/45	—	165.6 23/38	—	—
April ..	91.9	75.9	81.4	98.0 19/24	60.8 11/43	—	163.0 1/38	—	—
May ..	90.9	72.6	81.4	96.8 (b)	59.2 8/49	—	160.0 5/20	—	—
June ..	87.5	69.5	78.5	98.6 17/37	55.3 18/49	—	155.2 2/16	—	—
July ..	86.6	67.8	77.2	94.0 16/21	50.7 29/42	—	156.0 28/17	—	—
August ..	88.5	69.7	79.1	96.0 30/36	58.0 (c)	—	156.2 28/16	—	—
September ..	91.0	73.9	82.5	99.0 25/28	63.8 1/46	—	157.0 (d)	—	—
October ..	92.6	77.2	84.9	99.0 14/33	68.5 26/45	—	160.5 30/38	—	—
November ..	93.2	78.2	85.7	101.0 27/24	67.4 12/45	—	170.4 14/37	—	—
December ..	92.0	78.1	85.0	100.4 13/31	68.5 24/41	—	169.0 26/23	—	—
Year { Averages ..	90.3	74.5	82.4	101.0 7/11/24	50.7 29/7/42	—	170.4	—	—
Extremes ..	—	—	—	—	—	—	14/11/37	—	—

(a) Years 1918-41 at Post Office, 1942-55 at aerodrome; sites not strictly comparable. (b) 2/37 and 2/42. (c) 9/42 and 12/42. (d) 28/16 and 3/21.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.				Rainfall (inches).				Fog.
		Mean	Highest	Lowest	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	
No. of years over which observation extends.	58	58	58	58	30	22	87	87	87	30
January ..	0.925	78	89	69	16.18	20	27.86 1906	2.25 1930	11.67 7/97	0
February ..	0.920	79	88	71	12.37	18	25.74 1955	0.44 1931	5.25 15/49	0
March ..	0.912	78	84	69	11.18	17	21.88 1898	0.81 1911	7.18 6/19	0
April ..	0.800	69	80	60	3.08	6	23.74 1891	Nil (a)	5.51 1/29	0
May ..	0.652	63	76	49	0.33	1	14.00 1953	Nil (a)	2.19 6/22	0
June ..	0.545	61	75	52	0.09	1	1.53 1902	Nil (a)	1.32 10/62	0.4
July ..	0.522	59	71	47	0.01	0	2.56 1900	Nil (a)	1.71 2/00	1.1
August ..	0.613	63	73	53	0.02	0	3.00 1870	Nil (a)	1.06 14/09	0.7
September ..	0.732	65	73	54	0.60	2	2.72 1950	Nil (a)	2.00 26/50	0.2
October ..	0.832	65	72	60	1.93	5	13.34 1954	Nil (a)	3.60 15/16	0
November ..	0.868	68	75	62	4.32	10	15.72 1938	0.40 1870	4.73 9/51	0
December ..	0.890	73	83	65	8.57	15	22.38 1910	0.98 1934	7.87 28/10	0
Year { Totals ..	—	—	—	—	58.68	95	—	—	—	2.4
Averages ..	0.764	68	—	—	—	—	—	—	—	—
Extremes ..	—	—	89	47	—	—	27.86 1/06	Nil (b)	11.67 7/11/97	—

(a) Various years.

(b) April to October, various years.

CLIMATOLOGICAL DATA; ADELAIDE, SOUTH AUSTRALIA.
(LAT. 34° 56' S., LONG. 138° 35' E. HEIGHT ABOVE M.S.L. 140 Ft.)
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. M. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 75 feet.)			Prevailing Direction.		Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m., 9 p.m.(g)	No. of Clear Days.	
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	9 a.m.	3 p.m.					
No. of years of observations.	30(b)	30(b)	77	38	30(b)	30(b)	30(b)	30(b)	30(b)	30(b)	
January ..	29 917	9.9	31.6	19/99	72	SW	SW	9.27	2.3	3.6	12.9
February ..	29 953	8.8	28.8	22/96	64	NE	SW	7.56	2.0	3.7	11.2
March ..	30 037	8.3	26.2	9/12	63	S	SW	6.39	1.8	4.0	10.6
April ..	30 119	8.0	32.2	10/96	81	NE	SW	3.78	1.5	5.2	7.2
May ..	30 131	8.3	31.7	9/80	67	NE	NW	2.27	1.3	5.8	4.9
June ..	30 119	8.3	31.3	12/78	67	NE	N	1.37	1.3	6.1	4.1
July ..	30 111	8.5	28.1	25/82	60	NE	NW	1.34	1.5	6.0	4.3
August ..	30 084	9.2	32.2	31/97	57	NE	N	1.99	2.0	5.5	5.8
September ..	30 050	9.2	30.0	2/87	69	NNE	SW	3.05	2.0	5.3	5.6
October ..	30 007	9.8	32.0	28/98	73	NNE	SW	5.03	2.8	5.3	5.7
November ..	29 990	9.9	32.2	7/48	79	SW	SW	6.89	3.3	4.9	7.2
December ..	29 922	9.9	28.1	12/91	75	SW	SW	8.74	2.2	4.2	9.5
Year { Totals ..	—	—	—	—	—	—	—	57.68	24.0	—	89.0
Year { Averages ..	30.037	9.0	—	—	—	NE	SW	—	—	—	—
Year { Extremes ..	—	—	32.2 (c)	—	81	—	—	—	—	5.0	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940). (c) 10/4/1896, 31/8/1897 and 7/11/1948.

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.				
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.					
No. of years over which observation extends.	30(a)	30(a)	30(a)	99	99	99	54(b)	95	30(a)				
January ..	84.8	61.0	72.9	117.7	12/39	45.1	21/84	72.6	180.0	18/82	36.5	14/79	10.0
February ..	85.7	61.8	73.7	113.6	12/99	45.5	23/18	68.1	170.5	10/00	35.8	23/26	9.3
March ..	81.3	59.1	70.2	110.5	9/34	43.9	21/33	66.6	174.0	17/83	32.1	21/33	7.9
April ..	73.0	54.4	63.7	98.6	5/38	39.6	15/59	59.0	155.0	1/83	30.2	16/17	6.0
May ..	66.8	50.8	58.8	89.5	4/21	36.9	26/95	52.6	148.2	12/79	25.6	19/28	4.8
June ..	61.0	46.6	53.8	76.0	23/65	32.5	(c)	43.5	138.8	18/79	21.0	24/44	4.2
July ..	59.9	45.4	52.7	74.0	11/06	32.0	24/08	42.0	134.5	26/90	22.1	30/29	4.3
August ..	62.3	46.2	54.3	85.0	31/11	32.3	17/59	52.7	140.0	31/92	22.8	11/29	5.4
September ..	66.8	48.3	57.5	91.3	29/44	32.7	4/58	58.6	160.5	23/82	25.0	25/27	6.3
October ..	72.5	51.7	62.1	102.9	21/22	36.0	—/57	66.9	162.0	30/21	27.8	(d)	7.3
November ..	78.1	55.4	66.7	113.5	21/65	40.8	2/09	72.7	166.9	20/78	31.5	2/09	8.6
December ..	82.6	58.9	70.7	114.6	29/31	43.0	(e)	71.6	175.7	7/99	32.5	4/84	9.5
Year { Averages ..	72.9	53.3	63.1	—	—	—	—	—	—	—	—	—	7.0
Year { Extremes ..	—	—	—	117.7	12/1139	32.0	24/7/08	85.7	180.0	18/1/82	21.0	24/6/44	—

(a) Standard 30 years' normal (1911-1940). (b) Records incomplete, 1931-34. Discontinued, 1934.
(c) 27/1876 and 24/1944. (d) 4/1931 and 2/1918. (e) 16/1861 and 4/1906.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches).	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).				Fog.				
		Mean.	Highest.	Lowest.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.		Greatest in One Day.			
No. of years over which observation extends.	30(a)	30(a)	99	99	30(a)	30(a)	117	117	117	30(a)			
January ..	0.327	39	59	29	0.76	5	4.00	1850	Nil	(b)	2.30	2/89	0.0
February ..	0.352	41	56	30	1.10	5	6.09	1925	Nil	(b)	5.57	7/25	0.0
March ..	0.332	44	58	29	0.87	5	4.60	1878	Nil	(b)	3.50	5/78	0.0
April ..	0.329	55	72	37	1.45	10	7.75	1853	Nil	1945	3.15	5/60	0.0
May ..	0.313	64	76	49	2.49	13	7.75	1875	0.10	1934	2.75	1/53	0.6
June ..	0.294	75	84	67	2.93	15	8.58	1916	0.42	1886	2.11	1/20	1.1
July ..	0.282	75	87	66	2.49	16	5.38	1865	0.37	1899	1.75	10/65	1.4
August ..	0.282	68	78	54	2.58	16	6.24	1852	0.33	1944	2.23	19/51	0.4
September ..	0.289	59	72	44	2.39	13	5.83	1923	0.27	1951	1.53	20/23	0.2
October ..	0.287	48	67	29	1.54	10	4.38	1948	0.17	1914	2.24	16/08	0.0
November ..	0.292	41	57	31	1.22	8	4.10	1934	0.04	1885	2.08	7/34	0.0
December ..	0.322	40	50	31	1.27	6	3.98	1861	Nil	1904	2.42	23/13	0.0
Year { Totals ..	—	—	—	—	21.09	122	—	—	—	—	—	—	3.7
Year { Averages ..	0.304	52	—	—	—	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	87	29	—	—	8.58	6/1916	Nil	(c)	5.57	7/2/25	—

(a) Standard 30 years' normal (1911-1940). (b) Various years. (c) December to April, various years.

CLIMATOLOGICAL DATA; BRISBANE, QUEENSLAND.
(LAT. 27° 28' S., LONG. 153° 2' E. HEIGHT ABOVE M.S.L. 134 Ft.)
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. Mm. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 105 feet.)					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m., 9 p.m.(c)	No. of Clear Days.
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of years of observations.	30(b)	30(b)	41	40	30(b)	30(b)	30(b)	30(b)	30(b)	
January ..	29.865	6.8	19.7 23/47	58	SE	NE	6.74	9.8	5.7	3.5
February ..	29.912	7.0	23.2 21/54	67	SE	E	5.49	6.5	5.6	2.4
March ..	29.975	6.5	20.3 1/29	50	S	NE	5.05	5.9	5.1	5.4
April ..	30.035	5.9	16.7 3/25	57	S	E	4.05	5.0	4.3	7.8
May ..	30.083	5.8	17.9 17/26	49	SW	SE	3.09	4.1	4.3	8.3
June ..	30.091	5.7	19.0 14/28	58	SW	W & SW	2.45	2.9	4.4	9.2
July ..	30.090	5.6	22.0 13/54	52	SW	W & SW	2.69	2.8	3.8	12.4
August ..	30.105	5.8	14.8 4/35	56	SW	NE	3.51	3.8	3.1	13.1
September ..	30.067	5.9	16.1 1/48	57	SW	NE	4.51	5.8	3.3	13.0
October ..	30.019	6.3	15.7 1/41	62	S	NE	5.81	7.1	4.2	8.5
November ..	29.958	6.7	15.5 10/28	62	SE & N	NE	6.32	9.5	4.9	5.9
December ..	29.890	7.0	19.5 15/26	79	SE	NE	7.02	10.6	5.3	3.8
Year { Totals ..	—	—	—	—	—	—	56.73	73.8	—	93.3
Year { Averages ..	30.007	6.3	—	—	SW	NE	—	—	4.5	—
Year { Extremes ..	—	—	23.2 21/54	79	—	—	—	—	—	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940).

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.
	Mean.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of years over which observation extends.	30(a)	30(a)	30(a)	69	69	69	51(b)	69	30(a)
January ..	85.5	69.1	77.3	109.8 26/40	58.8 4/93	51.0	169.0 2/37	49.9 4/93	7.6
February ..	84.6	68.7	76.6	105.7 21/25	58.5 23/31	47.2	165.2 6/10	49.1 22/31	7.4
March ..	82.3	66.2	74.3	99.4 5/19	52.4 29/13	47.0	162.5 6/39	45.4 29/13	7.0
April ..	79.1	61.5	70.3	95.2 (c)	44.4 25/25	50.8	153.8 11/16	36.7 24/25	7.1
May ..	73.7	55.6	64.7	90.3 21/23	40.6 30/51	49.7	147.0 1/10	29.8 8/97	6.6
June ..	69.4	51.5	60.5	88.9 19/18	36.3 29/08	52.6	136.0 3/18	25.4 23/88	6.3
July ..	68.6	49.4	59.0	84.3 23/46	36.1 (d)	48.2	146.1 20/15	23.9 11/90	6.8
August ..	71.1	50.0	60.6	91.0 14/46	37.4 6/87	53.6	141.9 20/17	27.1 9/99	7.9
September ..	75.5	54.8	65.1	100.9 22/43	40.7 1/96	60.2	155.5 26/03	30.4 1/89	8.2
October ..	79.2	60.3	69.8	101.4 18/93	43.3 3/99	58.1	157.4 31/18	34.9 8/89	8.4
November ..	82.3	64.6	73.4	106.1 18/13	48.5 2/05	57.6	162.3 7/89	38.8 1/05	8.2
December ..	84.5	67.5	76.0	105.9 26/93	56.4 13/12	49.5	165.9 28/42	49.1 3/94	8.2
Year { Averages ..	78.0	59.9	69.0	—	—	—	—	—	7.5
Year { Extremes ..	—	—	—	109.8 26/1/40	36.1 (d)	73.7	169.0 2/1/37	23.9 11/7/90	—

(a) Standard 30 years' normal (1911-1940). (b) From 1887 to March, 1947, excluding 1927 to 1936.
(c) 9/1896 and 5/1903. (d) 12/7/1894 and 2/7/1896.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).					Fog. Mean No. of Days of Fog.
		Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	
No. of years over which observation extends.	30(a)	30(a)	69	69	30(a)	30(a)	104	104(b)	104	30(a)
January ..	0.636	66	79	53	5.72	12	27.72 1895	0.32 1919	18.31 21/87	0.6
February ..	0.644	69	82	55	5.47	12	40.39 1893	0.58 1849	10.61 6/31	0.9
March ..	0.606	72	85	56	4.97	14	34.04 1870	Nil 1849	11.18 14/08	1.6
April ..	0.512	71	80	56	3.68	11	15.28 1867	0.04 1944	5.46 5/33	4.0
May ..	0.420	71	85	59	2.35	9	13.85 1876	Nil 1846	5.62 9/79	5.4
June ..	0.357	73	84	54	2.75	8	14.03 1873	Nil 1847	6.41 15/48	4.5
July ..	0.331	71	88	53	1.88	8	8.60 1950	Nil 1841	3.54 (c)	4.9
August ..	0.338	67	80	53	1.07	7	14.67 1879	Nil (d)	4.89 12/87	5.9
September ..	0.396	62	76	47	1.69	7	5.43 1886	0.10 1907	2.46 2/94	2.8
October ..	0.459	59	72	48	2.27	8	11.41 1949	0.03 1948	5.34 25/49	1.6
November ..	0.533	61	73	45	4.00	10	12.40 1917	Nil 1842	4.46 16/86	0.7
December ..	0.589	62	70	51	4.24	11	17.36 1942	0.35 1865	6.60 28/71	0.4
Year { Totals ..	—	—	—	—	40.09	117	—	—	—	33.3
Year { Averages ..	0.485	67	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	85	45	—	—	40.39 2/1893	Nil (e)	18.31 21/1/87	—

(a) Standard 30 years' normal (1911-1940). (b) Records incomplete for various years between 1846 and 1859.
(c) 15/1876 and 16/1889. (d) 1862, 1869, 1880. (e) Various months in various years.

CLIMATOLOGICAL DATA: SYDNEY, NEW SOUTH WALES.
 (LAT. 33° 52' S., LONG. 151° 12' E. HEIGHT ABOVE M.S.L. 138 FT.)
 Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. M.S. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 58 feet.)				Prevailing Direction.		Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m. to 3 p.m., 9 p.m.(a)	No. of Clear Days.
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).							
					9 a.m.	3 p.m.					
No. of years of observations.	30(b)	26(c)	40(d)	36(e)	26(c)	26(c)	26(c)	30(f)	30(b)	30(b)	
January	29.875	8.9	24.9 2/22	74	S	ENE	5.71	4.8	5.7	4.8	
February	29.942	8.1	20.1 14/18	61	NE	ENE	4.68	3.3	5.5	5.4	
March	30.009	7.5	20.7 10/44	58	W	ENE	4.05	2.8	5.3	5.8	
April	30.063	7.0	23.4 19/27	72	W	ENE	2.91	2.4	5.0	7.0	
May	30.098	6.8	19.6 2/26	63	W	S	2.17	1.6	4.9	7.4	
June	30.078	7.1	24.5 17/14	70	W	W	1.61	1.5	4.8	8.3	
July	30.070	7.2	26.6 6/31	68	W	W	1.69	1.1	4.5	10.1	
August	30.060	7.4	24.6 9/51	68	W	NE	2.30	2.1	3.9	11.1	
September	30.018	8.0	22.3 19/17	70	W	ENE	3.00	3.0	4.2	10.0	
October	29.976	8.2	21.1 18/44	95	W	ENE	4.17	3.9	4.9	7.4	
November	29.935	8.5	22.6 14/30	71	W & E	ENE	4.97	4.5	5.5	5.7	
December	29.881	8.9	24.9 10/20	75	S	ENE	5.64	5.4	5.8	4.8	
Year { Totals	—	—	—	—	—	—	42.90	36.4	—	87.8	
Year { Averages	30.000	7.8	—	—	W	NE	—	—	5.0	—	
Year { Extremes	—	—	26.6 6/7/31	95	—	—	—	—	—	—	

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940). (c) 1915-1940. (d) 1914-1953.
 (e) 1917-1954. (f) 1921-1950.

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of years over which observation extends.	30(a)	30(a)	30(a)	97	97	97	84	96	30(b)
January	78.6	65.1	71.8	113.6 14/39	51.1 18/49	62.5	164.3 26/15	43.7 6/25	7.5
February	78.7	65.5	72.1	107.8 8/26	49.3 28/63	58.5	168.3 14/39	42.8 22/33	7.0
March	76.6	62.9	69.8	102.6 3/69	48.8 14/86	53.8	158.3 10/26	39.9 17/13	6.4
April	72.0	57.7	64.9	91.4 1/36	44.6 27/64	46.8	144.1 10/77	33.3 24/09	6.1
May	67.0	52.4	59.7	86.0 1/19	40.2 22/59	45.8	129.7 1/96	29.3 25/17	5.7
June	62.8	48.1	55.5	80.4 11/31	35.7 22/32	44.4	125.5 2/23	28.0 22/32	5.6
July	61.8	46.4	54.1	78.3 22/26	35.9 12/90	42.4	124.7 19/77	24.0 4/93	6.1
August	64.3	47.6	56.0	82.8 12/46	36.8 3/72	46.0	149.0 30/78	26.1 4/09	7.0
September	68.3	51.4	59.9	92.3 27/19	40.8 2/45	51.5	142.2 12/78	30.1 17/05	7.3
October	71.7	55.9	63.8	99.4 4/42	42.2 6/27	57.2	152.2 20/33	32.7 9/05	7.5
November	74.5	59.8	67.1	104.5 6/46	45.8 1/05	61.3	158.5 28/99	36.6 6/06	7.5
December	76.9	63.2	70.1	107.5 (c)	48.4 3/24	59.1	164.5 27/89	41.4 3/24	7.5
Year { Averages	71.1	56.3	63.7	—	—	—	—	—	6.8
Year { Extremes	—	—	—	113.6 14/1/39	35.7 22/6/32	77.9	168.3 14/2/39	24.0 4/7/93	—

(a) Standard 30 years' normal (1911-1940). (b) 1921-1950 (different exposure prior to 1921). (c) 31/04 and 21/53.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).			Fog.				
		Mean.	Highest.	Lowest.	Greatest Monthly.	Least Monthly.	Greatest in One Day.					
No. of years over which observation extends.	30(a)	30(a)	80	80	30(a)	30(a)	97	97	97	30(b)		
January	0.537	65	78	58	3.86	13	15.26	1911	0.25	1932	7.08 13/11	0.4
February	0.560	68	81	60	3.15	12	18.56	1873	0.12	1939	8.90 25/73	0.8
March	0.527	71	85	62	4.44	13	20.52	1942	0.42	1876	11.05 28/42	1.8
April	0.441	73	87	63	5.65	14	24.49	1861	0.06	1868	7.52 29/60	2.8
May	0.362	75	90	63	4.98	12	23.03	1919	0.18	1860	8.36 28/89	3.7
June	0.303	76	89	63	3.68	11	25.30	1950	0.19	1904	5.17 16/84	3.3
July	0.282	74	88	63	4.89	12	13.23	1950	0.10	1946	7.80 7/31	2.9
August	0.288	68	84	54	2.41	10	14.89	1899	0.04	1885	5.33 2/60	2.3
September	0.325	62	79	49	2.77	11	14.05	1879	0.08	1882	5.69 10/79	1.0
October	0.378	60	77	46	2.80	11	11.13	1916	0.21	1867	6.37 13/02	0.6
November	0.433	60	79	42	2.54	11	9.88	1865	0.07	1915	4.23 19/00	0.6
December	0.501	63	77	51	3.63	13	15.82	1920	0.23	1913	4.75 13/10	0.4
Year { Totals	—	—	—	—	—	143	—	—	—	—	—	20.6
Year { Averages	0.393	68	—	—	—	—	—	—	—	—	—	—
Year { Extremes	—	—	90	42	—	—	25.30 6/1950	0.04 8/1885	11.05	—	—	—

(a) Standard 30 years' normal (1911-1940). (b) 1921-1950.

CLIMATOLOGICAL DATA; CANBERRA, AUSTRALIAN CAPITAL TERRITORY.
(LAT. 35° 18' S., LONG. 149° 6' E. HEIGHT ABOVE M.S.L., 1,906 FT.)
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. M.S. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 20 feet.)					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m. and 3 p.m., (a).	No. of Clear Days.
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of years of observations.	25	25	26	(b)	27	27	27	19	26	26
January	29.856	4.9	14.9 23/33	—	NW	NW	8.37	1.4	4.7	7.3
February	29.902	4.4	15.3 24/33	—	E	NW	6.51	2.4	4.9	6.5
March	30.008	3.9	18.2 28/42	—	E	NW	5.30	0.2	5.0	7.1
April	30.065	3.7	18.6 8/45	—	NW	NW	3.31	0.4	5.4	4.9
May	30.137	3.1	12.6 3/30	—	NW	NW	1.97	0.2	5.5	6.0
June	30.127	3.7	16.1 2/30	—	NW	NW	1.30	0.1	6.1	4.4
July	30.137	3.6	23.4 7/31	—	NW	NW	1.28	0.0	5.7	5.6
August	30.067	4.1	15.7 25/36	—	NW	NW	1.82	0.1	5.5	5.7
September	30.057	4.5	17.4 28/34	—	NW	NW	2.90	0.4	5.1	6.1
October	29.959	4.4	12.4 27/40	—	NW	NW	4.48	1.0	5.3	5.3
November	29.886	4.8	17.2 28/42	—	NW	NW	5.91	1.2	5.5	4.5
December	29.840	4.8	16.1 11/38	—	NW	NW	7.65	0.7	5.1	6.0
Year { Totals	—	—	—	—	—	—	50.80	8.7	—	—
Year { Averages	30.002	4.2	—	—	NW	NW	—	—	5.3	—
Year { Extremes	—	—	23.4 7/7/31	—	—	—	—	—	—	—

(a) Scale 0-10. (b) No record.

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).			Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.	Extreme Range.	Highest in Sun.	Lowest on Grass.	
							(a)	28	
No. of years over which observation extends.	28	28	28	28	28	28	(a)	28	26
January	82.5	56.1	69.3	107.4 11/39	39.4 18/49	68.0	—	30.1 10/50	8.3
February	80.8	56.0	68.4	99.8 13/33	35.0 (b)	64.8	—	26.5 23/43	7.6
March	76.3	52.5	64.4	99.1 6/38	34.8 31/49	64.3	—	26.4 26/35	7.2
April	66.8	45.4	56.1	89.7 6/38	29.0 29/34	60.7	—	19.0 18/44	6.7
May	59.3	39.0	49.2	72.6 1/36	22.5 9/29	50.1	—	15.6 (c)	5.2
June	52.6	35.6	44.1	64.9 1/54	18.1 20/35	43.9	—	8.9 25/44	4.2
July	51.9	33.8	42.8	63.5 16/34	20.0 (d)	43.5	—	10.8 9/37	4.8
August	55.2	35.5	45.3	71.0 24/54	21.0 3/29	49.5	—	10.1 6/44	5.8
September	61.4	39.0	50.2	81.5 16/34	25.2 6/46	56.3	—	13.0 6/45	7.2
October	67.2	44.3	55.7	90.0 13/46	29.0 24/28	61.0	—	18.2 2/45	7.8
November	73.1	48.9	61.0	101.4 19/44	32.2 11/36	69.2	—	25.9 6/40	8.2
December	79.5	53.4	66.4	103.5 27/38	36.0 24/28	67.5	—	30.2 (e)	8.4
Year { Averages	67.2	45.0	56.1	—	—	—	—	—	6.8
Year { Extremes	—	—	—	107.4 11/11/39	18.1 20/6/35	89.3	—	8.9 25/6/44	—

(a) No record. (b) 22/31 and 23/31. (c) 13/37 and 15/46. (d) 19/29, 9/37 and 27/43. (e) 2/39 and 20/48

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).					Fog. Mean No. of Days of Fog.	
		Mean 9 a.m.	Mean.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.		Greatest in One Day.
No. of years over which observation extends.	26	27	27	27	28	28	28	28	28	28	24
January	0.370	53	69	39	2.09	7	6.69 1941	0.02 1932	2.47 19/50	0.1	
February	0.388	58	71	40	2.17	7	6.03 1948	0.01 1933	3.24 17/28	0.2	
March	0.378	65	79	48	2.24	7	12.69 1950	0.01 1940	2.53 20/52	0.7	
April	0.315	71	81	54	2.12	7	5.19 1952	0.07 1942	2.52 9/45	1.3	
May	0.254	79	87	67	1.98	7	6.13 1948	0.06 1935	3.88 3/48	4.8	
June	0.212	81	90	72	1.78	9	6.09 1931	0.18 1944	1.65 24/31	6.0	
July	0.196	81	87	73	1.56	10	4.09 1933	0.27 1940	2.02 13/33	5.1	
August	0.213	75	88	60	1.99	11	4.71 1939	0.36 (a)	2.07 12/29	2.2	
September	0.239	66	74	51	1.62	9	3.03 1937	0.13 1946	1.75 3/47	1.4	
October	0.273	60	72	46	2.70	11	6.59 1934	0.34 1940	2.51 25/34	0.3	
November	0.301	54	67	38	2.15	9	4.45 1950	0.28 1936	2.45 9/50	0.0	
December	0.338	51	70	37	1.92	8	8.80 1947	0.16 1938	2.29 28/29	0.0	
Year { Totals	—	—	—	—	24.32	102	—	—	—	22.1	
Year { Averages	0.286	66	—	—	—	—	—	—	—	—	
Year { Extremes	—	—	90	37	—	—	12 69 3/50	0.01 2/33, 3/40	3.88 3/5/48	—	

(a) 1944 and 1949.

CLIMATOLOGICAL DATA; MELBOURNE, VICTORIA.
(LAT. 37° 49' S., LONG. 144° 58' E. HEIGHT ABOVE M.S.L. 114 FT.)
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. Mm. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 93 feet.)				Prevailing Direction.	Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m. to 3 p.m., 9 p.m. (a)	No. of Clear Days.	
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	9 a.m. 3 p.m.						
					9 a.m.						3 p.m.
No. of years of observations.	30(b)	15(c)	42	45	30(b)	30(b)	30(b)	30(b)	30(b)		
January ..	29.897	8.8	21.1	27/41	66	S & SW	S	6.55	1.8	4.9	6.8
February ..	29.950	8.4	19.0	13/47	74	N & S	S	5.10	2.3	4.8	6.4
March ..	30.025	7.8	17.2	19/50	66	N	S	4.26	1.8	5.3	5.5
April ..	30.092	7.1	19.9	16/43	67	N	S	2.53	1.2	5.9	4.6
May ..	30.113	7.4	20.0	4/44	72	N	S	1.57	0.5	6.1	3.4
June ..	30.097	7.2	22.8	16/47	62	N	S	1.18	0.4	6.5	2.7
July ..	30.079	8.7	20.9	9/44	68	N	S	1.16	0.3	6.3	2.9
August ..	30.048	8.2	21.3	20/42	65	N	S	1.54	0.9	6.0	3.1
September ..	30.001	8.5	19.4	6/53	69	N & W	N & S	2.41	1.3	5.9	3.3
October ..	29.968	8.4	18.6	12/52	69	N	S	3.54	1.8	6.1	3.8
November ..	29.951	8.6	19.4	4/50	71	S & SW	S	4.62	2.3	6.0	3.6
December ..	29.896	8.7	21.0	11/52	61	S & SW	S	5.85	1.9	5.6	4.5
Year { Totals ..	—	—	—	—	—	—	—	40.31	16.5	—	50.6
Year { Averages ..	30.010	8.1	—	—	—	N	S	—	—	5.8	—
Year { Extremes ..	—	—	22.8	16/6/47	74	—	—	—	—	—	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940). (c) Early records not comparable.

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).		Extreme Range.	Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.				
	Mean Max.	Mean Min.	Mean	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.					
										30(a)	30(a)	30(a)	100
No. of years over which observation extends.	30(a)	30(a)	30(a)	100	100	100	86(b)	95	35(c)				
January ..	77.7	56.9	67.3	114.1	13/39	42.0	28/85	72.1	178.5	14/62	30.2	28/85	7.8
February ..	78.6	58.0	68.3	109.5	7/01	40.2	24/24	69.3	167.5	15/70	30.9	6/91	7.4
March ..	74.9	55.2	65.1	107.0	11/40	37.1	17/84	69.9	164.5	1/68	28.9	(d)	6.5
April ..	67.9	50.8	59.3	94.8	5/38	34.8	24/88	60.0	152.0	8/61	25.0	23/97	5.0
May ..	62.0	46.9	54.5	83.7	7/05	29.9	29/116	53.8	142.6	2/59	21.1	26/16	4.1
June ..	56.8	43.8	50.3	72.2	1/07	28.0	11/66	44.2	129.0	1/61	19.9	30/29	3.4
July ..	56.2	42.6	49.4	69.3	22/26	27.0	21/69	42.3	125.8	27/80	20.5	12/03	3.7
August ..	58.7	43.7	51.7	77.0	20/85	28.3	11/63	48.7	137.4	29/69	21.3	14/02	4.6
September ..	63.3	46.0	54.7	88.6	28/28	31.0	3/40	57.6	142.1	20/67	22.8	8/18	5.5
October ..	67.9	48.7	58.3	98.4	24/14	32.1	3/71	66.3	154.3	28/68	24.8	22/18	5.8
November ..	71.3	51.8	61.5	105.7	27/94	36.5	2/96	69.2	159.6	29/65	24.6	2/96	6.2
December ..	75.4	55.3	65.3	110.7	15/76	40.0	4/70	70.7	170.3	20/69	33.2	1/04	7.0
Year { Averages ..	67.6	50.0	58.8	—	—	—	—	—	—	—	—	—	5.6
Year { Extremes ..	—	—	—	114.1	13/1/39	27.0	21/7/69	87.1	178.5	14/1/62	19.9	30/6/29	—

(a) Standard 30 years' normal (1911-1940). (b) Records discontinued, 1946. (c) 1916-1950. (d) 17/1884 and 20/1897.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.				Rainfall (inches).				Fog. Mean No. of Days of Fog.				
		Mean 9 a.m.	M	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.		Greatest in One Day.			
												30(a)	30(a)	48
No. of years over which observation extends.	30(a)	30(a)	48	48	30(a)	30(a)	100	100	100	30(a)				
January ..	0.382	58	68	50	1.88	9	6.66	1941	0.01	1932	2.97	9/97	0.1	
February ..	0.417	62	77	48	2.00	8	7.72	1939	0.03	1870	3.44	26/46	0.3	
March ..	0.385	64	79	50	2.22	9	7.50	1911	0.14	1934	3.55	5/19	1.1	
April ..	0.351	72	82	66	2.30	13	6.71	1901	Nil	1923	2.28	22/01	2.3	
May ..	0.311	79	88	70	1.94	14	5.60	1942	0.14	1934	1.85	7/91	6.8	
June ..	0.276	83	92	75	2.06	16	4.51	1859	0.73	1877	1.74	21/04	6.5	
July ..	0.264	82	86	75	1.93	17	7.02	1891	0.57	1902	2.71	12/91	6.5	
August ..	0.271	76	82	65	2.02	17	4.35	1939	0.48	1903	1.94	26/24	3.7	
September ..	0.288	68	76	60	2.20	15	7.93	1916	0.52	1907	2.62	12/80	1.3	
October ..	0.307	62	67	52	2.63	14	7.61	1869	0.29	1914	3.00	17/69	0.3	
November ..	0.336	60	69	52	2.33	13	8.11	1954	0.25	1895	2.86	21/54	0.3	
December ..	0.373	59	69	48	2.38	11	7.18	1863	0.11	1904	3.92	4/54	0.2	
Year { Totals ..	—	—	—	—	25.89	155	—	—	—	—	—	—	29.4	
Year { Averages ..	0.323	69	—	—	—	—	—	—	—	—	—	—	—	
Year { Extremes ..	—	—	92	48	—	—	8	11	1/1/1954	Nil	4/1/1923	3	92	4/1/2/54

(a) Standard 30 years' normal (1911-1940).

CLIMATOLOGICAL DATA; HOBART, TASMANIA.
(LAT. 42° 53' S., LONG. 147° 20' E. HEIGHT ABOVE M.S.L. 177 FT.)
Barometer, Wind, Evaporation, Lightning, Clouds and Clear Days.

Month.	Bar. corrected to 32° F. M.S. Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind. (Height of Anemometer 40 feet.)					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m. to 3 p.m., 9 p.m. (g)	No. of Clear Days.
		Average Miles per Hour.	Highest Mean Speed in One Day (miles per hour).	Highest Gust Speed (miles per hour).	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of years of observations.	30(b)	30(b)	64	64	30(b)	30(b)	30(b)	30(b)	30(b)	
January ..	29.819	8.0	20.8 30/16	76	NNW	SSE	4.84	0.9	6.4	1.9
February ..	29.913	7.2	25.2 4/27	65	NNW	SSE	3.71	1.0	6.2	2.3
March ..	29.961	6.8	21.4 13/38	75	NW	SSE	3.10	1.2	6.1	2.4
April ..	29.997	6.7	24.1 9/52	74	NW	W	1.98	0.7	6.5	1.7
May ..	30.009	6.3	20.2 20/36	79	NNW	NW	1.37	0.4	6.1	2.4
June ..	29.986	6.2	23.7 27/20	71	NW	NW	0.91	0.4	6.2	2.4
July ..	29.958	6.5	22.9 22/53	78	NNW	NNW	0.94	0.3	6.1	2.0
August ..	29.906	6.8	25.5 19/26	87	NNW	NW	1.28	0.4	6.1	2.1
September ..	29.860	7.9	21.5 26/15	84	NNW	NW	1.97	0.7	6.3	1.5
October ..	29.833	8.2	19.2 8/12	74	NNW	SW	3.05	0.6	6.6	1.0
November ..	29.831	7.9	21.2 18/15	73	NNW	S	3.77	0.7	6.4	1.3
December ..	29.816	7.6	23.4 1/34	70	NNW	SSE	4.37	0.5	6.8	1.1
Year { Totals ..	29.907	7.2	—	—	NNW	W	31.29	7.8	—	22.1
{ Averages	—	—	—	—	—	—	—	—	—	—
{ Extremes	—	—	25.5 19/82/6	87	—	—	—	—	—	—

(a) Scale 0-10. (b) Standard 30 years' normal (1911-1940).

Temperature and Sunshine.

Month.	Mean Temperature (°Fahr.).			Extreme Shade Temperature (°Fahr.).			Extreme Temperature (°Fahr.).		Mean Daily Hours of Sunshine.
	Mean	Mean	Mean	Highest.	Lowest.	Extreme Range.	Highest in Sun.	Lowest on Grass.	
No. of years over which observation extends.	30(a)	30(a)	30(a)	72(b)	72(b)	72(b)	57(c)	72(b)	30
January ..	69.8	52.4	61.0	105.0 1/00	40.1 (d)	64.9	160.0 (e)	30.6 19/97	7.7
February ..	70.6	53.7	62.2	104.4 12/99	39.0 20/87	65.4	165.0 24/98	28.3 —/87	7.1
March ..	67.5	51.3	59.4	99.1 13/40	35.2 31/26	63.9	150.9 26/44	27.5 30/02	6.4
April ..	62.2	48.0	55.1	87.1 1/41	33.3 24/88	53.8	142.0 18/93	25.0 —/86	5.0
May ..	57.8	44.6	51.2	77.8 5/21	29.2 20/02	48.6	128.0 (f)	20.0 19/02	4.4
June ..	52.8	41.2	47.0	69.2 1/07	29.2 28/44	40.0	122.0 12/94	21.0 6/87	4.0
July ..	52.7	40.6	46.6	66.1 14/34	27.7 11/95	38.4	121.0 12/93	18.7 16/86	4.4
August ..	55.4	41.7	48.7	71.6 28/14	28.9 9/51	42.7	129.0 —/87	20.1 7/09	5.1
September ..	59.0	43.7	51.4	81.7 23/26	31.0 16/97	50.7	138.0 23/93	18.3 16/26	5.9
October ..	62.5	46.1	54.3	92.0 24/14	32.0 12/89	60.0	156.0 9/93	23.8 (g)	6.1
November ..	65.0	48.2	56.6	98.3 26/37	35.0 16/41	63.3	154.0 19/92	26.0 1/08	7.2
December ..	67.9	51.3	59.6	105.2 30/97	38.0 3/06	67.2	161.5 10/39	27.2 —/86	7.3
Year { Averages	61.9	46.9	54.4	—	—	—	—	—	5.9
{ Extremes	—	—	—	105.2 30/12/97	27.7 11/7/95	77.5	165.0 24/2/98	18.3 16/9/26	—

(a) Standard 30 years' normal (1911-1940). (b) Records 1855-1879 not comparable. (c) Period 1934-1938 not comparable; records discontinued, 1946. (d) 9/37 and 11/37. (e) 5/86 and 13/05. (f) —/89 and —/93. (g) 1/86 and —/99.

Humidity, Rainfall and Fog.

Month.	Vapour Pressure (inches)	Rel. Hum. (%) at 9 a.m.			Rainfall (inches).					Fog. Mean No. of Days of Fog.
		Mean	Highest	Lowest	Mean Monthly.	Mean No. of Days of Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	
No. of years over which observation extends.	30(a)	54	69	69	30(a)	30(a)	73(b)	73(b)	73(b)	30(c)
January ..	0.309	59	72	46	1.82	13	5.91 1893	0.17 1915	2.96 30/16	0.0
February ..	0.342	63	77	48	1.68	10	4.96 1935	0.11 1914	2.20 1/54	0.0
March ..	0.323	67	77	52	2.13	13	10.05 1946	0.29 1943	3.47 17/46	0.3
April ..	0.290	72	84	58	2.31	14	8.50 1935	0.07 1904	5.02 20/09	0.2
May ..	0.263	78	89	65	1.71	14	6.37 1905	0.14 1913	1.75 2/93	0.9
June ..	0.233	80	91	68	2.25	16	8.15 1889	0.28 1886	5.80 7/54	0.8
July ..	0.227	80	94	72	2.14	17	6.02 1922	0.17 1950	2.51 18/22	1.0
August ..	0.232	76	92	60	1.82	18	6.32 1946	0.30 1892	2.28 14/90	0.4
September ..	0.240	67	85	58	1.90	17	5.02 1953	0.38 1951	2.34 21/53	0.1
October ..	0.258	63	73	51	2.52	18	7.60 1947	0.39 1914	2.58 4/06	0.0
November ..	0.274	60	72	50	2.23	16	7.39 1885	0.33 1921	3.70 30/85	0.1
December ..	0.306	58	67	45	2.52	14	7.72 1916	0.17 1931	3.33 5/41	0.0
Year { Totals	—	—	—	—	25.03	180	—	—	—	3.8
{ Averages	0.271	69	—	—	—	—	—	—	—	—
{ Extremes	—	—	94	45	—	—	10.05 31/10/46	0.07 41/1904	5.80 7/16/54	—

(a) Standard 30 years' normal (1911-1940). (b) Records prior to 1885 not comparable. (c) 1/22-1951.

CHAPTER III.

GENERAL GOVERNMENT.

§ 1. Scheme of Parliamentary Government.

1. **General.**—The legislative power of the Commonwealth is vested in the Parliament of the Commonwealth, which consists of the Sovereign, the Senate, and the House of Representatives. The Sovereign is represented throughout the Commonwealth by the Governor-General who, subject to the Constitution of the Commonwealth, has such powers and functions as the Sovereign is pleased to assign to him. In each State, there is a State Governor, who is the representative of the Sovereign for the State, and who exercises such powers within the State as are conferred upon him by the Letters Patent which constitute his office and by the instructions which inform him in detail of the manner in which his duties are to be fulfilled. The Legislature in each State was bi-cameral until 1922, in which year the Queensland Parliament became uni-cameral. In the bi-cameral States it consists of (a) a Legislative Council and (b) a Legislative Assembly or House of Assembly. In Queensland the Legislative Assembly constitutes the legislature. The Upper House is known as the Senate in the Commonwealth Parliament, and as the Legislative Council in the State Parliaments. The Lower House in the bi-cameral Parliaments is known as the House of Representatives in the Commonwealth Parliament, as the Legislative Assembly in the State Parliaments of New South Wales, Victoria and Western Australia, and as the House of Assembly in the State Parliaments of South Australia and Tasmania. The legislative powers of these Parliaments are delimited by the Commonwealth and the State Constitutions. The Assembly, which is the larger House, (Queensland as pointed out above is uni-cameral) is, in all cases, elective, the franchise extending to adult British subjects with certain residential qualifications. The Council in each of the States other than New South Wales is elected by the people of the State concerned, the constituencies being differently arranged and, in general, some property or special qualification for the electorate being required. In Victoria, however, under the Legislative Council Reform Act passed in October, 1950, adult suffrage was adopted for Legislative Council elections. In the case of New South Wales, the Council is elected by the members of both Houses of Parliament at a simultaneous sitting. In the Federal Parliament, the qualifications for the franchise are identical for both Houses.

2. **The Sovereign.**—(i) *Accession of Queen Elizabeth II.* On 7th February, 1952, the Governor-General and members of the Federal Executive Council proclaimed Princess Elizabeth Queen Elizabeth the Second, Queen of this Realm and of all her other Realms and Territories, Head of the Commonwealth, Defender of the Faith, Supreme Liege Lady in and over the Commonwealth of Australia. The coronation of Her Majesty in Westminster Abbey took place on 2nd June, 1953.

(ii) *Royal Style and Titles Act 1953.* At a conference of Prime Ministers and other representatives of the British Commonwealth in London in December, 1952, it was agreed that the Royal Style and Titles then in use were not in accord with current relationships within the British Commonwealth and that there was need of a new form which would, in particular, "reflect the special position of the Sovereign as Head of the Commonwealth".

It was therefore decided that each member of the British Commonwealth should use a form of the Royal Style and Titles suited for its own circumstances, while retaining as a common element the description "Queen of Her other Realms and Territories and Head of the Commonwealth"; and that consultation between all countries of the Commonwealth should take place on any future proposal to change the form of the Royal Style and Titles used in any country.

To give effect to these decisions in Australia, the Royal Style and Titles Act was passed on 3rd April, 1953, giving Parliament's assent to the adoption by the Queen, for use in relation to the Commonwealth of Australia and its Territories, of the following Royal Style and Titles :—"Elizabeth the Second, by the Grace of God of the United Kingdom,

Australia and Her other Realms and Territories Queen, Head of the Commonwealth, Defender of the Faith." The Act also approves the adoption by the Queen of a Royal Style and Titles for use in relation to other countries of the British Commonwealth in accordance with the principles formulated at the London conference.

(iii) *Authorization of a Royal Great Seal.* By warrant published in the Commonwealth Gazette of 17th November, 1955, Her Majesty authorized the Great Seal of the Commonwealth to be used as a Royal Great Seal in sealing all things whatsoever (other than things that pass the said Great Seal) that bear Her Majesty's Sign Manual and the counter-signature of one of Her Ministers of State for the Commonwealth.

3. Powers and Functions of the Governor-General and of the State Governors.—
(i) *Governor-General of the Commonwealth.* Section 2 of the Commonwealth Constitution provides as follows :—

"A Governor-General appointed by the Queen shall be Her Majesty's representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen's pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him."

As the Queen's representative in Australia, the Governor-General exercises certain prerogative powers and functions assigned to him by the Queen—either by Letters Patent (see Letters Patent dated 29th October, 1900, and 15th December, 1920), by Instructions under the Royal Sign Manual and Signet, by Commission issued to him under the Royal Sign Manual and Signet, or by any instrument of delegation under section 2 of the Constitution. Powers which have been so assigned include, amongst others, the power to appoint a Deputy or Deputies of the Governor-General, to administer or authorize any other person to administer the Oath of Allegiance, to grant pardons and to remit fines for offences against the laws of the Commonwealth and to appoint certain officers in the Diplomatic or Consular Service of the Commonwealth.

Other powers and functions are conferred on the Governor-General by the Constitution. For example, under section 5 of the Constitution he may appoint times for holding the sessions of the Parliament, prorogue Parliament and dissolve the House of Representatives. Under section 32, the Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives. Under section 58, he assents in the Queen's name to a proposed law passed by both Houses of the Parliament or withholds assent, or reserves the law for the Queen's pleasure; or he may return the proposed law to the House in which it originated and may transmit therewith any amendments which he may recommend. Under section 61, he exercises the executive power of the Commonwealth, under section 62, he chooses and summons Executive Councillors, who hold office during his pleasure, and under section 64, he may appoint Ministers of State for the Commonwealth. By section 68, the command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General, as the Queen's representative. Under the conventions of responsible government obtaining in Commonwealth countries, the Governor-General's executive functions generally are exercised on the advice of Ministers of State. In this regard, the Governor-General's position has become assimilated to that of the Queen in relation to her Ministers of State for the United Kingdom.

In addition, many powers and functions are exercised by the Governor-General under Acts of the Commonwealth Parliament. Most Acts, for example, provide that the Governor-General may make regulations, not inconsistent with the Act, either generally to give effect to the Act or to cover certain matters specified in the power. The Governor-General may be authorized by statute to issue proclamations—for example, to declare an Act in force or a state of things to exist, e.g. the existence of an epidemic. The Governor-General has been given power by statute to legislate for certain Territories of the Commonwealth. Other statutory powers include the power to appoint and dismiss statutory officers or bodies. A reference to the Governor-General, in Acts of the Commonwealth Parliament, means, unless the contrary intention appears, the Governor-General acting with the advice of the Executive Council (Acts Interpretation Act 1901–1950, section 17 (f)).

(ii) *Governors of the States.* The Queen is represented in each of the States by a Governor, the office having been constituted by Letters Patent under the Great Seal of the United Kingdom of various dates.

The Governors of the States exercise prerogative powers conferred on them by these Letters Patent, their Commissions of appointment, and the "Governor's Instructions" given them under the Royal Sign Manual and Signet or other instrument as specified in the Letters Patent. In addition they have been invested with various statutory functions, either under the State Constitutions, conferred by Imperial Act, or by Act of the Parliament of the State.

A Governor of a State assents in the Queen's name to Bills passed by the Parliament of the State, except those reserved for the Royal assent. The latter include certain classes of Bills, which are regulated by the Constitution Acts and by the Governor's Instructions. He administers the prerogative of mercy by the reprieve or pardon of criminal offenders within his jurisdiction, and may remit fines and penalties due to the Crown.

In the performance of his functions generally, particularly those conferred by Statute, the Governor of a State acts on the advice of Ministers of State for the State.

(iii) *Holders of Office.* For the names of the Governors-General since the inception of the Commonwealth and of the present State Governors, see § 3. following.

4. **The Cabinet and Executive Government.**—(i) *General.* Both in the Commonwealth and in the States, executive government is based on the system which was evolved in Britain in the 18th century, and which is generally known as "Cabinet" or "responsible" government. Its essence is that the head of the State (Her Majesty the Queen, and her representative, the Governor-General or Governor) should perform Governmental acts on the advice of her Ministers; that she should choose her principal Ministers of State from members of Parliament belonging to the party, or coalition of parties, commanding a majority in the popular House; that the Ministry so chosen should be collectively responsible to that House for the government of the country; and that the Ministry should resign if it ceases to command a majority there.

The Cabinet system operates chiefly by means of constitutional conventions, customs or understandings, and of institutions that do not form part of the legal structure of the government at all. The constitutions of the Commonwealth and the States make fuller legal provision for the Cabinet system than the British Constitution does—for example, by requiring that Ministers shall either be, or within a prescribed period become, members of the Legislature. In general, however, the legal structure of the executive government remains the same as it was before the establishment of the Cabinet system.

The executive power of the Commonwealth is exercisable by the Governor-General, and that of the States by the Governor. In each case he is advised by an Executive Council, which, however, meets only for certain formal purposes, as explained below. The whole policy of a Ministry is, in practice, determined by some or all of the Ministers of State, meeting, without the Governor-General or Governor, under the chairmanship of the Prime Minister or Premier. This group of Ministers is known as the Cabinet.

(ii) *The Cabinet.* This body does not form part of the legal mechanism of government. Its meetings are private and deliberative. The actual Ministers of the day alone are present, no records of the meetings are made public, and the decisions taken have, in themselves, no legal effect. In Australia, until January, 1956, all Ministers were members of the Cabinet. Since then, however, although in the States all Ministers are members of the Cabinet, the Commonwealth ministry is made up of twelve senior Ministers, who constitute the Cabinet and ten Ministers of non-Cabinet rank who attend meetings of the Executive Council only when required, as, for example when the business of the Cabinet concerns their department. As Ministers are the leaders of the party or parties commanding a majority in the popular House, the Cabinet substantially controls, in ordinary circumstances, not only the general legislative programme of Parliament, but the whole course of Parliamentary proceedings. In effect, though not in form, the Cabinet, by reason of the fact that all Ministers are members of the Executive Council, is also the dominant element in the executive government of the country. Even in summoning, proroguing or dissolving Parliament, the Governor-General or Governor is usually guided by the advice tendered him by the Cabinet, through the Prime Minister or Premier, though legally the discretion is vested in the Governor-General or Governor himself.

(iii) *The Executive Council.* This body is usually presided over by the Governor-General or Governor, the members thereof holding office during his pleasure. All Ministers of State are *ex officio* members of the Executive Council. In the Commonwealth, and also in the States of Victoria and Tasmania, Ministers remain members of the Executive Council on leaving office, but are not summoned to attend its meetings, for it is an essential feature of the Cabinet system that attendance should be limited to the Ministers of the day. The meetings of the Executive Council are formal and official in character, and a record of

proceedings is kept by the Secretary or Clerk. At Executive Council meetings, the decisions of the Cabinet are (where necessary) given legal form, appointments made, resignations accepted, proclamations issued, and regulations and the like approved.

(iv) *The Appointment of Ministers.* Legally, Ministers hold office during the pleasure of the Governor-General or Governor. In practice, however, the discretion of the Queen's representative in the choice of Ministers is limited by the conventions on which the Cabinet system rests. Australian practice follows, broadly, that of the United Kingdom. When a Ministry resigns, the Crown's custom is to send for the leader of the party which commands, or is likely to be able to command, a majority in the popular House, and to commission him, as Prime Minister or Premier, to "form a Ministry"—that is, to nominate other persons to be appointed as Ministers of State and to serve as his colleagues in the Cabinet.

The customary procedure in connexion with the resignation or acceptance of office by a Ministry is described fully in previous issues of the Official Year Book (*see* No. 6, p. 942). It may be added, however, that legislation now exists in all States, the effect of which is to obviate the necessity of responsible Ministers vacating their seats in Parliament on appointment to office.

(v) *Ministers in Upper and Lower Houses.* The following table shows the number of Ministers with seats in the Upper or Lower Houses of each Parliament in December, 1956 :—

AUSTRALIAN PARLIAMENTS : MINISTERS IN UPPER OR LOWER HOUSES, DECEMBER, 1956.

Ministers with Seats in—	C'wealth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
The Upper House ..	5	2	4	(a)	3	2	..	16
The Lower House ..	16	14	10	11	5	8	9	73
Total ..	21	16	14	11	8	10	9	89

(a) Abolished in 1922.

For the names of the occupants of ministerial office in each of the Parliaments of Australia in December, 1956, *see* § 3. of this chapter. Subsequent changes of importance in Ministries will be found in the Appendix to this volume.

(vi) *Numbers and Salaries of Commonwealth Ministers.* Under sections 65 and 66, respectively, of the Constitution of the Commonwealth, the number of Ministers of State was not to exceed seven, and the annual sum payable for their salaries was not to exceed £12,000, each provision to operate, however, "until the Parliament otherwise provides."

Subsequently, number and salaries were increased to 8—£13,650 (1915) and to 9—£15,300 (1917). During the period of financial emergency in the early thirties the ministerial salary appropriation was reduced to as low as £10,710 a year, and was not restored to its former level until 1938. During the period of restoration of salary the number of Ministers was increased to 10 (1935). Later increases were as follows :—to 11—£18,600 (1938) ; 19—£21,250 (1941)—these increases were war-time provisions, extended into peacetime in 1946 ; £27,650 (1947—number unaltered) ; 20—£29,000 (1951) ; £41,000 (1952—number unaltered) ; 22—£46,500 (1956). In 1938 an additional ministerial allowance of £1,500 a year was granted to the Prime Minister ; this was increased to £3,500 a year (exempt from income tax) in 1952 and at the same time an additional ministerial allowance of £1,000 a year (exempt from income tax) was granted to each other Minister.

All amounts payable in the foregoing paragraphs are in addition to amounts payable as Parliamentary allowances (*see* paras. 5 and 6 below).

5. Number and Salary of Members of the Legislatures, Australian Parliaments, June, 1956.—The following table shows the number and annual salary of members in each of the legislative chambers in June, 1956.

AUSTRALIAN PARLIAMENTS : MEMBERS AND ANNUAL SALARIES,
JUNE, 1956.

Members in—	C'wealth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
NUMBER OF MEMBERS.								
Upper House ..	60	60	34	(a)	20	30	19	223
Lower House ..	124	94	66	75	39	50	30	478
Total ..	184	154	100	75	59	80	49	701
ANNUAL SALARY. (£.)								
Upper House ..	(b) 1,750	500	(c) 1,600	(a)	(d) 1,900— 1,975	(e) 2,120	(f) 1,382	..
Lower House ..	(b) 1,750	1,875	(c) 1,600	g £2,480 10s.	(d) 1,900— 1,975	(e) 2,120	(f) 1,382	..

(a) Abolished in 1922. (b) Plus expense allowances exempt from income tax—Senators, £550 ; Members of House of Representatives, £400–£900, varying with electoral divisions. See also para. 6 following. (c) Plus allowance of £400 for metropolitan, £600 for urban, £700 for inner country and £800 for outer country electorates. (d) According to distance of electorate from Adelaide. (e) Subject to an adjustment in accordance with variations of the State basic wage which at 31st December, 1955 was £20 per annum. Plus £50 where any part of electorate is more than 50 miles from Perth. (f) Includes cost of living adjustment, pegged at £382. Plus allowance according to area of electorate and distance from the capital varying from £250 to £550 in the case of the Legislative Council, and from £500 to £800 in the case of the House of Assembly. (g) Subject to adjustment in accordance with any variation of the equivalent Public Service Award classification which at 30th June, 1956 was £21 per annum. Plus marginal allowances of £100 for metropolitan electorates and ranging from £165 to £270 for non-metropolitan electorates.

6. Commonwealth Parliamentary Allowances. Section 48 of the Commonwealth Constitution granted to each Senator and member of the House of Representatives an allowance of £400 a year until Parliament should decide to alter it. This general allowance has been altered on several occasions (see Official Year Book No. 42, pp. 69 and 70) and in 1952 was raised to £1,750 a year. Certain additional allowances are also provided for holders of Parliamentary Offices, etc., details of which are also given in the issue referred to above.

7. Enactments of the Parliament.—In the Commonwealth, all laws are enacted in the name of the Sovereign, the Senate, and the House of Representatives. The subjects with respect to which the Commonwealth Parliament is empowered to make laws are enumerated in the Constitution. In the States, other than South Australia and Tasmania, laws are enacted in the name of the Sovereign by and with the consent of the Legislative Council (except in Queensland) and Legislative Assembly. In South Australia and Tasmania, laws are expressed to be enacted in the name of the Governor of the State, with the advice and consent of the Parliament in the case of South Australia, and of the Legislative Council and House of Assembly in the case of Tasmania. The Governor-General or the State Governor acts on behalf of, and in the name of, the Sovereign, in assenting to Bills passed by the Legislatures, but he may reserve them for the special consideration of the Sovereign. The Parliaments of the States are empowered generally, subject to the Commonwealth Constitution, to make laws in and for their respective States, in all cases whatsoever. Subject to certain limitations, they may alter, repeal, or vary their Constitutions. Where a law of a State is inconsistent with a law of the Commonwealth, the latter prevails, and the former is, to the extent of the inconsistency, invalid.

§ 2. Parliaments and Elections.

1. Commonwealth.—(i) Qualifications for Membership and for Franchise—Commonwealth Parliament. Qualifications necessary for membership of either House of the Commonwealth Parliament are possessed by any British subject, twenty-one years of age

or over, who has resided in the Commonwealth for at least three years and who is, or is qualified to become, an elector of the Commonwealth. Qualifications for Commonwealth franchise are possessed by any British subject, not under twenty-one years of age and not disentitled on racial or other ground, who has lived in Australia for six months continuously. Residence in a sub-division for a period of one month prior to enrolment is necessary to enable a qualified person to enrol. Enrolment and voting are compulsory. A member of the Defence Force on service outside Australia who is a British subject not less than 21 years of age and has lived in Australia for six months continuously is entitled to vote at Commonwealth elections whether enrolled or not.

The principal reasons for disqualification of persons otherwise eligible as members of either Commonwealth House are :—Membership of the other House, allegiance to a foreign power, being attainted of treason, being convicted and under sentence for any offence punishable by imprisonment for one year or longer, being an undischarged bankrupt or insolvent, holding office of profit under the Crown (with certain exceptions), or having pecuniary interest in any agreement with the public service of the Commonwealth except as a member of an incorporated company of more than 25 persons. Persons of unsound mind, attainted of treason, convicted and under sentence for any offence punishable by imprisonment for one year or longer, or of certain non-European races are excluded from the franchise. In the main these or similar grounds for disqualification apply also to State Parliament membership and franchise.

(ii) *Commonwealth Parliaments and Elections.* From the establishment of the Commonwealth until 1949, the Senate consisted of 36 members, six being returned by each of the original federating States. The Constitution empowers Parliament to increase or decrease the size of the Parliament and, as the population of the Commonwealth had more than doubled since its inception, the Parliament enacted legislation in 1948 enlarging both Houses of Parliament and providing a representation ratio nearer to the proportion which existed at Federation. Thus, the Representation Act 1948 provides that there shall be ten Senators from each State instead of six, increasing the total to 60 Senators. To effect this transition in the Senate, seven Senators were elected from each State at the elections of 1949, four taking office immediately the Senate sat after the election, the remaining three commencing their term on the usual date—1st July, 1950. Members of this Chamber are normally elected for the term of six years, but half the members retire at the end of every third year, although they are eligible for re-election. Accordingly, at each future periodical election of Senators, five Senators will normally be elected in each State, making 30 to be elected at each such election.

In accordance with the constitution, the total number of members of the House of Representatives must be as nearly as practicable double that of the Senate. Correspondingly, in terms of the Constitution and the Representation Act 1905–1938, from the date of the 1949 elections the number of members in the House of Representatives was increased from 74 to 121 (excluding the members for the internal Territories). As the States are represented in the House of Representatives on a population basis, the numbers were increased as follows :—New South Wales—from 28 to 47 ; Victoria—20 to 33 ; Queensland—10 to 18 ; South Australia—6 to 10 ; Western Australia—5 to 8 ; Tasmania—5, no increase ; total—74 to 121. The increase in the number of members of Parliament necessitated a redistribution of seats and a redetermination of electoral boundaries. This was carried out by Distribution Commissioners in each State on a quota basis, but taking into account community or diversity of interest, means of communication, physical features, existing boundaries of divisions and sub-divisions, and State electoral boundaries.

The population as disclosed by the Census taken on 30th June, 1954, necessitated a further alteration in representation in the House of Representatives in respect of New South Wales, South Australia, and Western Australia. Representation as from the General Election for the House of Representatives on 12th December, 1955, is New South Wales 46, Victoria 33, Queensland 18, South Australia 11, Western Australia 9, Tasmania 5, the total number of members (excluding the members for the internal Territories) being increased from 121 to 122. A redistribution of electoral boundaries was effected by Distribution Commissioners appointed in each State.

Since the general elections of 1922, the Northern Territory has been represented by one member in the House of Representatives. The Australian Capital Territory Representation Act 1948 gave similar representation to the Australian Capital Territory as from the elections of 1949. The members for the Territories may join in the debates but are

not entitled to vote, except on a motion for the disallowance of any ordinance of the Territory or on any amendment to such motion. The Commonwealth Parliament, however, when providing for a Legislative Council for the Northern Territory in 1947, relinquished the power to disallow ordinances for that Territory.

The Constitution provides for a minimum of five members for each original State. Members of the House of Representatives are elected for the duration of the Parliament, which is limited to three years. At elections for Senators, the whole State constitutes the electorate. For the purposes of elections for the House of Representatives, the State is divided into single electorates corresponding in number with the number of members to which the State is entitled. Further information regarding the Senate and the House of Representatives is given in earlier issues of the Official Year Book.

There have been twenty-one complete Parliaments since the inauguration of Federation. Until 1927 the Parliament met in Melbourne ; it now meets at Canberra, the first meeting at Parliament House, Canberra, being opened by the late King George VI., then Duke of York, on 9th May, 1927.

The fifth Parliament, which was opened on 9th July, 1913, was dissolved on 30th July, 1914 in somewhat unusual circumstances, when for the first time in the history of the Commonwealth, a deadlock occurred between the Senate and the House of Representatives, and, in accordance with Section 57 of the Constitution which provides for such an eventuality, both Houses were dissolved by the Governor-General. The nineteenth Parliament was similarly dissolved. It opened on 22nd February, 1950, but on 19th March, 1951, in its first session, a double dissolution was proclaimed for the second time since the inception of the Commonwealth.

The system of voting for the House of Representatives is preferential and for the Senate, until 1948, voting was also preferential. The Commonwealth Electoral Act 1948, however, introduced with the Representation Act 1948 to enlarge the Commonwealth Parliament (see page 66), changed the system of scrutiny and counting of votes in Senate elections from preferential to that of proportional representation. For a description of the system, see Official Year Book No. 38, pp. 82-3.

For particulars of electors enrolled and of electors who voted at the various Commonwealth elections, see earlier Year Books. Elections for the Senate have usually been held at the same time as those for the House of Representatives. The double dissolution of the nineteenth Parliament, however, referred to above, led to the holding of Senate elections on separate dates. An election for the Senate was held on 9th May, 1953, and a further election was due within one year of 30th June, 1956, i.e. the date of the completion of the term of office of half the elected Senators.

Following the House of Representatives election on 29th May, 1954, the twenty-first Parliament opened on 4th August, 1954 and was dissolved on 4th November, 1955, which enabled the elections for the Senate and House of Representatives again to be held simultaneously.

The elections for both Houses were held on 10th December, 1955, and particulars of electors and voting in the several States are as follows :—

SENATE ELECTION, 10th DECEMBER, 1955.

State.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	972,265	1,024,116	1,996,381	930,597	970,099	1,900,696	95.71	94.73	95.21
Victoria ..	702,812	741,223	1,444,035	666,313	699,070	1,365,383	94.81	94.31	94.55
Queensland ..	379,143	373,502	752,645	356,410	353,846	710,256	94.00	94.74	94.37
South Australia	224,507	238,240	462,747	216,679	228,148	444,827	96.51	95.76	96.13
West. Australia	171,069	171,944	343,013	162,637	163,126	325,763	95.07	94.87	94.97
Tasmania ..	85,929	87,693	173,622	83,382	83,787	167,169	97.04	95.55	96.28
Total ..	2,535,725	2,636,718	5,172,443	2,416,018	2,498,076	4,914,094	95.28	94.74	95.01

ELECTION FOR HOUSE OF REPRESENTATIVES, 10th DECEMBER, 1955.(a)

State.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	891,668	932,493	1,824,161	853,275	883,573	1,736,848	95.69	94.75	95.21
Victoria ..	702,812	741,223	1,444,035	666,313	699,070	1,365,383	94.81	94.31	94.55
Queensland ..	336,251	331,487	667,738	315,287	314,218	629,505	93.77	94.79	94.27
South Australia	224,507	238,240	462,747	216,679	228,148	444,827	96.51	95.76	96.13
West. Australia	94,367	97,123	191,490	89,449	92,593	182,042	94.79	95.34	95.07
Tasmania ..	85,929	87,693	173,622	83,382	83,787	167,169	97.04	95.55	96.28
Nor. Territory(b)									
Aust. Cap. Terr.	8,317	7,864	16,181	7,715	7,262	14,977	92.76	92.34	92.56
Australia ..	2,343,851	2,436,123	4,779,974	2,232,100	2,308,651	4,540,751	95.23	94.77	95.00

(a) Contested Electorates only.

(b) Uncontested.

The twenty-second Parliament opened on 15th February, 1956.

(iii) *Commonwealth Referenda.* According to Section 128 of the Constitution, any proposed law for the alteration of the Constitution must, in addition to being passed by an absolute majority of each House of Parliament, be submitted to a referendum of the electors in each State, and must further be approved by a majority of the States and of the electors who voted, before it can be presented for Royal Assent. So far, 24 proposals have been submitted to referenda and the consent of the electors has been received in four cases only, the first in relation to the election of Senators in 1906, the second and third in respect of State Debts—one in 1910 and the other in 1928—and the fourth in respect of Social Services in 1946. Details of the various referenda and the voting thereon were given in previous issues of the Official Year Book (*see* No. 18, p. 87, No. 31, p. 67, No. 35, p. 60, No. 36, p. 61, No. 37, pp. 64–5, No. 38, p. 84 and No. 40, p. 56), and a brief résumé was given in Official Year Book No. 41 (*see* page 67).

2. *State Elections.*—(i) *Latest in each State.* (a) *Upper Houses.* The following table shows particulars of the voting at the most recent elections for the Upper Houses or Legislative Councils in the States of Victoria, South Australia and Western Australia. In New South Wales members of the Legislative Council are elected at simultaneous sittings of the members of both Houses, in Queensland there has been no Legislative Council since 1922, and in Tasmania three members of the Council are elected annually (but four in each sixth year) and the Council cannot be dissolved as a whole.

STATE UPPER HOUSE ELECTIONS.

State.	Year of Latest Election.	Electors Enrolled—Whole State.			Contested Electorates.					
					Electors who Voted.			Percentage of Electors who Voted.		
		Males.	Fe-males.	Total.	Males.	Fe-males.	Total.	Males.	Fe-males.	Total.
Victoria ..	1955	695,638	734,492	1,430,130	542,270	570,681	1,112,951	91.69	91.37	91.52
South Australia ..	1956	(a)	(a)	174,241	(a)	(a)	16,002	(a)	(a)	69.69
Western Australia	1956	70,958	29,815	100,773	35,372	15,563	50,935	74.23	71.32	73.31

(a) Not available.

Particulars of voting in 1956 at the latest contested election for the Legislative Council in Tasmania are as follows:—Number of electors on the roll, 9,538; number of votes recorded, 8,129; percentage of electors who voted, 85.23.

(b) *Lower Houses.* The following table shows particulars of the voting at the most recent election for the Lower House in each State.

STATE LOWER HOUSE ELECTIONS.

State.	Year of Latest Election.	Electors Enrolled— Whole State.			Contested Electorates.					
					Electors who Voted.			Percentage of Electors who Voted.		
		Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
New South Wales	1956	979,706	1031,552	2011,258	843,786	878,842	1722,628	93.81	92.64	93.21
Victoria . . .	1955	691,034	731,554	1422,588	639,535	679,402	1318,937	93.93	94.11	94.01
Queensland . .	1956	388,997	386,261	775,258	331,987	330,693	662,680	92.91	93.11	93.01
South Australia . .	1956	(a)	(a)	468,303	(a)	(a)	280,811	(a)	(a)	93.90
Western Australia	1956	171,234	170,784	342,018	118,511	123,352	241,863	91.95	92.40	92.18
Tasmania . . .	1956	86,690	87,940	174,630	82,806	83,487	166,293	95.52	94.94	95.23

(a) Not available.

(ii) *Elections in Earlier Years.* Official Year Book No. 38 and earlier issues contain particulars of the voting at elections for both Upper and Lower State Houses in years prior to those shown above, and some general information is given in the following paragraphs.

3. **The Parliament of New South Wales.**—The Parliament of New South Wales consists of two Chambers, the Legislative Assembly and the Legislative Council. By legislation assented to in July, 1949, the Assembly was enlarged from 90 to 94 members, elected in single-seat electoral districts, who hold their seats during the existence of the Parliament to which they are elected. The duration of Parliament is limited to three years and by legislation enacted in 1950 cannot be extended beyond that period except with the approval of electors by referendum. Until 1934, the Council was a nominee Chamber, consisting of a variable number of members appointed for life without remuneration, but as from 23rd April, 1934 it was reconstituted and became a House of 60 members to serve without remuneration for a term of twelve years, with one-quarter of the members retiring every third year. As from 1st September, 1948, however, members of the Council have been paid an allowance, now £500 a year. Vacancies are filled by members of both Chambers, who vote as a single electoral body at simultaneous sittings of both Chambers.

Any person who is an elector entitled to vote at a Legislative Assembly election, or a person entitled to become such elector, and who has been for at least three years resident in Australia, and who is a natural-born or naturalized subject of the Queen, is eligible for election to the Legislative Council. For the Council franchise, an elector must be a sitting member of either the Legislative Council or the Legislative Assembly. Any person qualified to vote at a Legislative Assembly election for any electoral district in New South Wales is qualified to be elected as a Member for that or any other district. Any person not under twenty-one years of age, who is a natural born or naturalized subject of the Queen, and who has lived in Australia for at least six months continuously, and in New South Wales for at least three months, and in any sub-division for at least one month immediately preceding the date of claim for enrolment, is entitled to enrolment as an elector for the Legislative Assembly. Persons are disqualified either as members or voters for reasons generally the same as those outlined on page 66.

Since the introduction of responsible government in New South Wales there have been 37 complete Parliaments, the first of which opened on 22nd May, 1856, and was dissolved on 19th December, 1857, while the thirty-seventh was dissolved on 6th February, 1956. The thirty-eighth Parliament opened on 10th April, 1956.

The elections of 1920, 1922, and 1925 were contested on the principle of proportional representation, but a reversion to the system of single seats and preferential voting was made at all later appeals to the people. The principle of one elector one vote was adopted in 1894, and that of compulsory enrolment in 1921. Compulsory voting was introduced at the 1930 election. The franchise was extended to women (Women's Franchise Act) in 1902, and was exercised by them for the first time in 1904.

4. **The Parliament of Victoria.**—Both of the Victorian legislative Chambers are elective bodies, but there is a considerable difference in the number of members of each House, and there was also, until the Legislative Council Reform Act 1950, a difference in the qualifications

necessary for members and electors. The number of members in the Upper House is 34, and in the Lower House, 66. In the Legislative Council the tenure of the seat is for six years, except that one-half of the members who are elected for provinces at any general election for the Council are entitled to hold their seats for a period of only three years, one member for each of the seventeen provinces retiring every third year. Members of the Legislative Assembly are elected for the duration of Parliament, which is limited to three years.

Prior to the passing of the Act just referred to, which operated from November, 1951, there were property qualifications required for membership of, and franchise for, the Legislative Council. As alternatives to the property qualifications for the Council franchise, certain professional and academic qualifications were also allowed. As amended, however, the qualifications for membership of the Council are possessed by any adult natural-born subject of the Queen, or by any adult alien naturalized for five years and resident in Victoria for two years. Entitlement for enrolment as an elector is extended to every adult natural-born or naturalized subject who has resided in Australia for at least six months continuously and in Victoria for at least three months and in any subdivision for at least one month immediately preceding the date of claim for enrolment. These qualifications for membership and electors apply also in respect of the Legislative Assembly. Reasons for disqualification follow the general pattern for Australia (*see* page 66)

Since the introduction of responsible government in Victoria, there have been 39 complete Parliaments, the first of which opened on 21st November, 1856, and closed on 9th August, 1859, while the thirty-ninth was dissolved on 22nd April, 1955. The fortieth Parliament was opened on 15th June, 1955.

Single voting is observed in elections held for either House, plural voting having been abolished for the Legislative Assembly in 1899 and for the Legislative Council in 1937. A preferential system of voting (*see* Official Year Book No. 6, p. 1182) was adopted for the first time in Victoria at the election held in November, 1911. The franchise was extended to women by the Adult Suffrage Act 1908, while voting at elections was made compulsory for the Legislative Assembly in 1926 and for the Legislative Council in 1935.

5. The Parliament of Queensland.—As stated previously, the Legislative Council in Queensland was abolished in 1922, the date of Royal Assent to the Act being 23rd March, 1922. The Legislative Assembly is composed of 75 members, each elected for a period of three years and each representing an electoral district.

Any person qualified to be enrolled for any electoral district is qualified for election to the Legislative Assembly. Any person of the age of twenty-one years, who is a natural-born or naturalized British subject with continuous residence within Australia for six months, in Queensland for three months, and in an electoral district for one month prior to making a claim for enrolment, is qualified to enrol as an elector. The classes of persons not qualified to be elected are similar to those for other Australian Parliaments (*see* page 66).

Under the Electoral Districts Act of 1949, the number of members and the number of electorates were increased from 62 to 75, and the increase became effective from the beginning of the thirty-second Parliament, elected in 1950. The Act divided the State into four zones, and a commission of three appointed by the Governor-in-Council completely distributed the prescribed zones into the number of electoral districts, taking into account community or diversity of interest, means of communication, physical features, boundaries of Petty Sessions Districts and of areas of Local Authorities.

Since the establishment of responsible government in Queensland, there have been 33 complete Parliaments, the last of which was dissolved on 17th April, 1956. Opinions differ regarding the opening date of the first Queensland Parliament. According to the Votes and Proceedings of the Legislative Assembly, the House met for the first time on 22nd May, 1860, when the members were sworn and the Speaker elected. The Governor, however, was unable to be present on that date, but he duly attended on 29th May, 1860, and delivered the Opening Address. The thirty-fourth Parliament was opened on 31st July, 1956.

At the elections held in May, 1915, the principle of compulsory voting was introduced for the first time in Australia. The election of 1907 was the first State election in Queensland at which women voted, the right being conferred under the Elections Acts Amendment Act 1905. In 1942, the system of preferential voting was abolished and that of election of the candidate obtaining the highest number of votes in the electorate now operates.

6. The Parliament of South Australia.—In this State, there is a Legislative Council composed of twenty members and a House of Assembly with 39 members, both Chambers

being elective. For the Legislative Council, the State is divided into five districts each returning four members, two of whom retire alternately, the term of office being six years. Thirty-nine districts return one member each to the House of Assembly; prior to 1938 there were 46 members representing nineteen districts. The duration of the House of Assembly is three years.

Any person who is at least thirty years of age, is a British subject or legally made a denizen of the State and who has resided in the State for at least three years is qualified for membership in the Legislative Council. Qualifications for the Council franchise are that a person is at least twenty-one years of age, a British subject, an inhabitant of the State with residence for at least six months prior to the registration of the electoral claim, and that he or she has had certain war service, or possesses property qualifications relating to ownership, leaseholding, or inhabitant occupancy. Any person qualified and entitled to be registered as an elector for the House of Assembly is qualified and entitled for election as a member of that House. Qualifications for enrolment as an elector for the House of Assembly are that a person is at least twenty-one years of age, is a British subject, and has lived continuously in Australia for at least six months, in the State for three months and in an Assembly subdivision for one month immediately preceding the date of claim for enrolment. Provisions in the Constitution for disqualification from membership or from the franchise in respect of either House follow the usual pattern for Australia (*see* page 66).

Since the inauguration of responsible government in South Australia, there have been 34 complete Parliaments, the first of which was opened on 22nd April, 1857. The thirty-fourth Parliament closed on 29th February, 1956 and the thirty-fifth was opened on 22nd May, 1956. The duration of the twenty-eighth Parliament was extended from three to five years by the provisions of the Constitution (Quinquennial Parliament) Act 1933, but this Act was repealed by the Constitution Act Amendment Act (No. 2) 1939, and the three-year term was reverted to.

South Australia was the first of the States to grant women's suffrage (under the Constitution Amendment Act 1894), the franchise being exercised by women for the first time at the Legislative Assembly election on 25th April, 1896. Compulsory voting for the House of Assembly was first observed at the 1944 election. A system of preferential voting is in operation.

7. The Parliament of Western Australia.—In this State, both Chambers are elective. For the Legislative Council, there are 30 members, each of the ten provinces returning three members, one of whom retires biennially. At each biennial election, the member elected holds office for a term of six years, and automatically retires at the end of that period. The Legislative Assembly is composed of 50 members, one member being returned by each electoral district. Members of the Legislative Assembly are elected for three years.

Since the establishment of responsible government in Western Australia, there have been twenty-one complete Parliaments, the first of which was opened on 30th December, 1890. The twenty-first Parliament closed on 6th April, 1956 and the twenty-second was opened on 2nd August, 1956. The preferential system of voting in use in Western Australia is described in *Official Year Book* No. 6, p. 1184.

Qualifications required for membership of the Legislative Council are the age of thirty years, residence in Western Australia for two years, being a natural-born British subject or naturalized for five years prior to election and resident in the State for that period, and freedom from legal incapacity. Qualifications required for Council franchise are the age of twenty-one years, residence in Western Australia for six months, being a natural-born British subject or naturalized for twelve months, freedom from legal incapacity, and certain property qualifications relating to freehold, leasehold, or householder occupancy. Qualifications required for membership of the Legislative Assembly are the age of twenty-one years, residence in Western Australia for twelve months, being a natural-born British subject or naturalized for five years and resident in the State for two years prior to election, and freedom from legal incapacity. Qualifications required for the franchise are the age of twenty-one years, residence in Western Australia for six months and in an electoral district continuously for three months, and being a natural-born or naturalized British subject. Persons may be disqualified as members or voters for reasons similar to those for other Australian Parliaments (*see* page 66).

Women's suffrage was granted by the Electoral Act of 1899. The first woman member to be elected to an Australian Parliament was returned at the 1921 election in this State. Voting for the Legislative Assembly was made compulsory in December, 1936, the first elections for which the provision was in force being those held on 18th March, 1939.

8. **The Parliament of Tasmania.**—In Tasmania there are two legislative Chambers, the Legislative Council and the House of Assembly, both bodies being elective. In accordance with the Constitution Act 1946, the Council now consists of nineteen members, elected for six years and returned from nineteen divisions. Three members retire annually (except in the 1953 elections and in each sixth successive year thereafter, when four retire) and the Council cannot be dissolved as a whole. Prior to the 1946 Act there were eighteen members elected from fifteen divisions, of which Hobart returned three members and Launceston two. There are five House of Assembly divisions, corresponding to the Commonwealth electoral divisions, each returning six members elected under a system of proportional representation which first came into force at the 1909 elections (*see* Official Year Book No. 6, p. 1185). By the Constitution Act 1936 the life of the Assembly was extended from three to five years except where, after a general election, all the Members elected are members of either of two opposing parties, and of these fifteen are members of one of those parties and fifteen are members of the other of those parties, when the Governor shall by Proclamation, invoke the Constitution Act (No. 2) 1954 which limits the life of the Assembly to three years.

Persons qualified for election to the Legislative Council must be 25 years of age and qualified to vote as Council electors, have been resident in Tasmania for a period of five years at any one time or at least two years immediately preceding the election, and be natural-born subjects of the Queen or naturalized for at least five years. An elector for the Council must be twenty-one years of age, a natural-born or naturalized subject and resident in Tasmania for a period of twelve months, with certain freehold or occupancy property qualifications, or the spouse of a person qualified to vote as the owner or occupier of property, or with certain academic, professional, defence force, or war service qualifications. For the House of Assembly members must be twenty-one years of age, have been resident in Tasmania for a period of five years at any one time or for a period of two years immediately preceding the election, and be natural-born subjects of the Queen or naturalized for a period of five years. Electors must be twenty-one years of age, natural-born or naturalized subjects and resident in Tasmania for a period of six months continuously. Reasons for disqualification of members or voters are similar to those for other Australian Parliaments (*see* page 66).

The first Tasmanian Parliament opened on 2nd December, 1856, and closed on 8th May, 1861. There have been 31 complete Parliaments since the inauguration of responsible government, the first of which opened on 2nd December, 1856, and closed on 8th May, 1861, while the thirty-first was dissolved on 20th September, 1956. The thirty-second Parliament was opened on 4th December, 1956.

The suffrage was granted to women under the Constitution Amendment Act 1903 and compulsory voting for both Houses came into force on the passing of the Electoral Act in 1928. The system of voting is proportional representation by single transferable vote.

9. **Superannuation Funds of the Parliament of the Commonwealth and of the Australian States.**—(i) *General.* In Official Year Book No. 38, there is a conspectus of Superannuation Funds of the Parliaments of the Commonwealth and of the five States (New South Wales, Victoria, Queensland, South Australia and Western Australia) in which such schemes operate (*see* pp. 91-9). This conspectus summarized the main features of each fund as at 30th June, 1949. Although the schemes are still essentially as described in the conspectus, there have subsequently been several amending Acts providing for extensions or increases in benefits, increased contributions, etc., in some of the schemes. In December, 1955, the Tasmanian Parliament passed an Act, the Parliamentary Retiring Allowances Act, No. 59 of 1955, which set up a trust to administer a Parliamentary Retiring Allowances Fund. Contributions to this fund are to be made by every member at the rate of £156 per annum and subject to specified conditions persons aged 45 years or over ceasing to be members, other than by voluntary retirement, are entitled to a pension after a period of service of not less than eight years. Other provisions are, in general, on much the same lines as for other parliamentary superannuation funds. The Commonwealth Retiring Allowances Act 1952 provided *inter alia* for additional benefit of £1,200 a year, subject to certain conditions, to a retired Prime Minister, and in case of his death, additional benefit of £750 a year to his widow.

(ii) *Finances.* For particulars of the financial operations of these schemes *see* Chapter XX.—Private Finance of this volume.

§ 3. Administration and Legislation.

1. The Commonwealth Parliaments.—The first Parliament of the Commonwealth was convened by proclamation dated 29th April, 1901, by His Excellency the Marquis of Linlithgow, then Earl of Hopetoun, Governor-General. It was opened on 9th May, 1901, by H.R.H. the Duke of Cornwall and York, who had been sent to Australia for that purpose by His Majesty the King. The Rt. Hon. Sir Edmund Barton, G.C.M.G., K.C., was Prime Minister.

The following table shows the number and duration of Parliaments since Federation :—

COMMONWEALTH PARLIAMENTS.

Number of Parliament.	Date of Opening.	Date of Dissolution.
First	9th May, 1901	23rd November, 1903
Second	2nd March, 1904	5th November, 1906
Third	20th February, 1907	19th February, 1910
Fourth	1st July, 1910	23rd April, 1913
Fifth	9th July, 1913	30th July, 1914(a)
Sixth	8th October, 1914	26th March, 1917
Seventh	14th June, 1917	3rd November, 1919
Eighth	26th February, 1920	6th November, 1922
Ninth	28th February, 1923	3rd October, 1925
Tenth	13th January, 1926	9th October, 1928
Eleventh	9th February, 1929	16th September, 1929
Twelfth	20th November, 1929	27th November, 1931
Thirteenth	17th February, 1932	7th August, 1934
Fourteenth	23rd October, 1934	21st September, 1937
Fifteenth	30th November, 1937	27th August, 1940
Sixteenth	20th November, 1940	7th July, 1943
Seventeenth	23rd September, 1943	16th August, 1946
Eighteenth	6th November, 1946	31st October, 1949
Nineteenth	22nd February, 1950	19th March, 1951(a)
Twentieth	12th June, 1951	21st April, 1954
Twenty-first	4th August, 1954	28th October, 1955
Twenty-second	15th February, 1956 .. ..	..

(a) A dissolution of both the Senate and the House of Representatives was granted by the Governor-General, acting on the advice of the Ministry, and under Section 57 of the Constitution.

2. Governors-General and Commonwealth Ministries.—(i) *Governors-General.* The following statement shows the names of the Governors-General since the inception of the Commonwealth :—

GOVERNORS-GENERAL.

- Rt. Hon. JOHN ADRIAN LOUIS, EARL OF HOPETOUN (afterwards MARQUIS OF LINLITHGOW), K.T G.C.M.G., G.C.V.O. From 1st January, 1901 to 9th January, 1903.
- Rt. Hon. HALLAM, BARON TENNYSON, G.C.M.G. From 17th July, 1902 to 9th January, 1903, (Acting).
- Rt. Hon. HALLAM, BARON TENNYSON, G.C.M.G. From 9th January, 1903 to 21st January, 1904.
- Rt. Hon. HENRY STAFFORD, BARON NORTHCOTE, G.C.M.G., G.C.I.E., C.B. From 21st January, 1904 to 9th September, 1908.
- Rt. Hon. WILLIAM HUMBLE, EARL OF DUDLEY, G.C.B., G.C.M.G., G.C.V.O. From 9th September, 1908 to 31st July, 1911.
- Rt. Hon. THOMAS, BARON DENNMAN, G.C.M.G., K.C.V.O. From 31st July, 1911 to 18th May, 1914.
- Rt. Hon. SIR RONALD CRAUFURD MUNRO FERGUSON (afterwards VISCOUNT NOVAR OF RAITH), G.C.M.G. From 18th May, 1914 to 6th October, 1920.
- Rt. Hon. HENRY WILLIAM, BARON FORSTER OF LEPE, G.C.M.G. From 6th October, 1920 to 8th October, 1925.
- Rt. Hon. JOHN LAWRENCE, BARON STONEHAVEN, G.C.M.G., D.S.O. From 8th October, 1925 to 22nd January, 1931.
- Rt. Hon. SIR ISAAC ALFRED ISAACS, G.C.B., G.C.M.G. From 22nd January, 1931 to 23rd January, 1936.
- General the Rt. Hon. ALEXANDER GORE ARKWRIGHT, BARON GOWRIE, V.C., G.C.M.G., C.B., D.S.O., K.G.St.J. From 23rd January, 1936 to 30th January, 1945.

His Royal Highness PRINCE HENRY WILLIAM FREDERICK ALBERT, DUKE OF GLOUCESTER, EARL OF ULSTER AND BARON CULLODEN, K.G., K.T., K.P., P.C., G.C.B., G.C.M.G., G.C.V.O., General in the Army, Air Chief Marshal in the Royal Air Force, One of His Majesty's Personal Aides-de-Camp. From 30th January, 1945 to 11th March, 1947.
 Rt. Hon. SIR WILLIAM JOHN MCKELL, G.C.M.G. From 11th March, 1947 to 8th May, 1953.
 Field-Marshal SIR WILLIAM JOSEPH SLIM, G.C.B., G.C.M.G., G.C.V.O., G.B.E., D.S.O., M.C., K.St.J. From 8th May, 1953.

(ii) *Administrators.* In addition to the holders of the office of Governor-General listed above, certain persons have, from time to time, been appointed as Administrator of the Government of the Commonwealth during the absence from Australia or illness of the Governor-General. The following is a list of such appointments.

	Term of Office.
Rt. Hon. Frederic John Napier, Baron Chelmsford, K.C.M.G.	21st December, 1909 to 27th January, 1910
Lieut-Colonel the Rt. Hon. Arthur Herbert Tennyson, Baron Somers, K.C.M.G., D.S.O., M.C.	3rd October, 1930 to 22nd January, 1931
Captain the Rt. Hon. William Charles Arcedeckne Vanneck, Baron Huntingfield, K.C.M.G., K.St.J.	29th March, 1938 to 24th September, 1938
Major-General Sir Winston Joseph Dugan, G.C.M.G., C.B., D.S.O.	5th September, 1944 to 30th January, 1945
Major-General Sir Winston Joseph Dugan, G.C.M.G., C.B., D.S.O.	18th January, 1947 to 11th March, 1947
General* Sir John Northcott, K.C.M.G., C.B., M.V.O.†	19th July, 1951 to 14th December, 1951
General* Sir John Northcott, K.C.M.G., K.C.V.O., C.B.	30th July, 1956 to 22nd October, 1956

(iii) *Commonwealth Ministeries.* (a) *Names and Tenure of Office, 1901 to 1956.* The following list shows the name of each Commonwealth Ministry to hold office since 1st January, 1901, and the limits of its term of office.

COMMONWEALTH MINISTERIES.

- (i) BARTON MINISTRY, 1st January, 1901 to 24th September, 1903.
- (ii) DEAKIN MINISTRY, 24th September, 1903 to 27th April, 1904.
- (iii) WATSON MINISTRY, 27th April, 1904 to 17th August, 1904.
- (iv) REID-MCLEAN MINISTRY, 18th August, 1904 to 5th July, 1905.
- (v) DEAKIN MINISTRY, 5th July, 1905 to 13th November, 1908.
- (vi) FISHER MINISTRY, 13th November, 1908 to 1st June, 1909.
- (vii) DEAKIN MINISTRY, 2nd June, 1909 to 29th April, 1910.
- (viii) FISHER MINISTRY, 29th April, 1910 to 24th June, 1913.
- (ix) COOK MINISTRY, 24th June, 1913 to 17th September, 1914.
- (x) FISHER MINISTRY, 17th September, 1914 to 27th October, 1915.
- (xi) HUGHES MINISTRY, 27th October, 1915 to 14th November, 1916.
- (xii) HUGHES MINISTRY, 14th November, 1916 to 17th February, 1917.
- (xiii) HUGHES MINISTRY, 17th February, 1917 to 10th January, 1918.
- (xiv) HUGHES MINISTRY, 10th January, 1918 to 9th February, 1923.
- (xv) BRUCE-PAGE MINISTRY, 9th February, 1923 to 22nd October, 1929.
- (xvi) SCULLIN MINISTRY, 22nd October, 1929 to 6th January, 1932.
- (xvii) LYONS MINISTRY, 6th January, 1932 to 7th November, 1938.
- (xviii) LYONS MINISTRY, 7th November, 1938 to 7th April, 1939.
- (xix) PAGE MINISTRY, 7th April, 1939 to 26th April, 1939.
- (xx) MENZIES MINISTRY, 26th April, 1939 to 14th March, 1940.
- (xxi) MENZIES MINISTRY, 14th March, 1940 to 28th October, 1940.
- (xxii) MENZIES MINISTRY, 28th October, 1940 to 29th August, 1941.
- (xxiii) FADDEN MINISTRY, 29th August, 1941 to 7th October, 1941.

* Lieutenant-General Sir John Northcott was granted honorary rank of General whilst administering the Government of the Commonwealth. † K.C.V.O., 1954.

COMMONWEALTH MINISTRIES—*continued.*

- (xxiv) CURTIN MINISTRY, 7th October, 1941 to 21st September, 1943.
 (xxv) CURTIN MINISTRY, 21st September, 1943 to 6th July, 1945.
 (xxvi) FORDE MINISTRY, 6th July, 1945 to 13th July, 1945.
 (xxvii) CHIFLEY MINISTRY, 13th July, 1945 to 1st November, 1946.
 (xxviii) CHIFLEY MINISTRY, 1st November, 1946 to 19th December, 1949.
 (xxix) MENZIES MINISTRY, 19th December, 1949 to 11th May, 1951.
 (xxx) MENZIES MINISTRY, 11th May, 1951 to 11th January, 1956.
 (xxxi) MENZIES MINISTRY, 11th January, 1956.

(b) *Names of Successive Holders of Ministerial Office, 9th February, 1923 to 31st December, 1956.* In Official Year Book No. 17, 1924, there appeared the names of each Ministry up to the Bruce-Page Ministry (9th February, 1923 to 22nd October, 1929), together with the names of the successive holders of portfolios therein, and issue No. 39 contains a list, commencing with the Bruce-Page Ministry, which covers the period between the date on which it assumed power, 9th February, 1923 and 31st July, 1951, showing the names of all persons who have held office in each Ministry during that period.

This issue shows only particulars of the latest Menzies Ministry, but includes any changes therein during its term of office up to and including the reconstruction of 18th October, 1956. For any subsequent changes see Appendix to this volume.

MENZIES MINISTRY—from 11th January, 1956.

(The State from which each Minister was elected to Parliament is added in parentheses.)

Prime Minister—

THE RT. HON. R. G. MENZIES,
C.H., Q.C. (Vic.).

Treasurer—

THE RT. HON. SIR ARTHUR FADDEN,
K.C.M.G. (Qld.).

Minister for Labour and National Service—

THE RT. HON. H. E. HOLT (Vic.).

Minister for Trade—

THE RT. HON. J. MCEWEN (Vic.).

Minister for External Affairs—

THE RT. HON. R. G. CASEY, C.H.,
D.S.O., M.C. (Vic.).

Minister for Defence—

THE HON. SIR PHILIP MCBRIDE,
K.C.M.G. (S.A.).

Vice-President of the Executive Council; and Attorney-General—

SENATOR THE HON. N. O'SULLIVAN,
(Qld.).

Minister for National Development—

SENATOR THE HON. W. H. SPOONER,
M.M. (N.S.W.).

Minister for Immigration—

THE HON. A. G. TOWNLEY (Tas.).

Minister for Territories—

THE HON. P. M. C. HASLUCK (W.A.).

Minister for Supply; and Minister for Defence Production—

THE HON. H. BEALE, Q.C. (N.S.W.)

Minister for Primary Industry—

THE HON. W. MCMAHON (N.S.W.).

(The above Ministers constitute the Cabinet.)

Minister for Repatriation—

SENATOR THE HON. W. J. COOPER,
M.B.E. (Qld.).

Minister for Shipping and Transport; and Minister for Civil Aviation—

SENATOR THE HON. S. D. PALTRIDGE
(W.A.).

Minister for Health—

THE HON. D. A. CAMERON, O.B.E.
(Qld.).

Minister for the Army—

THE HON. J. O. CRAMER (N.S.W.).

Postmaster-General; and Minister for the Navy—

THE HON. C. W. DAVIDSON, O.B.E.
(Qld.).

Minister for Air—

THE HON. F. M. OSBORNE, D.S.C.
(N.S.W.).

Minister for the Interior; and Minister for Works—

THE HON. A. FAIRHALL (N.S.W.).

Minister for Social Services—

THE HON. H. S. ROBERTON (N.S.W.).

Minister for Customs and Excise—

SENATOR THE HON. N. H. D. HENTY
(Tas.).

(iv) *Commonwealth Ministers of State.* In Official Year Book No. 38 a statement was included showing the names of the Ministers of State who had administered the several Departments during the period 1st April, 1925 to 31st December, 1949 (pp. 74-79). This was in continuation of a similar statement covering the period from the inauguration of Commonwealth Government to 1925 which appeared in Official Year Book No. 18.

3. **Governors and State Ministers.**—The names of the Governors and members of the Ministries in each State in December, 1956, are as shown in the following statement. (Changes since December, 1956 are shown in the Appendix to this volume.)

NEW SOUTH WALES.

Governor—LIEUT.-GENERAL SIR JOHN NORTHCOTT, K.C.M.G., K.C.V.O., C.B.

Ministry (from 15th March, 1956).

<i>Premier and Colonial Treasurer</i> — THE HON. J. J. CAHILL.	<i>Minister for Local Government and Minister for Highways</i> — THE HON. J. B. RENSHAW.
<i>Deputy Premier and Minister for Education</i> — THE HON. R. J. HEFFRON.	<i>Minister for Transport</i> — THE HON. A. G. ENTICKNAP.
<i>Attorney-General, Minister of Justice and Vice-President of the Executive Council</i> — THE HON. R. R. DOWNING, M.L.C.	<i>Minister for Housing</i> — THE HON. A. LANDA.
<i>Chief Secretary, Minister for Immigration and Minister for Co-operative Societies</i> — THE HON. C. A. KELLY.	<i>Secretary for Public Works</i> — THE HON. J. F. MCGRATH.
<i>Minister for Agriculture and Food Pro- duction</i> — THE HON. E. H. GRAHAM.	<i>Minister for Conservation</i> — THE HON. E. WETHERELL.
<i>Minister for Health</i> — THE HON. W. F. SHEAHAN, Q.C.	<i>Minister without Portfolio</i> — THE HON. W. M. GOLLAN.
<i>Minister for Child Welfare and Minister for Social Welfare</i> — THE HON. F. H. HAWKINS.	<i>Secretary for Lands and Secretary for Mines</i> — THE HON. R. B. NOTT.
	<i>Minister for Labour and Industry</i> — THE HON. J. J. MALONEY, M.L.C.
	<i>Minister without Portfolio</i> — THE HON. J. B. SIMPSON.

VICTORIA.

Governor—GENERAL SIR REGINALD ALEXANDER DALLAS BROOKS, K.C.B., K.C.M.G., K.C.V.O., D.S.O., K.St.J.

Ministry (from 7th June, 1955).

<i>Premier, Treasurer and Minister for Con- servation</i> — THE HON. H. E. BOLTE.	<i>Minister of Education</i> — THE HON. J. S. BLCOMFIELD.
<i>Chief Secretary and Attorney-General</i> — THE HON. A. G. RYLAH.	<i>Minister of Housing and Minister of Immi- gration</i> — THE HON. H. R. PETTY.
<i>Minister of Transport and a Vice-President of the Board of Land and Works</i> — THE HON. SIR ARTHUR WARNER, M.L.C.	<i>Commissioner of Crown Lands and Survey, Minister of Soldier Settlement and Pre- sident of the Board of Land and Works</i> — THE HON. K. H. TURNBULL.
<i>Minister of Agriculture and a Vice-President of the Board of Land and Works</i> — THE HON. G. L. CHANDLER, M.L.C.	<i>Minister of Labour and Industry and Minister of Electrical Undertakings</i> — THE HON. G. O. REID.
<i>Commissioner of Public Works and a Vice- President of the Board of Land and Works</i> — THE HON. SIR THOMAS MALTBY.	<i>Minister of Forests and Minister of State Development and Decentralization</i> — THE HON. G. S. MCARTHUR, M.L.C.
<i>Minister of Health</i> — THE HON. E. P. CAMERON, M.L.C.	<i>Ministers without Portfolio</i> — THE HON. M. V. PORTER. THE HON. A. J. FRASER.
<i>Minister of Water Supply and Minister of Mines</i> — THE HON. W. J. MIBUS.	

GOVERNORS AND STATE MINISTERS—*continued.*

QUEENSLAND.

Governor—LIEUT.-GENERAL SIR JOHN DUDLEY LAVARACK, K.C.M.G., K.C.V.O., K.B.E., C.B., D.S.O.

Ministry (from 22nd June, 1956).

<i>Premier and Chief Secretary and Vice-President of the Executive Council—</i> THE HON. V. C. GAIR.	<i>Secretary for Health and Home Affairs—</i> THE HON. W. M. MOORE.
<i>Minister for Transport—</i> THE HON. J. E. DUGGAN.	<i>Attorney-General—</i> THE HON. W. POWER.
<i>Treasurer—</i> THE HON. E. J. WALSH.	<i>Secretary for Public Lands and Irrigation—</i> THE HON. P. J. R. HILTON.
<i>Secretary for Agriculture and Stock—</i> THE HON. H. H. COLLINS.	<i>Secretary for Mines—</i> THE HON. G. H. DEVRIES.
<i>Secretary for Labour and Industry—</i> THE HON. A. JONES.	<i>Secretary for Public Works, Housing and Immigration—</i> THE HON. C. G. MCCATHIE.
	<i>Secretary for Public Instruction—</i> THE HON. L. F. DIPLOCK.

SOUTH AUSTRALIA.

Governor—AIR VICE-MARSHALL SIR ROBERT ALLINGHAM GEORGE, K.C.V.O., K.B.E., C.B., M.C.

Ministry (from 15th May, 1944).

<i>Premier, Treasurer and Minister of Immigration—</i> THE HON. T. PLAYFORD.	<i>Minister of Works and Minister of Marine—</i> THE HON. SIR MALCOLM MCINTOSH, K.B.E.
<i>Chief Secretary, Minister of Health and Minister of Mines—</i> THE HON. SIR LYELL MCEWIN, K.B.E., M.L.C.	<i>Minister of Education—</i> THE HON. B. PATTINSON.
<i>Attorney-General and Minister of Industry and Employment—</i> THE HON. C. D. ROWE, M.L.C.	<i>Minister of Local Government, Minister of Roads and Minister of Railways—</i> THE HON. N. L. JUDE, M.L.C.
<i>Minister of Lands, Minister of Repatriation and Minister of Irrigation—</i> THE HON. C. S. HINCKS.	<i>Minister of Agriculture and Minister of Forests—</i> THE HON. G. G. PEARSON.

WESTERN AUSTRALIA.

Governor—LIEUT.-GENERAL SIR CHARLES GAIRDNER, K.C.M.G., K.C.V.O., C.B., C.B.E.

Ministry (from 20th April, 1956).

<i>Premier, Treasurer and Minister for Child Welfare—</i> THE HON. A. R. G. HAWKE.	<i>Minister for Health and Justice—</i> THE HON. E. NULSEN.
<i>Deputy Premier, Minister for Works and Water Supplies—</i> THE HON. J. T. TONKIN.	<i>Minister for Education and Labour—</i> THE HON. W. HEGNEY.
<i>Minister for Transport, Housing and Forests—</i> THE HON. H. E. GRAHAM.	<i>Minister for Mines, Industrial Development and Fisheries—</i> THE HON. L. F. KELLY.
<i>Chief Secretary and Minister for Local Government and Town Planning—</i> THE HON. G. FRASER, M.L.C.	<i>Minister for Railways, the North-West and Supply and Shipping—</i> THE HON. H. C. STRICKLAND, M.L.C.
<i>Minister for Lands and Agriculture—</i> THE HON. E. K. HOAR.	<i>Minister for Native Welfare and Police—</i> THE HON. J. J. BRADY.

GOVERNORS AND STATE MINISTERS—*continued.*

TASMANIA.

Governor—THE RT. HON. SIR RONALD HIBBERT CROSS, BART., K.C.M.G., K.C.V.O.

Ministry (from 25th February, 1948).

Premier and Minister for Education—
THE HON. R. COSGROVE.

Attorney-General—
THE HON. R. F. FAGAN.

Minister for Lands and Works and Mines—
THE HON. E. E. REECE.

Chief Secretary—
THE HON. A. J. WHITE.

Minister for Agriculture—
THE HON. J. J. DWYER, V.C.

Treasurer and Minister for Health—
THE HON. R. J. D. TURNBULL.

Minister for Housing, Police and Licensing—
THE HON. C. B. AYLETT.

Minister for Tourist and Immigration and Forests—
THE HON. W. A. NEILSON.

Minister for Transport—
THE HON. D. A. CASHION.

4. **Leaders of the Opposition, Commonwealth and State Parliaments.**—The Leader of the Opposition plays an important part in the Party system of government which operates in the Australian Parliaments. The following list gives the names of the holders of this position in each of the Parliaments in December, 1956.

Leader of the Opposition, Commonwealth and State Parliaments—

Commonwealth—The Rt. Hon. H. V. Evatt, Q.C.

New South Wales—P. H. Morton.

Victoria—The Hon. J. Cain.

Queensland—G. F. R. Nicklin.

South Australia—M. R. O'Halloran.

Western Australia—The Hon. Sir Ross McLarty, K.B.E., M.M.

Tasmania—The Hon. W. Jackson.

5. **The Course of Legislation.**—The actual legislation by the Commonwealth Parliament up to the end of 1954 is indicated in alphabetical order in "The Acts of the Parliament of the Commonwealth of Australia passed during the year 1954, in the Third Session of the Twentieth Parliament of the Commonwealth, and portion of the First Session of the Twenty-first Parliament of the Commonwealth, with Tables, Appendix and Index."

A "Chronological Table of Acts passed from 1901 to 1954, showing how they are affected by subsequent legislation or lapse of time" is also given, and, further, "A table of Commonwealth Legislation passed from 1901 to 1954 in relation to the several provisions of the Constitution", is furnished. Reference should be made to these for complete information.

6. **Legislation during 1955.**—The following paragraphs present a selection from the legislative enactments of the Commonwealth Parliament during the year 1955. The acts included have been selected as the more important new measures and amending measures enacted during the year. The selection is somewhat arbitrary, however, because of the task of determining, in view of the limitations on space that might reasonably be allotted, the relative importance of the acts passed. Certain principles regulating the choice of acts have nevertheless been generally observed. Ordinary appropriation and loan acts are excluded, as are also acts relating to less important changes in existing forms of taxation, in superannuation and pension schemes, and in workers' compensation. Acts providing for minor amendments to existing statutes and continuance acts are similarly excluded.

The total enactments of the Commonwealth Parliament for a number of years at fairly even intervals since 1901 show a general increase. About 17 acts were passed in 1901, 36 in 1914, 38 in 1927, 87 in 1939 and 71 in 1955.

In Official Year Book No. 40 (*see pp. 66–70*), and previous Year Books, similar information was published for the principal legislative enactments of State Parliaments.

Commonwealth Legislation Passed in 1955.—Australian Capital Territory and Jervis Bay (Lands Acquisition) Act 1955 (No. 70 of 1955). Amends the provisions of the Seat of Government Act 1908, the Seat of Government Acceptance Act 1909–1938, the Seat of

Government (Administration) Act 1910-1947, the Seat of Government (Administration) Act 1930-1935, and the Jervis Bay Territory Acceptance Act 1915, relating to the acquisition of land and dealings with land so acquired.

Cocos (Keeling) Islands Act 1955 (No. 34 of 1955). Provides for the acceptance of the Cocos or Keeling Islands as a territory under the authority of the Commonwealth and for the government of that territory.

Commonwealth Aid Roads Act 1955 (No. 43 of 1955). Amends the Commonwealth Aid Roads Act 1954 by increasing the amount payable in respect of works on rural roads and for the promotion of road safety practices.

Commonwealth and State Housing Agreement Act 1955 (No. 12 of 1955). Amends the Commonwealth and State Housing Agreement Act 1945 and approves the Agreement dated 16th April, 1955, amending the Commonwealth and State Housing Agreement.

Conciliation and Arbitration Act 1955 (No. 54 of 1955). Amends the provisions of the Conciliation and Arbitration Act 1904-1952 which authorize a single Judge of the Court to exercise jurisdiction in relation to certain matters and which provide for references to the Full Court of questions arising out of those matters.

Consular Fees Act 1955 (No. 5 of 1955). Provides for the imposition of fees for consular acts performed by Australian Diplomatic and Consular Officers and certain other officers of the Commonwealth.

Courts-Martial Appeal Act 1955 (No. 16 of 1955). Provides for the constitution of a Courts-Martial Appeal Tribunal to hear and determine appeals by persons convicted by courts-martial; regulates the power and functions of the Tribunal; and provides for the reference to the High Court of questions of law involved in decisions of the Tribunal.

Income Tax and Social Services Contribution Assessment Act 1955 (No. 62 of 1955). Provides for an extension of time of the special depreciation allowance to primary producers, for deductions and exemptions for residents of certain external territories, for exemptions for companies engaged in uranium ore mining operations, and makes provision in relation to the taxable income of friendly society dispensaries.

International Finance Corporation Act 1955 (No. 66 of 1955). Approves the acceptance by Australia of membership of the International Finance Corporation established under Articles of Agreement set out in the Schedule to the Act.

Lands Acquisition Act 1955 (No. 69 of 1955). Repeals and replaces the Lands Acquisition Act 1906-1936, and provides for the acquisition of land required for public purposes, the compensation payable for land so acquired and for dealings with land so acquired.

Loan (Canadian Dollars) Act 1955 (No. 65 of 1955). Approves the borrowing of 15,000,000 dollars in Canadian currency in accordance with a loan underwriting agreement between the Commonwealth and Wood, Gundy and Company Limited of Toronto, Canada, and for the repayment of the loan out of the Canadian Loan Trust Account established by the Act.

Loan (Emergency Wheat Storage) Act 1955 (No. 37 of 1955). Authorizes the Treasurer to raise £3,500,000 to be advanced to the Australian Wheat Board to enable the Board to meet its liabilities in relation to emergency wheat stores erected by it between May, 1954 and June, 1956.

Loan (International Bank for Reconstruction and Development) Act 1955 (No. 8 of 1955). Approves the borrowing by the Treasurer on behalf of the Commonwealth in accordance with the Loan Agreement dated 18th March, 1955, between the Commonwealth and the International Bank for Reconstruction and Development, of moneys not exceeding \$4,500,000 dollars in the currency of the United States of America to finance development programmes described in Schedule 2 of the Loan Agreement.

Loan (Swiss Francs) Act 1955 (No. 9 of 1955). Approves the borrowing by the Treasurer on behalf of the Commonwealth of moneys not exceeding 60,000,000 francs in Swiss currency in accordance with the agreement made between the Commonwealth and certain banks in Switzerland, a copy of which is set out in the Schedule to the Act.

Marriage (Overseas) Act 1955 (No. 31 of 1955). Provides for the appointment of marriage officers by or before whom marriages between parties of whom at least one is an Australian citizen may be solemnized in foreign countries, the solemnization by Service chaplains of marriages between parties of whom one is a member of the Australian forces in overseas countries, the validation of marriages performed abroad by Service chaplains during the recent World War and for the registration of marriages solemnized under the Act.

Matrimonial Causes Act 1955 (No. 29 of 1955). Amends the Matrimonial Causes Act 1945 to enable a woman to institute proceedings in a matrimonial cause in the Supreme Court of the State or Territory in which she has resided for three years prior to the institution of the suit.

Meat Agreement (Deficiency Payments) Act 1955 (No. 32 of 1955). Provides for the payment by the Australian Meat Board to exporters to the United Kingdom of specified classes of meat of deficiency payments at rates to be fixed by the Minister.

Meat Export (Additional Charge) Act 1955 (No. 33 of 1955). Imposes a charge in addition to the charge imposed under the Meat Export Charge Act 1935–1954 on meat exported to the United Kingdom to make good amounts by which deficiency payments by the Australian Meat Board exceed payments by the United Kingdom to the Commonwealth under the Meat Agreement made between the Governments of those countries on 11th October, 1951.

Meteorology Act 1955 (No. 6 of 1955). Repeals and replaces the Meteorology Act 1906. It establishes a Commonwealth Bureau of Meteorology and specifies the functions of the Bureau. The functions include the promotion of meteorological science, the taking and recording of meteorological observations and the supply of meteorological information.

National Health Act 1955 (No. 68 of 1955). Amends the National Health Act 1953 on matters relating to claims, registered organizations, pensioner benefits and offences by medical practitioners and chemists. It re-enacts, with variations, the Schedule specifying the rates of benefits payable and sets up Medical and Hospital Benefits Committees of Enquiry.

Nationality and Citizenship Act 1955 (No. 1 of 1955). Amends the provisions of the Nationality and Citizenship Act 1948–1953 relating to the application by an alien or a protected person for a certificate of naturalization and provides for minors over sixteen years to receive a separate certificate of citizenship.

Northern Territory (Administration) Act 1955 (No. 71 of 1955). Amends the provisions of the Northern Territory (Administration) Act 1910–1953 relating to the acquisition of land and dealings with land so acquired.

Re-establishment and Employment Act 1955 (No. 56 of 1955). Amends the Re-establishment and Employment Act 1945–1953 by extending the preference provisions for a further 3 years to 2nd September, 1958, by authorizing an increased rate of allowance for wives of unemployed ex-servicemen and by making provision as to the period within which ex-servicemen who served in Korea or Malaya should apply for business re-establishment allowances.

States Grants (Mental Institutions) Act 1955 (No. 67 of 1955). Grants to the States the sum of £10,000,000 as financial assistance in relation to mental hospitals.

States Grants (Universities) Act 1955 (No. 28 of 1955). Repeals the States Grants (Universities) Act 1953 and provides for the grant of financial assistance to the States in connexion with Universities during 1955.

Tobacco Charge Act (No. 1) 1955 (No. 59 of 1955). Imposes a charge on tobacco leaf grown in Australia and sold after 1st January, 1956 to a manufacturer.

Tobacco Charge Act (No. 2) 1955 (No. 60 of 1955). Imposes a charge on Australian-grown tobacco leaf purchased after 1st January, 1956 by a manufacturer, not being a growers' co-operative association which purchased from its shareholders 90 per cent. of the total leaf purchased by it.

Tobacco Charge Act (No. 3) 1955 (No. 61 of 1955). Imposes a charge on tobacco leaf grown in Australia by a manufacturer and appropriated by him after 1st January, 1956 for manufacturing purposes.

Tobacco Charges Assessment Act 1955 (No. 58 of 1955). Provides for the assessment and collection by the Commissioner of Taxation of the charges imposed on tobacco leaf under the Tobacco Charge Act (No. 1) 1955, the Tobacco Charge Act (No. 2) 1955 and the Tobacco Charge Act (No. 3) 1955.

Tobacco Industry Act 1955 (No. 57 of 1955). Establishes a Tobacco Industry Trust Account into which is to be paid amounts reserved by the Commissioner of Taxation under the Tobacco Charge Act (No. 1) 1955, the Tobacco Charge Act (No. 2) 1955, and the Tobacco Charge Act (No. 3) 1955 and other specified moneys. The money in the Account is to be used for research, training and publicity purposes in connexion with the promotion of the tobacco industry.

Trade Marks Act 1955 (No. 20 of 1955). Repeals the Trade Marks Act 1905–1948 and enacts new legislation relating to the registration of trade marks.

Wine Research Act 1955 (No. 11 of 1955). Repeals the Wine Export Bounty Act 1947, and provides for the payment into the Wine Research Trust Fund of moneys held in the Wine Industry Assistance Account established under the Repealed Act, and for the expenditure of the moneys in the Fund.

Wool Realization (Distribution of Profits) Act 1955 (No. 14 of 1955). Amends the Wool Realization (Distribution of Profits) Act 1948–1952 and provides for the disposal of moneys in the Wool Disposals Profit Fund after the final distribution of profits is made; the distribution of accrued interest; and the deduction by the Commission of money for special expenses.

§ 4. Commonwealth Government Departments.

Official Year Book No. 37 contains, on pp. 76–86, a list of the Commonwealth Government Departments as at 31st March, 1947, showing details of the matters dealt with by each Department, and the Acts administered by the Minister of each Department, and Year Book No. 39 contains, on pp. 100–1, a description of major changes in Departmental structure from 1947 to 1951. Apart from the structural changes and transfers of functions described therein, there are several Departments which, in the interval between 1947 and 1956, have developed to cope with changing circumstances affecting the particular Department. The Prime Minister's Department, the Department of Immigration, and the Department of Social Services are among those whose organizations were thus altered.

In January, 1956, a major re-organization of two Departments—the Department of Commerce and Agriculture and the Department of Trade and Customs—took place. A new Department of Trade was created, embracing not only the trade aspects of the former Department of Commerce and Agriculture, but also absorbing the administration of the Tariff Board and the Central Import Licensing Committee from the Department of Trade and Customs. The normal administration of import licensing, subject to the rules laid down in the new Department, remained with Customs, which now became the Department of Customs and Excise. To avoid overloading the Department of Trade, a new Department of Primary Industry was created, which, except for the Department of Trade's control of statutory marketing boards, assumed responsibility for Australia's primary industries. Other consequential changes included the transfer of the Division of Industrial Development from the Department of National Development to the Department of Trade; the transfer of the War Service Homes Division from the Department of Social Services to that of National Development; and the transfer of the War Service Land Settlement Division from the Department of the Interior to the new Department of Primary Industry. Later, in October, 1956, the administration of uranium, atomic energy, and the development of bauxite and certain other minerals was transferred from the Department of Supply to that of National Development.

§ 5. Cost of Parliamentary Government.

The tables in this section are intended to represent the expenditure incurred in the operation of the Parliamentary system in Australia, comprising the Governor-General and Governors, the Ministries, the Upper and Lower Houses of Parliament, and electoral activities; they do not attempt to cover the expenditure on Commonwealth and State administration generally.

Comparison between individual items should be made with caution because of differences in accounting and presentation.

The following statement shows this expenditure for the Commonwealth and for each State, as well as the cost per head of population, for the year ended 30th June, 1955. In order to avoid incorrect conclusions as to the cost of the Governor-General's or Governor's establishment, it may be pointed out that a very large part of the expenditure (with the exception of the item "Governor's salary") under the head of Governor-General or Governor represents official services entirely outside the Governor's personal interest, and carried out at the request of the Government.

COST OF PARLIAMENTARY GOVERNMENT, 1954-55.

(£)

Particulars.	C'wth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
1. Governor-General or Governor(a)								
Governor's salary	10,000	5,000	6,000	5,104	13,103	4,826	3,000	47,033
Other salaries	8,948	23,075	6,821	9,327	5,179	3,792	17,883	75,025
Other expenses, including main- tenance of house and grounds	98,008	12,091	34,499	14,741	8,422	24,055	7,603	199,419
Total	116,956	40,166	47,320	29,172	26,704	32,673	28,486	321,477
2. Ministry—								
Salaries of Ministers	63,496	52,270	26,786	35,052	18,373	12,750	15,478	224,205
Travelling expenses	12,497	(b)	(c) 472	(b)	(b)	1,766	3,276	18,011
Other	271	2,691	(b)	(b)	(b)	6,083	14,933	23,978
Total	76,264	54,961	27,258	35,052	18,373	20,599	33,687	266,194
3. Parliament—								
A. Upper House :								
President and Chairman of Committees	2,900	3,584	2,228	..	2,158	3,730	1,363	15,963
Allowance to members	139,550	27,994	63,534	..	24,858	45,345	24,734	326,015
Railway passes(e)	9,750	15,292	(f)	..	1,585	6,807	1,358	34,792
Other travelling expenses	g 11,427	..	..	..	..	(f)	..	11,427
Postage for members	3,990	(f)	(h) 467	..	215	918	..	5,590
B. Lower House :								
Speaker and Chairman of Committees	2,900	5,175	2,054	4,855	3,645	3,930	700	23,259
Allowance to members	281,697	146,727	125,998	118,955	49,850	76,720	32,935	832,882
Railway passes (e)	21,630	28,904	(i) 9,000	11,813	3,091	20,200	2,041	96,679
Other travelling expenses	g 25,268	1,600	..	13,505	..	(i) 1,677	..	42,050
Postage for members	7,900	(i) 9,030	h 1,574	8,258	697	1,476	..	28,935
C. Both Houses :								
Government contribution to Members' Superannuation Fund	10,447	4,950	8,191	7,358	7,661	..	..	38,607
Printing— <i>Hansard</i>	45,289	13,548	13,782	12,103	9,723	15,045	..	109,490
Other	41,489	26,811	23,226	6,103	20,233	4,267	10,925	133,054
Reporting Staff— Salaries	38,694	20,801	17,210	7,092	19,426	17,863	..	121,086
Contingencies	2,023	425	321	..	1,126	474	..	4,369
Library— Salaries	33,536	11,891	6,923	4,657	3,138	100	..	60,245
Contingencies	16,245	3,125	2,000	2,527	1,103	400	..	25,400
Salaries of other officers	270,031	106,174	55,100	18,567	25,030	30,464	21,427	526,793
Other	j 159,140	12,116	8,941	4,790	9,640	698	938	196,263
D. Miscellaneous :								
Fuel, light, heat, power, and water	3,436	4,197	4,960	2,521	5,045	236	..	23,337
Posts, telegraphs, telephones..	18,838	9,135	778	1,607	2,658	922	..	109,328
Furniture, stores and stationery	17,037	5,857	3,869	2,043	23,528	324	..	6,192
Other	k 114,228	27,122	7,494	7,448	6,315	l 12,604	..	181,403
Total	127,745	484,458	357,650	234,202	220,725	244,200	104,950	2,923,630
4. Electoral—								
Salaries	345,731	7,297	4,276	13,153	11,541	19,269	2,879	404,146
Cost of elections, contingencies, etc.	96,558	108,686	97,255	31,881	3,947	3,564	16,688	358,579
Total	442,289	115,983	101,531	45,034	15,488	22,833	19,567	762,725
5. Royal Commissions, Select Com- mittees, etc.	94,059	15,071	2,180	4,998	61	267	3,009	119,645
Grand Total	200,7013	710,639	535,939	348,458	281,351	320,572	189,699	4,393,671
<i>Cost per head of population</i>	4s. 5d.	4s. 1d.	4s. 4d.	5s. 3d.	7s. 0d.	9s. 11d.	12s. 1d.	9s. 8d.

(a) Includes Executive Council except in Tasmania, where duties are performed by Chief Secretary's Department. (b) Not available separately. (c) From October, 1954 only. (d) Includes Government Leader. (e) Actual amounts paid to the respective Railway Departments, except in New South Wales and Western Australia, where the amounts shown represent the value of railway passes as supplied by the Railway Departments. (f) Included with Lower House. (g) While in Canberra. See also (j). (h) Members' postage allowances were discontinued in October, 1954. (i) Both Houses. (j) Conveyance of Members of Parliament and others not elsewhere included. (k) Includes maintenance of Ministers' and Members' rooms, £66,967, and additions, new works, buildings, etc., £15,984. (l) Includes Ex-Ministers' and Ex-Members' Life Passes (Rail), £3,031.

Figures for total cost and cost per head during each of the years 1948-49 to 1954-55 in comparison with 1938-39 are shown in the next table.

COST OF PARLIAMENTARY GOVERNMENT.

Year.	C'wealth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
TOTAL.								
(£.)								
1938-39	516,455	232,709	114,497	106,942	97,383	113,793	49,270	1,231,049
1948-49	903,853	367,383	266,559	201,873	145,698	181,227	113,643	2,180,236
1949-50	1,418,532	427,955	361,387	248,174	174,240	213,611	112,615	2,956,514
1950-51	1,624,998	430,814	303,417	246,941	181,758	212,933	117,208	3,118,069
1951-52	1,853,709	508,024	407,278	298,401	215,673	294,441	156,982	3,734,508
1952-53	2,089,968	679,946	474,731	349,262	254,147	292,289	161,383	4,301,726
1953-54	2,072,757	645,505	419,261	452,527	290,110	298,426	175,525	4,354,111
1954-55	2,007,013	710,639	535,939	348,458	281,351	320,572	189,699	4,393,671

PER HEAD OF POPULATION.

(s. d.)

1938-39	1 6	1 8	1 3	2 1	3 3	4 10	4 2	3 7
1948-49	2 4	2 5	2 6	3 6	4 4	6 11	8 6	5 7
1949-50	3 6	2 9	3 4	4 3	5 0	7 10	8 2	7 4
1950-51	3 11	2 8	2 8	4 2	5 0	7 6	8 3	7 6
1951-52	4 4	3 1	3 6	4 10	5 10	10 0	10 8	8 9
1952-53	4 9	4 0	4 0	5 7	6 8	9 7	10 8	9 10
1953-54	4 8	3 9	3 6	7 0	7 5	9 6	11 4	9 9
1954-55	4 5	4 1	4 4	5 3	7 0	9 11	12 1	9 8

§ 6. Government Employees.

Information concerning the number of employees of Australian Government Authorities may be found in Chapter VI.—Labour, Wages and Prices.

CHAPTER IV.

LAND TENURE AND SETTLEMENT.

§ 1. Introduction.

For descriptions of the land tenure systems of the several States and the internal Territories *see* Official Year Book No. 4 (pp. 235-333) and subsequent issues, in particular No. 22 (pp. 133-195). Conspectuses of land legislation in force and of the systems of land tenure in the several States have appeared in issues up to and including No. 38, but only a brief summary is given below.

The land legislation in force in the several States may be classified broadly under five major types of land enactments, i.e., Crown Lands Acts, Closer Settlement Acts, Mining Acts, Returned Service Personnel Settlement Acts, and Advances to Settlers Acts, but within the groupings there is, of course, a wide variety of individual Acts. In the two internal Territories, the legislation relating to lands is embodied in various ordinances.

In each of the States, there is a Lands Department under the direction of a Minister who is charged generally with the administration of the Acts relating to the alienation, occupation and management of Crown Lands. In the Northern Territory, the Administrator, under the control of the Minister for Territories, is charged with the general administration of the Lands Ordinance and of Crown lands in the Northern Territory. In the Australian Capital Territory, the administration of the Leases Ordinances is in the hands of the Department of the Interior.

In each of the States, there is also a Mines Department which is empowered under the several Acts relating to mining to grant leases and licences of Crown lands for mining and allied purposes. In the Northern Territory, there are several ordinances relative to mining.

As with land legislation, land tenures may be classified under broad headings; these indicate the nature of the tenure and comprise:—Free Grants and Reservations, Unconditional Purchases of Freehold, Conditional Purchases of Freehold, Leases and Licences under Land Acts, Closer Settlement, Leases and Licences under Mining Acts, and Settlement of Returned Service Personnel. For details of the various particular forms of land tenure within these seven groups in each State *see* Official Year Book No. (38, pp. 114-116) and earlier issues. Descriptions of the systems operating in the two internal Territories may be found on pp. 329-30 and 338 of Official Year Book No. 39.

The following sections contain figures showing the extent of the different tenures in the several States and Territories, together with some general descriptive matter.

§ 2. Free Grants and Reservations.

1. *New South Wales.*—(i) *Free Grants.* Crown lands may, by notification in the *Gazette*, be dedicated for public purposes and be granted therefor in fee simple. Such lands may be placed under the care and management of trustees, not less than three nor more than seven in number, appointed by the Minister.

(ii) *Reservations.* Temporary reservations of Crown lands from sale or lease may be made by the Minister.

(iii) *Areas Granted and Reserved.* During 1954-55, 15,585 acres were permanently reserved or dedicated for miscellaneous recreation reserves and similar purposes. The areas reserved at 30th June, 1955 were as follows:—For travelling stock, 5,332,482 acres; pending classification and survey, 4,512,681 acres; forest reserves, 2,261,161 acres; water and camping reserves, 871,012 acres; mining reserves, 1,115,856 acres; for recreation and parks, 456,556 acres; other reserves, 6,315,599 acres; total, 20,865,347 acres.

2. *Victoria.*—(i) *Free Grants.* The Governor may grant, convey or otherwise dispose of Crown lands for public purposes.

(ii) *Reservations.* The Governor may temporarily or permanently reserve from sale, lease or licence any Crown lands required for public purposes.

(iii) *Areas Granted and Reserved.* During 1955, 174 acres were granted without purchase. The areas both temporarily and permanently reserved at the end of 1955 were as follows :—For roads, 1,664,703 acres ; water reserves, 317,910 acres ; agricultural colleges, etc., 8,434 acres ; forest and timber reserves, 5,676,604 acres ; reserves in the mallee, 410,000 acres ; other reserves, 552,978 acres ; total, 8,630,629 acres.

(iv) *Revoking of Agricultural Reservations.* Under the Agricultural Colleges Act 1944, the land on which the agricultural colleges and experimental farms at Longerenong (2,386 acres) and Dookie (6,048 acres) are established is permanently reserved as sites for the purposes of State Agricultural Colleges and the remainder of the lands previously reserved has become unalienated for treatment as such under the Lands Acts.

3. *Queensland.*—(i) *Free Grants.* The Governor may grant in trust any Crown land which is or may be required for public purposes. Under the Irrigation Acts, land to be used for the purpose of any undertaking under the Acts may be vested in fee simple in the Commissioner of Irrigation and Water Supply.

(ii) *Reservations.* The Governor may reserve from sale or lease, either temporarily or permanently, any Crown land which is or may be required for public purposes. Reserved lands may be placed under the control of trustees who are empowered to lease them for not more than 21 years with the approval of the Minister.

Under the State Forests and National Parks Acts, the Governor may permanently reserve any Crown lands and declare them to be a State Forest or a National Park.

(iii) *Areas Granted and Reserved.* During 1955, no areas were granted in fee simple without payment, 223,304 acres were set apart as reserves and reserves cancelled totalled 167,994 acres. The areas reserved, including roads, at the end of 1955 were as follows :—Timber reserves, 3,182,193 acres ; for State forests and national parks, 5,556,383 acres ; aboriginal reserves, 7,847,510 acres ; for streets, surveyed roads and stock routes, 3,674,429 acres ; general reserves, 5,678,570 acres ; total, 25,939,085 acres.

4. *South Australia.*—(i) *Free Grants.* The Governor may dedicate Crown lands for any public purpose and grant the fee simple of such lands, with the exception of foreshores and lands for quays, wharves or landing-places, which are inalienable in fee simple from the Crown.

(ii) *Reservations.* The Governor may reserve Crown lands for the use and benefit of aboriginals, military defence, forest reserves, railway stations, park lands or any other purpose that he may think fit.

(iii) *Areas Granted and Reserved.* During 1954–55, free grants were issued for an area of 6,583 acres and reserves comprising 526,227 acres were proclaimed. At 30th June, 1955, the total area of surveyed roads, railways and other reserves was 21,862,525 acres, including 18,787,900 acres set apart as aboriginal reserves.

5. *Western Australia.*—(i) *Free Grants.* The Governor may dispose of, in such manner as for the public interest may seem best, any lands vested in the Crown for public purposes, and may grant the fee simple of any reserve to secure the use thereof for the purpose for which such reserve was made.

(ii) *Reservations.* The Governor may reserve any lands vested in the Crown for public purposes. Areas not immediately required may be leased by the Governor for periods up to 10 years. Reserves may be placed under the control of a local authority or trustees, with power to lease them for a period not exceeding 21 years, or may be leased for 99 years. Temporary reserves may also be proclaimed.

(iii) *Areas Granted or Reserved.* During the year ended 30th June, 1955, approximately 2,904,496 acres were reserved for various purposes. At 30th June, 1955 the total area reserved was 55,224,230 acres, comprising State forests, 3,834,207 acres, timber reserves, 1,831,870 acres and other reserves 49,558,153 acres.

6. *Tasmania.*—(i) *Free Grants.* No mention is made in the Crown Lands Act respecting free grants of land, and it is expressly stated that no lands may be disposed of as sites for religious purposes except by way of sale under the Act. Under the Returned Soldiers' Settlement Act 1916, returned soldiers who applied prior to 31st March, 1922 were eligible to receive free grants of Crown land not exceeding £100 each in value, but these grants were conditional on the land being adequately improved.

(ii) *Reservations.* The Governor in Council may except from sale or lease, and reserve to Her Majesty any Crown land for public purposes, and vest for such term as he thinks fit any land so reserved in any person or corporate body. Any breach or non-fulfilment of the conditions upon which such land is reserved renders it liable to forfeiture. A school allotment, not exceeding 5 acres in area, may also be reserved.

(iii) *Areas Granted or Reserved.* The total area reserved at 30th June, 1955 was 4,129,511 acres, excluding 21,484 acres of land occupied by Commonwealth and State Departments.

7. **Northern Territory.**—(i) *Reservations.* The Governor-General may resume for public purposes any Crown lands not subject to any right of, or contract for, purchase, and may reserve, for the purpose for which they are resumed, the whole or any portion of the lands so resumed.

(ii) *Areas Reserved.* The total area of reserves at 30th June, 1955 was 47,543,605 acres.

8. **Summary.**—The following table shows the total areas reserved in each State, and the grand totals, for the years 1951 to 1955 :—

AREAS RESERVED.
(’000 Acres.)

	N.S.W. (a)	Victoria. (b)	Q’ld. (b)	S. Aust. (a)	W. Aust. (a)	Tas. (a)	Nor. Terr. (a)	Total.
1951 ..	19,654	8,429	25,243	21,249	51,998	4,043	45,648	176,264
1952 ..	20,158	8,429	25,538	21,252	52,014	4,068	46,159	177,618
1953 ..	20,319	8,429	25,797	21,265	52,238	4,069	47,001	179,118
1954 ..	20,344	8,451	25,873	21,336	52,613	4,070	47,032	179,719
1955 ..	20,865	8,631	25,939	21,863	55,224	4,129	47,544	184,195

(a) At 30th June.

(b) At 31st December.

§ 3. Unconditional Purchases of Freehold.

1. **New South Wales.**—(i) *Auction Purchases.* Crown lands, not exceeding in the aggregate 200,000 acres in any one year, may be sold by public auction in areas not exceeding half-an-acre for town lands, 20 acres for suburban lands, and 640 acres for country lands, at the minimum upset price of £8, £2 10s., and 15s. per acre respectively. At least 10 per cent. of the purchase-money must be paid at the time of sale, and the balance within three months, or the Minister may allow the payment of such balance to be deferred for a period not exceeding ten years, 4 per cent. interest being charged. Town blocks in irrigation areas may also be sold by auction.

(ii) *After-Auction Purchases.* In certain cases, land offered at auction and not sold may be purchased at the upset price. A deposit in accordance with the terms and conditions under which the land was previously offered must be lodged, and, if the application be approved by the Minister, the balance of purchase money is payable as required by the specified terms and conditions.

(iii) *Special Purchases.* Under certain circumstances, land may be sold in fee simple, the purchaser paying the cost of survey and of reports thereon, in addition to the purchase-money as determined by the local Land Board.

(iv) *Improvement Purchases.* The owner of improvements in land in authorized occupation by residence under any Mining Act or the Western Lands Act of land within a gold-field or mineral field may purchase such land without competition at a price determined by the local Land Board, but at not less than £8 per acre for town lands or £2 10s. per acre for other lands. The area must not exceed $\frac{1}{4}$ acre within a town or village, or 2 acres elsewhere, and no person may purchase more than one such area within 3 miles of a similar prior purchase by him.

(v) *Road Purchases.* Land from roads that are closed may, with certain exceptions, be sold to the owners of adjoining lands at a value determined by the local Land Board.

(vi) *Areas Sold.* During the year ended 30th June, 1955, the total area sold was 1,321 acres of which 14 were sold by auction and 18 acres as after auction purchases, while 39 acres were sold as improvement purchases, 1,200 acres as road purchases and 50 acres as special purchases. The amount realized for the sale of the whole area was £124,512.

2. *Victoria.*—(i) *General.* Lands, not exceeding 100,000 acres in any one year, specially classed for sale by auction, may be sold by auction in fee simple at an upset price of not less than £1 per acre. The purchaser must pay the survey fee at the time of the sale, together with a deposit of 12½ per cent. of the whole price; the residue is payable in equal half-yearly instalments with interest. Any unsold land in a city, town or borough area, areas specially classed for sale, isolated pieces of land not exceeding 150 acres in area, and sites for churches or charitable purposes, if not more than 3 acres in extent, may be sold by auction on the same terms. Swamp or reclaimed lands may also be sold by auction, subject to the condition that the owner keeps open all drains, etc., thereon.

(ii) *Areas Sold at Auction and by Special Sales.* During 1955, a total of 838 acres was disposed of under this tenure, 529 acres being country lands and 309 acres town and suburban lands.

3. *Queensland.*—(i) *General.* From 1917 to 1929, the law precluded land being made available for any class of selection which gave the selector the right to acquire the freehold title. Amending legislation giving power to make land available under freehold tenures was passed in 1929, but this provision was repealed by the Act of 1932.

(ii) *Areas Sold, etc.* One unconditional selection was made freehold during 1955.

4. *South Australia.*—(i) *Sales by Auction.* The following lands may be sold by auction for cash :—(a) special blocks; (b) Crown lands which have been offered for lease and not taken up within two years; (c) town lands; and (d) suburban lands which the Governor excepts from the operations of the Land Board. A purchaser must pay 20 per cent. of the purchase money in cash, and the balance within one month or within such extended time as the Commissioner of Crown Lands may allow. Town lands may be sold subject to the condition that they cannot be transferred or mortgaged within six years without the consent of the Commissioner. If the Commissioner of Crown Lands so determines, town lands may also be offered at auction on terms that the buyer may at his option purchase the lands for cash or on agreement for sale and purchase.

(ii) *Areas Sold, etc.* During the year ended 30th June, 1955, the area of town lands and special blocks sold by auction was 21 acres. In addition, 176,123 acres were sold at fixed prices, and purchases on credit of 55,405 acres were completed, making a total of 231,549 acres.

5. *Western Australia.*—(i) *Sales by Auction.* Town, suburban and village lands may be sold by auction after being surveyed into lots and notified in the *Gazette*. Ten per cent. of the purchase-money must be paid in cash, together with the value of any improvements, and the balance in four equal quarterly instalments. Suburban land must be fenced within two years, and no Crown grant may be issued until the land is fenced.

(ii) *Areas Sold.* During the year ended 30th June, 1955, the area of town and suburban allotments sold by auction was 830 acres in 602 allotments.

6. *Tasmania.*—(i) *Sales by Auction.* Town lands may be sold by auction.

(ii) *After-auction Sales.* Town lands, not within 5 miles of any city, which, after having been offered at auction, have not been sold, may be sold at the upset price by private contract.

(iii) *Sales of Land in Mining Towns.* Any person being the holder of a residence licence or business licence who shall be in lawful occupation of any residence area or business area, and who shall be the owner of buildings and permanent improvements upon such land of a value equal to or greater than the upset price of such area, shall be entitled to purchase such area at the upset price at any time prior to the day on which such area is to be offered for sale as advertised. The upset price for such area shall not be less than £10, excluding the value of improvements, cost of survey, and of grant deed. The area which may be so purchased may, with the consent of the Commissioner, exceed one-quarter of an acre, but shall not in any case exceed one-half of an acre.

§ 4. Conditional Purchases of Freehold.

1. *General.*—The various methods of obtaining Crown lands by conditional purchase in the several States are given in some detail in preceding issues of the Official Year Book (see No. 22, pp. 141-9).

2. *New South Wales.*—At 30th June, 1955, the total number of incomplete conditional purchases in existence was 36,467 covering an area of 11,833,954 acres. During 1954-55, applications received for conditional purchases numbered 18, of which 11, with an area of 2,888 acres, were confirmed; during the year, deeds were issued for 346,062 acres, bringing the total acreage for which deeds had been issued to 34,564,241 at the end of the year. These figures exclude conversions from other tenures—589 comprising 191,235 acres.

3. **Victoria.**—The total area purchased conditionally in 1955 was 8,556 acres, all with residence. The number of selectors was 58. There were no selections in the Mallee in 1955.

4. **Queensland.**—The following selections were made freehold during 1955 :—Agricultural farms, 69,932 acres, prickly pear selections, 181,156 acres, prickly pear development selections, 3,981 acres, and unconditional selections, 708 acres.

5. **South Australia.**—During 1954–55, 45,602 acres were allotted under agreements to purchase, comprising Eyre Peninsula railway lands, 16,009 acres, closer settlement lands, 11,033 acres, surplus lands, 1,861 acres, and other Crown lands, 16,699 acres.

6. **Western Australia.**—During the year ended 30th June, 1955, the number of holdings conditionally alienated was 684, the total area involved being 823,016 acres, comprising conditional purchases by deferred payments with residence, 822,616 acres and free homestead farms, 400 acres. Under the heading “deferred payments with residence”, are included conditional purchases of grazing lands.

In addition, Crown grants were issued during 1954–55 for the following selections, the prescribed conditions having been complied with :—Free homestead farms, 5,490 acres and conditional purchases, 307,200 acres.

7. **Tasmania.**—During 1954–55, Crown grants were issued for 25,914 acres. The total area sold conditionally was 2,213 acres, comprising selections for purchase, 1,872 acres, and town and suburban allotments, 341 acres. The numbers of applications confirmed were 93 for country selections and 101 for town and suburban allotments.

§ 5. Leases and Licences under Land Acts.

1. **General.**—Information regarding the methods of obtaining leases and licences of Crown lands in the several States and Territories was given in earlier issues of the Official Year Book (*see* No. 22, pp. 149–63).

2. **New South Wales.**—The following table shows the areas held under various descriptions of leases and licences under the control of the Department of Lands, the Water Conservation and Irrigation Commission and the Western Lands Commission at 30th June, 1955.

AREAS OCCUPIED UNDER LEASE OR LICENCE AT 30th JUNE, 1955, NEW SOUTH WALES.(a)
(Acres.)

Particulars.	Area.	Particulars.	Area.
<i>Crown Lands or Closer Settlement Acts</i>		<i>Crown Lands or Closer Settlement Acts—continued.</i>	
Occupation licences	585,065	Suburban holdings	51,915
Conditional leases	10,989,056	Group purchase leases	222,621
Conditional purchase leases	132,363	Irrigation areas	183,445
Settlement leases	2,596,739	Other leases(b)	185,807
Improvement leases	29,897		
Annual leases	447,618	<i>Western Lands Act.</i>	
Scrub and Snow leases	642,651	Conditional leases	93,823
Special leases	1,364,696	Perpetual leases	66,017,125
Permissive occupancies	1,916,292	Other long-term leases	10,489,388
Prickly pear leases	96,885	Permissive occupancies	371,420
Crown leases	7,065,556	Leases being issued—occupation licences	112,336
Homestead farms	4,970,523	Preferential occupation licences	543,481
Homestead selections and grants	1,687,189		
Closer settlement leases	2,469,963		
Settlement purchase leases	1,045,639		
		Total	114,311,493

(a) Excludes mining leases and permits; forest leases and occupation permits. (b) Includes leases outside irrigation areas, controlled by the Water Conservation and Irrigation Commission—166,706 acres.

3. **Victoria.**—The area of Crown lands occupied under leases and licences in the year 1955 was as follows:—Grazing licences—other than Mallee, 4,483,853 acres; Mallee, 1,917,945 acres; auriferous lands licences, 15,866 acres; perpetual leases—other than Mallee, 17,819 acres; Mallee, 41,852 acres; swamp lands leases, 3,978 acres; agricultural college lands, 20,369 acres; total, 6,501,682 acres.

4. **Queensland.**—The area occupied under lease or licence, excluding mining leases, at the end of 1955 was as follows:—Pastoral leases, 252,205,480 acres; occupation licences, 11,109,160 acres; grazing selections and settlement farm leases, 89,824,655 acres; special purpose leases—Crown land, 477,792 acres; reserves, 1,585,210 acres; perpetual lease (including prickly pear) selections, 6,761,110 acres; auction perpetual leases, 280,959 acres; forest grazing leases (reserves), 1,625,400 acres; total, 363,869,766 acres.

5. **South Australia.**—The total area, including repurchased lands held under lease or licence except mining lease and licence, at 30th June, 1955 was 137,461,371 acres of which pastoral leases, 114,937,456 acres, constituted the major proportion.

6. **Western Australia.**—At 30th June, 1955, the total area held under lease or licence issued by the Lands Department amounted to 204,781,631 acres, of which 200,789,422 acres were under pastoral lease.

7. **Tasmania.**—Crown lands leased at 30th June, 1955, for other than mining purposes amounted to 2,486,666 acres of which 2,054,217 acres were leased for pastoral purposes.

8. **Northern Territory.**—At 30th June, 1955, the total area under lease, etc., was 181,165,325 acres of which pastoral leases accounted for 140,412,979 acres and other leases, licences and mission stations, 40,752,346 acres.

9. **Australian Capital Territory.**—Under the terms of the City Area Leases Ordinance 1936–1951, each block is leased for a period of 99 years at a rental of five per cent. per annum of the unimproved capital value as assessed by the Commonwealth. The number of leases granted under this Ordinance to 30th June, 1955 (excluding leases surrendered and determined) was 2,619 representing an unimproved value of £914,335. Auction sales of city leaseholds are described in Official Year Book No. 22, p. 599. During the year ended 30th June, 1955, 384 leases were granted for residential purposes and 54 for business purposes.

Thirteen leases under the Church Lands Leases Ordinance 1924–1932, which require the lessees to submit a definite building programme within a specified period, and one lease under the Church of England Lands Ordinance 1926, have been granted for church purposes. A further 27 leases have been granted for either church or scholastic purposes under various other Ordinances.

The total area held under lease and licence for grazing, agricultural, dairying and other purposes (including the Jervis Bay area) amounted to 320,906 acres in 1954–55.

10. **Summary.**—The following table shows particulars of the land held in each State under lease or licence for purposes other than mining and forestry, the total leased or licensed land in the Territories, and the grand totals, for the years 1951 to 1955.

AREAS OCCUPIED UNDER LEASE OR LICENCE OTHER THAN MINING AND FORESTRY.

(’000 Acres.)

Year.	N.S.W. (a)	Vic. (b)	Q’land. (b)	S. Aust. (a)	W. Aust. (a)	Tas. (a)	N.T. (a) (c)	A.C.T. (a) (c) (d)	Total.
1951 ..	113,918	8,709	359,144	137,514	199,303	2,639	171,841	331	993,399
1952 ..	114,051	7,218	360,684	138,177	200,839	2,704	178,135	321	1,002,129
1953 ..	114,913	7,501	361,594	139,509	202,761	2,712	180,015	323	1,009,328
1954 ..	114,452	6,367	361,657	137,867	202,754	2,576	180,020	323	1,006,016
1955 ..	114,311	6,502	363,870	137,461	204,782	2,487	181,165	321	1,010,899

(a) At 30th June.

(b) At 31st December.

(c) Leases and licences for all purposes.

(d) Includes Jervis Bay area.

§ 6. Leases and Licences under Mining Acts.

1. **General.**—Information regarding the various forms of leases and licences under Mining Acts in the several States and the Northern Territory is given in preceding issues of the Official Year Book (*see* No. 22, pp. 170–7). The following paragraphs contain particulars of operations during the year 1954–55 or 1955 and of areas occupied at the end of the year, under the various forms of lease, licence, etc., issued for mining purposes.

2. **New South Wales.**—At 30th June, 1955, total areas occupied under Mining Acts were as follows:—Gold-mining, 2,620 acres; mining for other minerals, 194,642 acres; authorities to prospect, 21,930,827 acres; other purposes, 7,689 acres; total, 22,135,778 acres.

3. **Victoria.**—During 1955, there were 116 leases and licences granted under Mining Acts, including 19 for gold-mining. Areas occupied at the end of 1955 were as follows:—Gold-mining, 16,956 acres; petroleum prospecting, 3,850,880 acres; coal, 13,101 acres; uranium and radio active minerals, 19,508 acres; other purposes, 5,979 acres; total, 3,906,424 acres.

4. **Queensland.**—During 1955, there were 3,285 miners' rights and three business licences issued. Areas taken up during 1955 totalled 162,655 acres, of which petroleum prospecting comprised 128,000 acres and mining for minerals other than gold, 18,397 acres. Total areas occupied at the end of 1955 were as follows:—Gold-mining, 2,688 acres; mining for other minerals, 112,066 acres; miners' homesteads, 427,056 acres; petroleum prospecting, 576,000 acres; coal prospecting, 14,186 acres; total, 1,131,996 acres. The area of land held under lease only was 541,810 acres.

5. **South Australia.**—Areas taken up under Mining Acts during 1954–55 totalled 47,460,986 acres, including claims, 2,281 acres, mineral and miscellaneous leases, 2,705 acres, and oil licences, 47,456,000 acres. Total areas occupied at 30th June, 1955 were as follows:—Gold-mining, 590 acres; other mineral and miscellaneous leases, 762,595 acres; claims, 10,603 acres; oil licences, 136,480,000 acres; other purposes, 28 acres; total, 137,253,816 acres.

6. **Western Australia.**—Areas taken up during 1955 under Mining Acts totalled 20,235 acres, including gold-mining, 8,961 acres, and mining for other minerals, 10,605 acres. Total areas occupied at the end of 1955 were as follows:—Gold-mining, 30,469 acres; mining for other minerals, 88,017 acres; other purposes, 41,405 acres; total, 159,891 acres.

7. **Tasmania.**—During 1955, the number of leases issued covered 1,151 acres, including coal-mining, 600 acres and tin-mining, 87 acres. Total areas occupied at the end of 1955 were as follows:—Gold-mining, 587 acres; coal-mining, 7,114 acres; mining for other minerals, 18,474 acres; other purposes, 4,233 acres; total, 30,408 acres.

8. **Northern Territory.**—At 30th June, 1955, the number and acreage of holdings under mining leases and tenements were as follows:—Gold-mining leases, 293 (4,871 acres); other minerals leases, 406 (10,442 acres); gold and tin dredging areas, 4 (843 acres); gold and other mineral prospecting areas, 36 (574 acres); business and residence areas, 189 (118 acres); other purposes, 134 (5,263 acres); total, 1,062 (22,111 acres). In addition, 25 authorities to prospect aggregating 2,900 square miles were held at 30th June, 1955.

9. **Summary.**—The following table shows the total areas occupied under Mining Acts in each State at the end of the years 1951 to 1955:—

AREAS OCCUPIED UNDER MINING ACTS.
(Acres.)

Year.	N.S.W. (a)	Victoria.	Q'land. (b)	S. Aust. (a) (b)	W. Aust. (c)	Tasmania. (b)	Total. (d)
1951..	364,991	1,096,495	1,285,740	36,669,380	137,523	32,744	39,586,873
1952..	477,873	840,989	840,344	740,094	151,376	32,150	3,082,826
1953..	2,372,244	957,797	1,040,816	44,742	148,932	31,398	4,595,929
1954..	14,078,264	2,978,321	1,757,309	156,743,650	166,378	30,059	175,753,981
1955..	22,135,778	3,906,424	1,131,996	137,253,816	159,891	30,408	164,618,313

(a) Year ended 30th June. (b) Excludes lands held under miners' rights and dredging claims.
(c) Excludes holdings under miners' rights and mineral oil licences. (d) Includes Northern Territory.

§ 7. Closer Settlement.

1. **General.**—Particulars regarding the methods of acquisition and disposal of land for closer settlement in the several States are given in issues of the Official Year Book up to No. 22 (*see* No. 22, pp. 163-9) and the results of the operations of the several schemes have appeared in subsequent issues in considerable detail. In more recent years, however, the amalgamation, in some States, of closer settlement records with those of other authorities has made it impossible to obtain up-to-date figures for those States and for Australia as a whole, although aggregations of State totals as at the latest dates available have been published as rough approximations intended to convey some idea of the extent of the schemes throughout Australia. Particulars in this issue are restricted to a summary only of the position in each State at the latest date available.

2. **New South Wales.**—From the inception of closer settlement in 1905 to 30th June, 1955, 2,479 estates totalling 6,744,047 acres had been purchased by the Crown at a cost of £30,213,100 for purposes of closer settlement of civilians and returned service personnel.

Closer settlement is now being effected entirely under perpetual leasehold tenure (closer settlement leases).

3. **Victoria.**—The Closer Settlement Commission was abolished as from 31st December, 1938, and land settlement was placed under the control of the Department of Lands and Survey. On 31st March, 1939, all Closer Settlement and Discharged Soldiers' accounts were amalgamated, the settlers' accounts adjusted and the new debt made payable over an extended period. Particulars of the operations under the provisions of the Closer Settlement Acts to 30th June, 1938, the latest date for which separate details are available, were given in earlier issues of the Official Year Book, (*see* No. 42, p. 98).

4. **Queensland.**—Separate records relating to the closer settlement of re-purchased land are no longer kept by the Land Administration Board, and the operations under this heading are now included with "Leases and Licences under Land Acts." Details of the position at 31st December, 1934, the latest date for which the information is available, were given in earlier issues of the Official Year Book, (*see* No. 42, page 98).

5. **South Australia.**—The total area re-purchased for closer settlement at 30th June, 1955 was 948,885 acres, at a cost of £2,865,200. Included in these figures are 51,872 acres purchased for £185,285, and afterwards set apart for returned service personnel, 3,214 acres reserved for forest and waterworks purposes the purchase-money being £16,185, and also 26,563 acres of swamp and other lands, which were purchased for £111,850, in connexion with reclamation of swamp-lands on the River Murray. Of the total area, 817,069 acres have been allotted to 2,768 persons.

6. **Western Australia.**—The total area acquired for closer settlement up to 30th June, 1955 was 2,858,777 acres, costing £4,344,990. Particulars of operations under the Act for the year ended 30th June, 1955 are as follows:—Area selected during the year, 41,095 acres; number of farms, etc., allotted to date, 2,410; total area occupied to date, 1,974,716 acres; area set aside for roads, reserves, etc., 20,972 acres; balance available for selection, 863,089 acres.

7. **Tasmania.**—Up to 30th June, 1955, 38 areas had been opened up for closer settlement, the total purchase-money paid by the Government being £371,486 and the total area acquired amounting to 104,294 acres, including 12,149 acres of Crown lands. The number of farms occupied at 30th June, 1955 was 100.

§ 8. Settlement of Returned Service Personnel : 1939-45 War.

1. **War Service Land Settlement Scheme.**—(i) *General.* The War Service Land Settlement Agreements Act 1945 authorized the execution by or on behalf of the Commonwealth of agreements between the Commonwealth and the States for proposals to settle discharged members of the Forces and other eligible persons on land in the States. The proposals were subsequently ratified by the States, and the agreements were signed in November, 1945.

For more detailed information about the agreements and the methods of operation and administration of the scheme, *see* Official Year Book No. 37, pp. 113-8. Issue No. 39 contains a brief general description of the scheme.

(ii) *Summary of Operations to 30th June, 1955.* The tables hereunder show the operations of the War Service Land Settlement Scheme in each State up to 30th June, 1955.

**WAR SERVICE LAND SETTLEMENT (1939-45 WAR) : SUMMARY TO
30th JUNE, 1955.**

State.	Land Submitted by States.		Land Approved by Commonwealth.				Land under Consideration.	Land Rejected or Withdrawn.
			As Suitable for Soldier Settlement.		Acquired by States.			
	Sub-missions.	Area.	Properties.	Area.	Properties.	Area.	Area.	Area.
	No.	Acres.	No.	Acres.	No.	Acres.	Acres.	Acres.
<i>New South Wales</i> —								
Subdivision ..	147	1,724,567	131	1,474,765	73	896,553	..	249,802
Irrigation Lands ..	30	264,829	(a) 29	232,104	(a) 16	173,135	..	32,725
Western Division ..	180	6,886,575	171	6,170,989	168	6,125,469	..	715,586
Promotion Scheme ..	(b) 629	1,417,880	(b) 499	1,240,936	487	1,261,623	..	176,944
Irrigation Lands ..	80	122,617	75	111,424	73	99,623	..	11,193
<i>Total, New South Wales</i> ..	<i>1,066</i>	<i>10,416,468</i>	<i>905</i>	<i>9,230,218</i>	<i>817</i>	<i>8,556,403</i>	<i>..</i>	<i>1,186,250</i>
<i>Victoria</i> —								
Irrigation Lands ..	19	177,154	19	133,610	18	105,427	..	43,544
Other ..	228	931,127	225	909,765	(a) 204	843,438	3,183	18,179
<i>Total, Victoria</i> ..	<i>247</i>	<i>1,108,281</i>	<i>244</i>	<i>1,043,375</i>	<i>222</i>	<i>948,865</i>	<i>3,183</i>	<i>61,723</i>
<i>Queensland</i> ..	182	531,259	145	455,476	(c) 134	398,524	..	75,783
South Australia ..	212	736,995	(b) 177	599,972	(a) 167	577,377	..	137,023
Western Australia ..	757	2,793,227	547	2,117,341	519	2,062,958	..	675,886
Tasmania ..	140	576,807	108	447,392	(b) 104	424,045	..	129,415
<i>Total, Australia</i> ..	<i>2,604</i>	<i>16,163,037</i>	<i>2,126</i>	<i>13,893,774</i>	<i>1,963</i>	<i>12,968,172</i>	<i>3,183</i>	<i>2,266,080</i>

State.	Land Approved by Commonwealth for Subdivision.			Single Properties Approved by Commonwealth.		Land Allotted to Settlers.	
	Properties.	Area.	Holdings.	Properties.	Area.	Area.	Holdings.
	No.	Acres.	No.	No.	Acres.	Acres.	No.
<i>New South Wales</i> —							
Subdivision ..	125	1,320,343	1,093	..	..	928,955	782
Irrigation Lands ..	(a) 25	203,270	334	1	770	162,014	295
Western Division ..	..	..	..	215	6,170,989	6,125,469	212
Promotion Scheme ..	(c) 196	943,514	671	299	285,607	1,105,029	869
Irrigation Lands ..	35	94,589	168	38	15,755	91,210	162
<i>Total, New South Wales</i> ..	<i>381</i>	<i>2,561,716</i>	<i>2,266</i>	<i>553</i>	<i>6,473,121</i>	<i>8,412,677</i>	<i>2,320</i>
<i>Victoria</i> —							
Irrigation Lands ..	14	104,112	1,115	5	2,336	84,878	836
Other ..	205	842,763	1,507	11	7,522	828,244	1,520
<i>Total, Victoria</i> ..	<i>219</i>	<i>946,875</i>	<i>2,622</i>	<i>16</i>	<i>9,858</i>	<i>913,122</i>	<i>2,356</i>
<i>Queensland</i> ..	88	399,241	604	43	15,143	218,640	470
South Australia ..	(c) 81	336,255	710	55	35,419	312,750	658
Western Australia ..	147	1,708,813	617	369	480,007	1,136,547	711
Tasmania ..	26	111,275	219	58	29,937	121,000	217
<i>Total, Australia</i> ..	<i>942</i>	<i>6,064,175</i>	<i>7,038</i>	<i>1,094</i>	<i>7,043,485</i>	<i>11,114,736</i>	<i>6,732</i>

(a) Excludes portions of four properties. (b) Excludes portions of two properties. (c) Excludes portion of one property. (d) Excludes portions of three properties.

(iii) *Expenditure.* The following table shows a dissection of the Commonwealth expenditure on War Service Land Settlement to 30th June, 1955:—

WAR SERVICE LAND SETTLEMENT (1939-45 WAR) : COMMONWEALTH EXPENDITURE TO 30th JUNE, 1955.
(£.)

Advances to States.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Total.
For acquisition of land ..	..	..	..	2,145,433	3,396,218	1,181,976	6,723,627
For development and improvement of land ..	..	..	..	8,935,161	9,857,484	4,980,435	23,773,080
Commonwealth contributions to excess cost over valuation ..	..	1,189,011	115,432	82,800	183,501	126,080	1,696,824
To provide credit facilities to settlers ..	..	..	..	2,143,898	6,594,802	1,169,709	9,908,409
For remission of settlers' rent and interest ..	245,221	91,565	33,447	82,657	190,351	53,226	696,467
For payment of living allowances to settlers ..	688,785	636,000	164,000	168,875	270,943	60,491	1,989,094
For operations and maintenance of irrigation projects ..	..	..	..	268,589	12,151	1,697	282,437
Loss on advances ..	..	99	1,132	1,727	23,612	..	26,570
Cost of administration of credit facilities ..	..	..	..	57,569	261,313	18,733	337,615
Total	934,006	1,916,675	314,011	13,886,709	20,790,375	7,592,347	45,434,123

Repayments of expenditure to 30th June, 1955, on the acquisition, development and improvement of land amounted to £3,655,503, and on the provision of credit facilities to settlers to £4,012,762, so that the total expenditure was reduced by £7,668,265 to £37,765,858. In addition, miscellaneous receipts in South Australia, Western Australia and Tasmania to 30th June, 1955, amounted to £1,490,079.

2. *Loans and Allowances (Agricultural Occupations) Scheme.*—(i) *General.* Full details of the measures taken to provide for the re-establishment of ex-servicemen in rural occupations were given in Official Year Book No. 37, pp. 117-8.

(ii) *Loans (Agricultural Occupations).* The following table shows particulars for each State and certain Territories to 30th June, 1955:—

LOANS (AGRICULTURAL OCCUPATIONS) : SUMMARY TO 30th JUNE, 1955.

State.	Applications.			Loans Approved.		Advanced by Commonwealth Treasury to Lending Authorities.	Advanced by Lending Authorities to Applicants. (b)
	Re-ceived.	Ap-proved.	Refused, With-drawn or Not Yet Approved.	Gross Amount.	Net Approvals.(a)		
				£		£	£
New South Wales	7,763	6,296	1,467	4,953,327	5,480	4,253,419	2,660,000
Victoria ..	4,817	3,350	1,467	2,175,881	3,090	2,016,830	1,040,000
Queensland ..	2,372	1,969	403	1,094,340	1,605	889,134	610,000
South Australia ..	2,128	1,282	846	996,643	1,219	955,029	465,000
Western Australia	3,197	2,287	910	2,154,322	2,150	2,020,979	1,110,000
Tasmania ..	1,124	758	366	473,265	728	454,404	300,400
Northern Territory	34	15	19	11,945	12	10,148	10,748
New Guinea ..	16	7	9	7,272	6	6,772	5,496
Norfolk Island ..	3	1	2	1,000	..	..	..
Total	21,454	15,965	5,489	11,867,995	14,290	10,606,715	6,201,644

(a) After deduction of loans declined after approval—£1,261,280. (b) Includes advances from principal repaid by borrowers.

These loans are made to eligible ex-servicemen for the purchase of land, effecting improvements on land, the acquisition of tools of trade, livestock, plant or equipment, the establishment of a co-operative business with other persons, reduction or discharge of a mortgage, bill of sale, etc.

(iii) *Allowances (Agricultural Occupations)*. The following table shows details for each State and New Guinea to 30th June, 1955 :—

**ALLOWANCES (AGRICULTURAL OCCUPATIONS) : SUMMARY TO
30th JUNE, 1955.**

State.	Applications.			Advanced by Commonwealth Treasury to Bank.	Allowances Paid.
	Received.	Approved.	Rejected, Withdrawn or Not Yet Approved.		
				£	£
New South Wales ..	4,075	3,623	452	582,000	579,523
Victoria ..	3,067	2,311	756	296,500	296,013
Queensland ..	3,043	2,514	529	477,206	477,206
South Australia(a) ..	2,261	1,753	508	324,500	323,832
Western Australia ..	3,018	2,608	410	480,100	479,699
Tasmania ..	633	522	111	116,250	115,657
New Guinea ..	4	3	1	944	944
Total ..	16,101	13,334	2,767	2,277,500	2,272,874

(a) Includes allowances paid to four ex-servicemen in the Northern Territory.

These allowances are payable only in respect of the period during which the income derived from the occupation by the ex-serviceman concerned is considered inadequate.

3. *War Service Land Settlement Division—Total Expenditure.*—The following table shows details, by States and Territories, of the total expenditure of the War Service Land Settlement Division for the years 1945–46 to 1954–55, and the aggregate to 30th June, 1955. The aggregate, £56,396,887, includes—War service land settlement, £45,434,123 ; agricultural loans, £6,201,644 ; agricultural allowances, £2,276,700 ; administrative expenses, £1,061,628 ; and rural training, £1,422,792.

**COMMONWEALTH WAR SERVICE LAND SETTLEMENT DIVISION :
EXPENDITURE.**

(£.)

Period.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	N. Ter.	N.G'nea.	Total.
1945-46	120,500	153,804	60,000	263,299	610,042	331,769	..	..	1,539,414
1946-47	1,289,426	536,230	261,780	1,285,495	1,337,384	140,506	2,000	..	4,852,821
1947-48	1,191,480	618,637	324,000	887,712	1,769,701	294,936	..	..	5,086,466
1948-49	870,890	388,323	269,158	1,169,650	2,156,805	366,240	..	..	5,221,066
1949-50	629,094	302,966	301,453	1,691,974	2,617,441	641,083	4,453	4,158	6,192,622
1950-51	287,491	145,773	109,691	1,743,583	2,844,116	830,343	4,295	389	5,965,681
1951-52	197,084	177,450	81,396	2,075,184	2,880,716	1,510,783	..	..	6,922,613
1952-53	172,001	403,500	63,708	2,257,968	3,746,099	1,412,346	..	1,500	8,057,122
1953-54	114,528	858,382	63,464	1,662,482	2,327,206	1,191,137	..	295	6,217,494
1954-55	135,061	268,599	37,153	1,887,668	2,585,162	1,427,847	..	98	6,341,588
Total to 30th June, 1955 ..	5,007,555	3,853,664	1,571,803	14,925,015	22,874,672	8,146,990	10,748	6,440	56,396,887

After deducting repayments of expenditure to 30th June, 1955, which amounted to £7,668,265, and miscellaneous receipts, £5,981,719, the net expenditure to 30th June, 1955 was £42,746,903.

§ 9. Advances to Settlers.

1. *General.*—A detailed statement regarding the terms and conditions governing advances to settlers in the several States and the Northern Territory may be found in earlier issues of the Official Year Book, (see No. 22, pp. 179–186).

The summaries of loans and advances in the following paragraphs are compiled from returns supplied by the various State government lending agencies in the several States. They include the transactions in lands acquired under closer and soldier settlement schemes, but exclude the balances owing on former Crown lands sold on the conditional purchase, etc., system.

The amounts outstanding do not represent the actual differences between the total advances and settlers' repayments, for considerable remissions of indebtedness have been made in all States as a result of reappraisements of land values and the writing down of debts. In general, they include both principal and interest outstanding.

A summary for Western Australia is not included, as practically the only Governmental funds being made available are Commonwealth (*see* § 8 above).

In New South Wales and Victoria, expenditure on the acquisition, development and improvement of land for war service land settlement is provided for by the States, and particulars thereof are included in the respective summaries. In Queensland, no money is paid for the value of the land acquired, most land being occupied on lease from the Government, but advances in respect of improvements are included. In the other States, this expenditure is provided for by the Commonwealth and particulars are included in § 8 above.

Loans (Agricultural Occupations) under the Commonwealth Re-establishment and Employment Act 1945 and certain advances for the purchase of wire-netting and for other purposes made from finance provided by the Commonwealth are included in the summaries following.

2. New South Wales.—The following table shows particulars respecting advances, etc., under State Authorities to 30th June, 1955:—

ADVANCES TO SETTLERS, ETC. : NEW SOUTH WALES.

Advances, etc.	Advances, etc., made during 1954-55.	Total Advances, etc., at 30th June, 1955.	Balance outstanding at 30th June, 1955.	
			Number of Accounts.	Amount.
	£	£		£
Department of Lands—				
Closer Land Settlement .. .. .	.. .. .	15,124,116	5,256 (a)	2,119,594
Soldier Settlers 1914-18 War .. .. .	.. .. .	(b) 3,196,005	332	102,182
1939-45 War .. .. .	.. .. .	975,002	4,698	3,427,673
Soldier Land Settlement—Acquisition, development and improvement of land, War Service Land Settlement Agreement Act	2,274,228	21,487,854	2,081 c	17,759,719
Wire Netting .. .. .	.. .. .	1,494,653	138	15,732
Prickly Pear	21,104	266,935	158	11,098
Rural Bank—				
General Bank Department—				
Commonwealth Re-establishment and Employment Act 1945	10,384	4,230,272	1,978	1,146,387
Other	3,402,850	70,008,612	8,930	19,086,993
Government Agency Department—				
Rural Industries	129,308	8,393,508	806	366,916
Unemployment Relief and Dairy Promotion	480,485	2,820,267	1,640	1,057,016
Rural Reconstruction(d)	366,662	12,961,431	779	1,698,183
Shallow Boring	82,919	1,314,579	177	179,465
Farm Water Supplies	100,191	347,185	344	266,883
Soil Conservation	2,109	5,613	9	3,834
Rivers and Foreshores Improvement	1,335	5,267	29	653
Irrigation Areas	496,295	(e)	336	2,767,152
Government Guarantee Agency .. .. .	.. .. .	225,475	51	2,688
Closer Settlement Agency .. .. .	.. .. .	167,914	42	49,144
Total	8,342,872	f 150,490,765	27,738	50,061,312

(a) Excludes an amount of £4,674,256 capitalized to 30th June, 1955, on conversion into leasehold under the Closer Settlement Amendment (Conversion) Act 1943. (b) In addition, the sum of £1,926,973 has been expended to 30th June, 1955 on developmental works on soldiers' settlements. (c) Includes capital value of Closer Settlement Leases, £13,054,755, and unpaid balance and interest on structural improvements, £4,704,964. (d) Includes Debt Adjustment, Drought Relief, and Marginal Wheat Areas Scheme Advances (Commonwealth and State Moneys), amount outstanding £1,034,667. (e) Not available. (f) Incomplete.

3. Victoria.—The following table shows particulars respecting advances, etc., under State Authorities to 30th June, 1955 :—

ADVANCES TO SETTLERS, ETC. : VICTORIA.

Advances, etc.	Advances, etc., made during 1954-55.	Total Advances, etc., at 30th June, 1955.	Balance outstanding at 30th June, 1955.	
			Number of Persons.	Amount.
	£	£		£
State Savings Bank, Crédit Foncier—				
Civilians	16,155	11,714,399	698	545,539
Discharged Soldiers .. .. .	..	848,567	33	19,056
Treasurer—				
Cool Stores, Canneries, etc.	106,093	1,586,542	(a) 3	588,978
Department of Lands and Survey—				
Closer Settlement Settlers and Soldier Settlers .. .. .	..	646,904,855	2,396	2,529,983
Cultivators of Land .. .. .	..	2,463,558	155	29,245
Wire Netting .. .. .	..	728,398	95	6,644
Soldier Settlement Commission—				
Purchase of land	1,411,967	13,441,573	..	} c17,284,370
Development and Improvement of Holdings	2,132,843	16,826,381	..	
Advances for sales of land not required for Soldier Settlement(d)	176,923	996,360	5	133,039
Advances for Settlers' Lease Liability, Soldier Settlement Act 1946	1,460,700	8,300,262	1,170	7,525,756
Advances to assist in acquiring and developing single unit farms	806,926	9,893,816	1,903	7,058,836
Advances for improvements, stock, implements, etc.	596,689	2,385,398	1,181	1,087,774
Advances for shares in Co-operative Companies, Soldier Settlement Act 1946	24,000	108,914	222	91,756
Commonwealth Re-establishment and Employment Act 1945 Advances	145	1,796,384	869	406,546
Total	6,732,441	117,995,407	8,730	37,307,522

(a) Companies and Co-operative Societies. (b) Represents consolidated debts of settlers (Section 30, Act 4091). (c) After allowing an amount of £3,420,394 representing excess acquisition, development and improvement cost which has been written off. (d) Sale price of land not required for settlement ; balance outstanding represents instalments not yet due where terms were given to purchasers.

4. Queensland.—The following table shows particulars of advances, etc. to 30th June, 1955. The figures exclude transactions in land :—

ADVANCES TO SETTLERS, ETC. : QUEENSLAND.

Advances, etc.	Advances, etc., made during 1954-55.	Total Advances, etc., at 30th June, 1955.	Balance outstanding at 30th June, 1955.	
			Number of Accounts.	Amount.
	£	£		£
Co-ordination of Rural Advances and Agricultural Bank Acts	2,054,167	20,774,862	3,460	6,488,211
Discharged Soldiers' Settlement (a) .. .. .	..	2,467,913	235	44,455
Water Facilities .. .. .	..	58,079	2	121
Wire Netting, etc. .. .. .	..	1,019,403	315	25,361
Seed Wheat and Barley .. .. .	..	(b) 143,229	(c)	12,040
Drought Relief .. .. .	..	961,047	76	61,318
War Service Land Settlement	421,489	3,265,969	465	2,453,903
Income (Unemployment Relief and State Development) Tax Acts (d) .. .. .	..	1,183,861	(e) 330	46,387
Irrigation .. .. .	..	54,914	6	1,352
Farmers' Assistance (Debt Adjustment Acts)	4,350	1,037,923	73	127,293
Commonwealth Re-establishment and Employment Act 1945 .. .. .	..	870,439	404	140,724
Total	2,480,006	31,837,639	(e) 5,366	9,401,165

(a) Includes advances to group settlers through the Lands Department, as well as advances through the Agricultural Bank. (b) Includes accrued interest. (c) Not available. (d) Largely for relief to cotton and tobacco growers and for rural development (ringbarking, clearing, fencing, etc.). (e) Incomplete.

5. South Australia.—The following table shows particulars respecting advances, etc. under State Authorities to 30th June, 1955 :—

ADVANCES TO SETTLERS, ETC. : SOUTH AUSTRALIA.

Advances, etc.	Advances, etc., made during 1954-55.	Total Advances, etc., at 30th June, 1955.	Balance outstanding at 30th June, 1955.	
			Number of Persons.	Amount.
	£	£		£
Department of Lands—				
Advances to Soldier Settlers	767	5,032,140	250	1,222,030
Advances to Blockholders .. .. .	.. .. .	41,451	..	..
Advances for Sheds and Tanks .. .. .	.. .. .	75,693	..	4,543
Advances Under Closer Settlement Acts	8,102	2,727,965	..	839,240
Advances under Agricultural Graduates Settlement Act .. .. .	.. .. .	62,258	..	21,143
Settlement of Returned Service Personnel, 1939-45 War	436,573	2,156,531	809	1,781,095
Primary Producers Assistance Department—				
Advances in Drought-affected Areas .. .. .	.. .. .	2,146,768	10	4,440
Advances under Farmers Relief Acts .. .. .	.. .. .	4,435,509	14	3,406
Irrigation Branch—				
Advances to Civilians .. .. .	.. .. .	291,443	44	17,744
Advances to Soldier Settlers .. .. .	.. .. .	1,048,174	326	348,918
State Bank of South Australia (Crédit Foncier Department)—				
Advances to Primary Producers	501,119	9,730,418	1,230	2,502,853
Advances to Settlers for Improvements	39,929	1,013,647	127	81,125
Advances under Vermin and Fencing Acts	2,760	1,386,520	104	45,252
Advances under Loans to Producers Act	260,957	1,332,198	85	959,676
Commonwealth Re-establishment and Employment Act 1945	14,736	815,991	420	286,285
Total	1,264,943	32,296,706	3,419	8,117,750

6. Western Australia.—The operations prior to 1945 covered in this section related to moneys made available through, or by, the old Agricultural Bank and other Government Departments for the purpose of agricultural development. On 1st October, 1945, however, the Agricultural Bank was reconstituted as the Rural and Industries Bank of Western Australia, and was given authority to operate similarly to the associated banks. Certain securities in the books of the old bank were taken over by the general banking division of the new bank, and the clients concerned then operated with privileges and obligations similar to those provided by other banking institutions. The majority of the remaining securities, also, were eventually transferred.

At present, very limited funds are being made available by the State Government for advances for agricultural development, the bulk of the moneys for this purpose being provided by the Commonwealth Government under the War Service Land Settlement and Commonwealth Re-establishment and Employment Acts. Particulars of this expenditure are shown in § 8 above.

7. Tasmania.—The following table shows particulars of advances under State Authorities to 30th June, 1955. Although not regarded as outstanding advances by the Department of Agriculture the figures in connexion with closer and soldier land settlement have been included in the table for comparative purposes ; the areas so purchased have been leased on 99-year terms having an option of purchase which the leaseholder may exercise at any time.

ADVANCES TO SETTLERS, ETC. : TASMANIA.

Advances, etc.	Advances, etc., made during 1954-55.	Total Advances, etc., at 30th June, 1955.	Balance outstanding at 30th June, 1955.	
			Number of Persons.	Amount.
	£	£		£
Agricultural Bank—				
State Advances Act and Rural Credits ..	229,334	3,187,150	712	(a) 674,608
Orchardists' Relief, 1926 ..	..	46,832	..	..
Unemployed (Assistance to Primary Producers) Relief Act 1930-31 ..	..	114,302	..	..
Bush Fire Relief 1934 ..	..	14,555	3	41
Crop Losses, 1934-35 ..	..	10,086	2	213
Assistance to Fruitgrowers Act 1941 ..	..	34,556	3	288
Flood Sufferers' Relief Act 1942 ..	..	3,764	..	..
Flood Sufferers' Relief Act 1944 ..	..	1,902	3	127
Commonwealth Re-establishment and Employ- ment Act 1945 ..	1,875	405,870	349	191,807
Primary Producers' Relief Act 1947 ..	..	297,846	216	44,615
Minister for Agriculture—				
Soldier Settlers—				
Advances ..	24,881	994,919	30	(b) 42,151
Purchase of Estates, etc.(c) ..	328	2,555,982	(d) 513	347,794
Closer Settlers—				
Advances ..	1,997	100,530	8	5,628
Purchase of Estates, etc.(c) ..	662	525,930	119	94,069
Total ..	259,077	8,294,224	1,958	1,401,341

(a) Excludes £3,723 forfeited properties. (b) Excludes £204,813 advances capitalized, £79,166 advances written off to bad debts, and £40,789 written off to revaluation. (c) Not regarded as outstanding advances by the Department. (d) Number of leaseholders, including those to whom advances have been made.

8. **Northern Territory.**—During the year 1954-55, two advances totalling £2,684 were made. The total amount advanced to 30th June, 1955, was approximately £36,904. At 30th June, 1955, the balance outstanding from 16 settlers, including interest, was £5,494.

9. **Summary of Advances.**—The following table is a summary for each State (except Western Australia) and the Northern Territory to the 30th June, 1955. The particulars so far as they are available, represent the total sums advanced to settlers, including amounts spent by the various Governments in the purchase and improvement of estates disposed of by closer and soldier land settlement, while the amounts outstanding reveal the present indebtedness of settlers to the Governments, including arrears of principal and interest but excluding amounts written off debts and adjustments for land revaluations. Particulars of Loans (Agricultural Occupations) under the Commonwealth Re-establishment and Employment Act 1945 and of certain advances for wire-netting and other purposes provided from Commonwealth funds are included.

ADVANCES TO SETTLERS, ETC. : SUMMARY.

State.	Advances, etc., made during 1954-55.	Total Advances, etc., at 30th June, 1955.	Balance outstanding at 30th June, 1955.	
			Number of Persons.	Amount.
	£	£		£
New South Wales(a) ..	8,342,872	6150,490,765	27,738	50,061,312
Victoria(a) ..	6,732,441	117,995,407	8,730	37,307,522
Queensland ..	2,480,006	31,837,639	(b)(c) 5,366	9,401,165
South Australia ..	1,264,943	32,296,706	3,419	8,117,750
Tasmania ..	259,077	8,294,224	1,958	1,401,341
Northern Territory ..	2,684	36,904	16	5,494

(a) Includes expenditure on acquisition, development and improvement of land for war service land settlement (see p. 95). (b) Incomplete. (c) Number of accounts.

§ 11. Alienation and Occupation of Crown Lands.

1. *General.*—The figures shown in the previous parts of this chapter show separately the areas alienated, in process of alienation, or occupied under various tenures. The following tables set out the position in regard to the tenure of land in each State, in the Northern Territory, and in the Australian Capital Territory during the latest year for which information is available—1955 in all cases. A summary for each State and Territory and for Australia as a whole is also supplied. Particulars for each year from 1944 to 1954 appear in *Primary Industries Bulletin* No. 48, Part 1.—Rural Industries, page 1. The area occupied includes roads, permanent reserves, forests, etc. In some cases, lands which are permanently reserved from alienation are occupied under leases and licences, and have been included therein. Lands occupied under leases or licences for pastoral purposes are frequently held on short tenures only, and could thus be made available for settlement practically whenever required.

2. *New South Wales.*—The total area of New South Wales is 198,037,120 acres, of which 26.3 per cent. had been alienated at 30th June, 1955; 6.9 per cent. was in process of alienation; 58.9 per cent. was held under leases and licences; and the remaining 7.9 per cent. was unoccupied, or held by the Crown.

The following table shows particulars as at 30th June, 1955:—

ALIENATION AND OCCUPATION OF CROWN LANDS : NEW SOUTH WALES,
30th JUNE, 1955.
(Acres.)

Particulars.	Area.	Particulars.	Area.
1. Alienated.		3. Held under Leases and Licences.	
Granted and sold prior to 1862	7,146,579	Homestead selections and grants ..	1,687,189
Sold by auction and other sales, 1862 to date	15,602,617	Alienable leases, long-term and perpetual	25,915,880
Conditionally sold, 1862 to date	34,564,241	Long-term leases with limited right of alienation	1,595,114
Granted under Volunteer Land Regulations, 1867 to date	172,198	Other long-term leases	80,244,736
Granted for public and religious purposes	265,953	Short-term leases and temporary tenures	4,868,628
		Forest leases	2,089,378
		Mining and auriferous leases	187,501
	57,751,588	Total	116,588,426
Less lands resumed or reverted to Crown	5,701,029		
Total	52,050,559		
2. In Process of Alienation.		4. Unoccupied—Particulars of Lord Howe Island not being available, the area, 3,220 acres, is included under unoccupied (approximate)	
Conditional purchases	11,833,954		15,682,403
Closer settlement purchases	1,454,637		
Soldiers' group purchases	154,736		
Other forms of sale	272,405		
Total	13,715,732	5. Total Area of State	198,037,120

3. *Victoria.*—The total area of Victoria is 56,245,760 acres, of which 55.0 per cent. had been alienated up to end of 1955; 4.2 per cent. was in process of alienation under deferred payments and closer settlement schemes; 18.5 per cent. was occupied under leases and licences; and 22.3 per cent. was unoccupied or held by the Crown.

The following table shows the distribution:—

**ALIENATION AND OCCUPATION OF CROWN LANDS: VICTORIA,
31st DECEMBER, 1955.**

(Acres.)

Particulars.	Area.	Particulars.	Area.
1. <i>Alienated</i>	30,907,043	3. <i>Leases and Licences held—</i> <i>Under Lands Department—</i>	
		Perpetual Leases	59,671
		Agricultural College Leases	20,369
		Other Leases and Licences	19,906
		Temporary (Yearly) Grazing Licences	6,401,798
		Under Mines Department (a)	3,906,456
2. <i>In Process of Alienation—</i> Exclusive of Mallee and Closer Settlement Lands	301,131		
Mallee Lands (exclusive of Closer Settlement Lands)	1,578,740		
Closer Settlement Lands	507,116		
Village Settlement	33		
		<i>Total</i>	10,408,200
		4. <i>Occupied by the Crown or Un-</i> <i>occupied</i>	12,543,497
<i>Total</i>	2,387,020	5. <i>Total Area of State</i>	56,245,760

(a) Includes State Coal Mine area, 7,575 acres and State Electricity Commission area, 2,800 acres.

4. *Queensland.*—The total area of this State is 429,120,000 acres, of which, on 31st December, 1955, 5.8 per cent. was alienated; 0.7 per cent. was in process of alienation; and 84.9 per cent. was occupied under leases and licences. The remainder, 8.6 per cent., was either unoccupied or held as reserves or for roads.

The distribution is shown in the following table:—

**ALIENATION AND OCCUPATION OF CROWN LANDS : QUEENSLAND.
31st DECEMBER, 1955.**

(Acres.)

Particulars.	Area.	Particulars.	Area.
1. <i>Alienated—</i>		3. <i>Occupied under Leases and</i> <i>Licences—</i>	
By Purchase	24,771,999	Pastoral Leases	252,205,480
Without Payment	92,159	Occupation Licences	11,109,160
		Grazing Selections and Settle- ment Farm Leases	89,824,655
		Leases—Special Purposes	2,063,002
		Mining Leases	564,329
		Perpetual Leases Selections and Perpetual Lease Prickly Pear Selections	6,761,110
		Auction Perpetual Leases, etc. Forest Grazing Leases (of Reserves)	280,959
			1,625,400
		<i>Total</i>	364,434,095
<i>Total</i>	24,864,158	4. <i>Reserves (net, not leased), Surveyed</i> <i>Roads and Surveyed Stock</i> <i>Routes</i>	22,728,475
		5. <i>Unoccupied</i>	14,202,801
2. <i>In Process of Alienation</i>	2,890,471	6. <i>Total Area of State</i>	429,120,000

(a) Special leases of Crown land, 477,792 acres; special leases of reserves, 1,585,210 acres.

5. *South Australia.*—The area of South Australia is 243,244,800 acres and at 30th June, 1955, 6.0 per cent. was alienated; 0.1 per cent. in process of alienation; 56.2 per cent. occupied under leases and licences; and 37.7 per cent. occupied by the Crown or unoccupied.

The following table shows the distribution:—

**ALIENATION AND OCCUPATION OF CROWN LANDS : SOUTH AUSTRALIA,
30th JUNE, 1955.**
(Acres.)

Particulars.	Area.	Particulars.	Area.
1. <i>Alienated</i> —		3. <i>Held under Lease and Licence(a)</i> —	
Sold	14,468,682	Perpetual Leases, including Ir-	
Granted for Public Purposes ..	145,889	rigation Leases	18,666,293
		Pastoral Leases	114,937,456
		Other Leases and Licences ..	3,044,848
		<i>Total</i>	136,648,597
<i>Total</i>	14,614,571	4. <i>Area Unoccupied(b)</i>	91,690,906
2. <i>In Process of Alienation</i> ..	290,726	5. <i>Total Area of State</i>	243,244,800

(a) Mining leases and licences have also been issued over an area comprising 137,253,816 acres.
(b) Includes surveyed roads, railways and other reserves, salt water lakes, lagoons, and fresh water lakes.

6. *Western Australia.*—The total area of Western Australia is 624,588,800 acres, of which, at 31st December, 1955, 4.0 per cent. was alienated; 2.1 per cent. was in process of alienation; and 34.2 per cent. was occupied under leases and licences issued either by the Lands, Mines or Forests Departments. The balance of 59.7 per cent. was unoccupied.

The following table shows the distribution:—

**ALIENATION AND OCCUPATION OF CROWN LANDS : WESTERN AUSTRALIA,
31st DECEMBER, 1955.**
(Acres.)

Particulars.	Area.	Particulars.	Area.
1. <i>Alienated</i>	25,021,524	3. <i>Leases and Licences in Force</i> —	
		(i) Issued by Lands Depart-	
		ment—	
		Pastoral Leases	205,783,374
		Special Leases	2,430,472
		Leases of Reserves	610,213
		Residential Lots	4,671
		Perpetual Leases	1,045,459
		(ii) Issued by Mines Depart-	
		ment—	
		Gold-mining Leases	23,145
		Mineral Leases	43,306
		Miners' Homestead	
		Leases	33,917
		(iii) Issued by Forests Depart-	
		ment—	
		Timber Permits	3,646,147
		<i>Total</i>	213,620,704
		4. <i>Area Unoccupied</i>	372,950,940
<i>Total</i>	12,995,632	5. <i>Total Area of State</i>	624,588,800
2. <i>In Process of Alienation</i> —			
Midland Railway Concessions ..	54,800		
Free Homestead Farms	376,219		
Conditional Purchase	10,286,153		
Selections under the Agricultural			
Lands Purchase Act	323,184		
Grazing Land	1,874,501		
Town and Suburban Lots	2,914		
Crown Grants of Reserves	77,861		

7. *Tasmania.*—The total area of Tasmania is 16,778,000 acres, of which, at 30th June, 1955, 37.5 per cent. had been alienated; 2.0 per cent. was in process of alienation; 16.1 per cent. was occupied under leases and licences for either pastoral, agricultural, timber, or mining purposes, or for closer or soldier settlement; while the remainder (44.4 per cent.) was unoccupied or reserved by the Crown.

The following table shows the distribution:—

**ALIENATION AND OCCUPATION OF CROWN LANDS : TASMANIA,
30th JUNE, 1955.
(Acres.)**

Particulars.	Area.	Particulars.	Area.
1. Alienated	6,287,918	3. Leases and Licences—continued.	
2. In Process of Alienation	331,434	(i) Issued by Lands Department—continued.	
3. Leases and Licences—		Soldier Settlement	71,877
(i) Issued by Lands Department—		Short-term Leases	1,353
Islands	161,061	(ii) Issued by Mines Department	30,059
Ordinary Leased Land	1,893,211	Total	2,713,031
Land Leased for Timber	532,822	4. Area Occupied by the Crown or Unoccupied(a)	7,445,617
Closer Settlement	22,648	5. Total Area of State	16,778,000

(a) Includes reservations for roads and various other public purposes, 4,129,511 acres, lands occupied by Commonwealth or State Departments, 21,484 acres and land acquired for Soldier and Closer Settlement but not leased, 200 acres.

8. Northern Territory.—The area of the Northern Territory is 335,116,800 acres, of which, at 30th June, 1955, only 0.1 per cent. was alienated; 54.1 per cent. was held under leases and licences; 14.2 per cent. was reserved for aboriginal, defence and public requirements; and the remaining 31.6 per cent. was unoccupied and unreserved.

The following shows the mode of occupancy of areas at 30th June, 1955:—Alienated, 455,322 acres; leased—pastoral leases, 140,412,979 acres, other leases, licences and mission stations, 40,752,346 acres, total leased, 181,165,325 acres; reserved for aboriginal, defence and public requirements, 47,543,605 acres; unoccupied and unreserved, 105,952,548 acres; total, 335,116,800 acres.

9. Australian Capital Territory.—Alienated land of the Territory (excluding the Jervis Bay area) at the end of 1955 comprised 11.3 per cent. of the total area; land in process of alienation 7.1 per cent; land held under lease and licence 52.9 per cent; land otherwise occupied, including city tenures, 6.5 per cent.; and unoccupied 22.2 per cent.

The following are the particulars of land areas in the Australian Capital Territory at the end of 1955:—Alienated, 65,857 acres; in process of alienation, 41,224 acres; leased—grazing, agricultural, etc., leases, 300,912 acres, grazing licences, 7,174 acres, total leased, 308,086 acres; otherwise occupied, 38,187 acres; unoccupied, 129,446 acres; total, 582,800 acres. Including the Jervis Bay area of 18,000 acres—12,788 acres leased and 5,212 acres otherwise occupied—the grand total for the whole Territory is 600,800 acres.

10. Summary.—The following table provides a summary for each State and Territory, and for Australia as a whole, of the alienation and occupation of Crown lands in 1955:—

ALIENATION AND OCCUPATION OF CROWN LANDS, 1955.

State or Territory.	Private Lands.				Crown Lands.				Total Area.
	Alienated.		In Process of Alienation.		Leased or Licenced.		Other.		
	'000 Acres.	Per Cent.	'000 Acres.	Per Cent.	'000 Acres.	Per Cent.	'000 Acres.	Per Cent.	
N.S.W.(a)	52,051	26.3	13,716	6.9	116,588	58.9	15,682	7.9	198,037
Victoria(b)	30,907	55.0	2,387	4.2	10,408	18.5	12,544	22.3	56,246
Queensland(b)	24,864	5.8	2,891	0.7	364,434	84.9	36,931	8.6	429,120
S. Aust.(a)	14,614	6.0	291	0.1	136,649	56.2	91,691	37.7	243,245
W. Aust.(b)	25,021	4.0	12,995	2.1	213,621	34.2	372,951	59.7	624,588
Tasmania(a)	6,288	37.5	331	2.0	2,713	16.1	7,446	44.4	16,778
Nor. Terr.(a)	455	0.1	..	..	181,166	54.1	153,496	45.8	335,117
A.C.T.(b)(c)	66	11.0	41	6.8	321	53.4	173	28.8	601
Australia ..	154,266	8.1	32,652	1.7	1,025,900	53.9	690,914	36.3	1,903,732

(a) At 30th June.

(b) At 31st December.

(c) Includes Jervis Bay area.

A diagram showing in graphical form the areas alienated from the State, those in process of alienation under the various systems of deferred payments, the areas held under leases or licences and the areas left unoccupied was included in earlier issues of the Official Year Book (see No. 41, page 73), but is not reprinted in this issue.

CHAPTER V.

THE TERRITORIES OF AUSTRALIA.

NOTE.—The internal Territories of Australia are the Northern Territory and the Australian Capital Territory. External Territories under the control of Australia are:—Norfolk Island; Papua (formerly British New Guinea); the Territory of New Guinea (under Trusteeship Agreement with the United Nations); Nauru (under Trusteeship Agreement with the United Nations); the Territory of Heard and McDonald Islands; the Australian Antarctic Territory; the Territory of Ashmore and Cartier Islands; and the Territory of Cocos (Keeling) Islands. Information on all except Ashmore and Cartier Islands is contained in the following pages, and details of the acquisition of all the Territories will be found on pp. 5, 23 and 24 of this issue.

THE NORTHERN TERRITORY.

§ 1. Area and Population.

1. Area.—Upon the extension of New South Wales westward to the 129th meridian in 1825, the Northern Territory was incorporated in that colony, but in 1863 was annexed by Royal Letters Patent to the province of South Australia. With the adjacent islands, it was transferred to the Commonwealth on 1st January, 1911. The total area is 523,620 square miles.

2. Population.—(i) *Population excluding Full-blood Aboriginals.* At the Census of 30th June, 1954, the population of the Northern Territory, excluding full-blood aboriginals, was 10,288 males, 6,181 females, 16,469 persons. Corresponding figures at the Census of 30th June, 1947, were 7,378, 3,490 and 10,868 respectively. The estimated population, excluding full-blood aboriginals, at 30th June, 1955, was 17,580 persons.

The European population of the Northern Territory increased slowly from 670 at the Census of 1881 to 3,767 in 1918. By 1921, it had decreased to 2,458, and in 1933 was still only 3,306. At the Census of 1947, it had risen to 9,116, an increase of 176 per cent. on the 1933 figures, while at the Census of 1954 it had risen a further 54 per cent. to 14,028.

Although at one time there were more than 4,000 Chinese in the Territory, at 30th June, 1954, there were only 325, these comprising the major proportion of the 486 full-blood non-European population, excluding Australian aboriginals, at that date.

The half-caste population recorded at the Census of 1954 numbered 1,955, of whom 1,659 were half-caste Australian aboriginals. Corresponding figures at the 1947 Census were 1,364 and 1,247 respectively.

(ii) *The Aboriginals.* The total number of full-blood aboriginals at 30th June, 1955, was estimated at 13,962, of whom approximately 3,489 were in regular employment. By virtue of the *Aboriginals Ordinance No. 2 of 1953*, part aboriginals are not now deemed to be aboriginals within the meaning of the *Aboriginals Ordinance 1918–1953*, except children who were committed to institutions prior to the commencement of the ordinance and those who have requested the Director of Native Affairs to declare them aboriginals within the meaning of the ordinance. Aboriginal reserves comprise an area of approximately 66,000 square miles. (See also Chapter XVI.—Population.)

§ 2. Legislation and Administration.

On 1st January, 1911, the Territory was transferred from South Australia to the Commonwealth. The terms were outlined in *Official Year Book No. 15*, p. 940. For particulars of the administration up to the Northern Territory (Administration) Act 1931, by which it was for the second time placed in the hands of an Administrator, see *Official Year Book No. 38* and earlier issues.

The Northern Territory (Administration) Act 1947 enabled the Northern Territory to set up a Legislative Council. The Council consists of the Administrator as President, seven official and six elected members who make ordinances for the Territory, which must be submitted to the Administrator for assent. The Administrator may, or may not, assent to them, or he may reserve them for the Governor-General. The Governor-General may

disallow any ordinance assented to by the Administrator within six months from the date of assent, and the operation of ordinances relating to certain matters including Crown Lands and aboriginal affairs is dependent on his approval. Money votes may be proposed in the Council only by the Administrator himself, or by his permission or direction.

The Territory elects a member to the House of Representatives, who has the right to take part in debates but not to vote.

§ 3. Physiography.

1. **Tropical Nature of the Country.**—The Territory is within the torrid zone, with the exception of a strip 2½ degrees wide which lies south of the Tropic of Capricorn.

2. **Contour and Physical Characteristics.**—The low flat coast-line seldom reaches a height of 100 feet. Sandy beaches and mud flats, thickly fringed with mangroves, prevail. Sandstone, marl and laterite form the occasional cliffy headlands. The sea frontage of more than 1,000 miles is indented by bays and inlets and intersected by numerous rivers, many of which are navigable for considerable distances from their estuaries. The only practicable deep-water port, however, is Darwin.

Inland, the country generally is destitute of conspicuous landmarks. From the coast, there is a general rise southwards to the vicinity of the 17th or 18th parallel of south latitude, where the higher lands form the watershed between the rivers that flow northwards to the sea and those that form the scanty supply of the interior systems. Towards the centre of the continent, the land over a wide area is of considerable elevation, and there are several mountain ranges, generally with an east and west trend.

§ 4. Climate, Fauna and Flora.

1. **The Seasons.**—There are two main climatic divisions, the wet season, November to April, and the dry season, May to October, with uniform and regular changes of weather. Nearly the whole of the rainfall occurs in the summer months. Further particulars appear in Official Year Book No. 6, p. 1116.

2. **Fauna.**—The ordinary types of native Australian fauna inhabit the Territory. As elsewhere on the continent, the higher *Theria* are rare, but marsupials, birds, crocodiles, fresh-water tortoises, snakes (mostly non-venomous) and frogs abound. There are many varieties of fresh-water fish and littoral mollusca. Butterflies and beetles are strongly represented. The white ant is a pest which is capable of serious destruction to wooden buildings unless special preventative measures are taken. Another species of the ant builds anthills which sometimes attain great dimensions. Mosquitoes and sandflies are very troublesome, particularly in the wet season. Native fauna are in some cases protected. Buffalo formerly existed in large herds, but their number has been greatly reduced by indiscriminate shooting. Buffalo shooting is now controlled by Ordinance.

3. **Flora.**—The vegetation is North Australian in type, but a number of the forms belong to the Malayan and Oceanic regions. The timber trees are not of great commercial value, but in the coastal regions tropical vegetation grows luxuriantly to the water's edge. In the north, cypress pine, bloodwood and paperbark timbers are now cut and milled for local building purposes. These three timbers are resistant to termites. On the wide expanses of plain country in the interior there is little vegetation, the principal orders represented being:—*Euphorbiaceae*, *Compositae*, *Convolvulaceae*, *Rubiaceae*, *Goodenoviaceae*, *Leguminosae*, *Utricaceae*.

§ 5. Production.

1. **Agriculture.**—Up to the present, agriculture has made little progress in the Territory, although rice, peanuts, tobacco, cotton, grain sorghum, bananas, pineapples, citrus, mangoes, papaws, vegetables and fodder plants can be grown in certain areas. At the present time, commercial agricultural production is practically confined to peanuts, which have been an export crop for some time (80 tons were exported in 1955), and vegetables and small-scale fruit production (mainly pineapple and citrus) for local consumption.

In 1946, the Commonwealth Scientific and Industrial Research Organization commenced scientific surveys to define more accurately the potentialities of the Territory. Surveys have been completed of the Katherine-Darwin, Barkly Tablelands and Victoria River Regions. The survey of the Katherine-Darwin Region indicated that further investigations into agricultural possibilities were warranted. As a result, the Commonwealth Scientific and Industrial Research Organization established an agricultural research station at Katherine to investigate the possibilities of dry farming in a land system covering an area of about 7,000 square miles in the Katherine-Daly River basin. The research work at this station was sufficiently encouraging in regard to the production of peanuts, grain sorghum, cotton and pastures to warrant investigations into the application of the findings on a commercial

scale. To further the investigations, the Commonwealth Government approved of the establishment by the Northern Territory Administration in 1952 of an experimental farm at Katherine for the purpose of carrying out trials with these crops to determine the requirements for farming them on a commercial scale. The trials are in progress but it is too early to make any pronouncements.

The survey of the Katherine-Darwin Region also indicated various soil types in other parts of the Region on which agricultural production tests would be worthwhile. In order to carry out these tests economically and quickly, the Administration organized, in 1952, a mobile unit for the purpose of conducting trials on five soil types with pineapples, peanuts, sorghum, tobacco and other crops.

Prospects for rice growing were indicated by the survey and, in 1952, the Administration established rice research stations at Humpty Doo and at a location known as Sixty Mile, on the Stuart Highway, 60 miles from Darwin. A quarantine station was also established at an area known as the Chinese Rice Gardens (near Darwin) to enable oversea varieties of rice to be introduced under controlled conditions. Because of flooding difficulties in the wet season, rice quarantine for the Northern Territory is carried out by the C.S.I.R.O. at the Kimberley Research Station, Western Australia. At the rice research stations, it has been demonstrated that rice can be grown but that the main problems of rice growing in the Territory are adequate water control and drainage, determination of cultivation techniques in the soil conditions which obtain in the Territory and the production of suitable rice varieties for the rainfall, temperature and soil conditions of the area. Since the 1954-55 season, Territory Rice Limited, a firm with Australian and American capital, has been conducting large-scale trials near Humpty Doo to prove its theory that commercial production of rice is possible on the sub-coastal plains of the Territory.

2. Pastoral Industry.—The pastoral possibilities of certain parts of the Northern Territory were recognized at an early date, and in 1866 stock were brought into the Macdonnell Range country from South Australia. Six years later cattle were moved from Queensland to the northern parts of the Territory, and in 1879 Giles reached the Katherine River with 2,000 head of cattle and 12,000 sheep from South Australia. For various reasons sheep-raising did not succeed. The cattle industry, however, progressed steadily and the expansion of the industry is continuing.

Cattle exported during 1955-56 (1954-55 figures in parentheses) numbered 131,733 (77,452)—58,918 (21,513) to Queensland, 64,243 (43,786) to South Australia, 7,986 (10,370) to Western Australia and 586 (1,783) to the Philippines. Other livestock exports were:—horses, 1,928 (479); bulls, 63 (5); pigs, 171 (104) and camels, nil (11). Importations of livestock were:—bulls, 468 (572); other cattle, 9,753 (9,340); stallions, 1 (1); other horses, 254 (611); rams, 71 (11); other sheep, 2,006 (2,575) and pigs, nil (4).

The estimated number of livestock in the Territory at the end of the years 1939 and 1951 to 1955 is given in the table hereunder:—

NORTHERN TERRITORY: LIVESTOCK.

31st December—	Horses.	Cattle.	Sheep.	Pigs.	Goats.	Camels.	Donkeys.	Mules.
1939	32,721	922,581	38,587	483	20,335	331	1,443	366
1951	32,519	1,057,906	30,935	794	10,520	98	1,180	603
1952	34,645	935,602	33,773	799	11,861	100	873	546
1953	36,985	966,033	31,232	1,132	12,502	53	1,475	626
1954	33,035	968,755	28,644	911	11,152	50	661	364
1955	37,306	1,027,819	33,249	1,076	12,273	59	755	363

3. Hides and Skins.—The number of hides and skins exported from the Northern Territory during 1955-56 was as follows:—buffalo, 5,663; sheep, 1,235; crocodile, 888; and cattle, 3,874. In addition, a considerable number of kangaroo skins were exported, but details are not available.

4. Mining.—Alluvial gold digging in the Northern Territory commenced in 1869 and in 1881 the yearly return was valued at £111,945. The value of minerals produced in the Territory in 1955 reached an all-time peak of £2,510,000 compared with £1,227,000 the previous year, mainly because of an increase in the value of copper production. Gold, which in the past has always returned the highest value of mineral production, was superseded by copper in 1955. The total value of copper production was £1,264,000, most of which was won from the "Peko" mine at Tennant Creek. Peko production is concentrated on copper with gold as a by-product and the Company operates its own modern crushing and treatment plant.

The value of gold production increased, most of the ore being obtained from the "Nobles Nob" mine at Tennant Creek. The ore is treated by the Company's own plant at the mine. The Harts Range Mica Field continues to produce the bulk of Australian high grade mica. The production of tin concentrates declined in sympathy with falling prices.

Uranium minerals were first discovered at Rum Jungle in September, 1949, and other deposits have been found since. Great interest in uranium mining is now being shown and many Australian and oversea mining companies are engaged in the search for radioactive minerals. Production has begun already on a small scale. The first full-scale uranium treatment plant was opened at Rum Jungle by the Prime Minister on 17th September, 1954, and continuous production of uranium oxide is now being achieved. The production of manganese was first reported during 1955, and is being mined for use at the Rum Jungle treatment plant.

The following table shows the value of mineral production for the years 1951 to 1955 compared with 1939:—

NORTHERN TERRITORY: VALUE OF MINERAL PRODUCTION.
(£'000.)

Year.	Gold.	Tin Concentrates.	Copper Ore.	Mica.	Wolfram.	Total All Minerals. (a)
1939	163	4	2	16	58	244
1951	603	22	44	59	257	987
1952	737	10	131	92	413	1,386
1953	841	16	28	102	267	1,256
1954	844	15	188	123	54	1,227
1955	1,019	2	1,264	76	120	2,510

(a) Excludes uranium. Includes small quantities of other minerals produced.

5. **Pearl and Other Fisheries.**—In 1884, mother-of-pearl-shell was discovered in the harbour of Port Darwin. Since that time, the areas fished have extended to the various banks to seaward and coastwise along the Northern Territory coast. Figures for production and value of shell for the years 1951 to 1955 are shown in the following table:—

NORTHERN TERRITORY: PEARL FISHING.

Year.	Boats Engaged.	Pearl-shell Taken.	
		Quantity. (tons.)	Value. (£.)
1951 .. ..	..	84	51,000
1952	8	116	59,000
1953	10	217	125,000
1954	11	205	119,000
1955	10	171	97,000

The price of shell remains high, £600 a ton for good grade shell being the average for 1955.

Darwin continues to provide a firm and ready market for fish. Local supplies are somewhat irregular and do not meet the demand, consequently imports are necessary.

§ 6. Land Tenure.

1. **General.**—A description of the system of land tenure in force in the Territory in 1928 is given in Official Year Book No. 22, Chapter V.—Land Tenure and Settlement. It was revised in Official Year Book No. 39, pp. 329–30, and Chapter IV.—Land Tenure and Settlement of this issue contains up-to-date statistical information on the subject.

Almost half the land in the Northern Territory is reserved, or unoccupied and unreserved, the remainder, apart from a very small proportion alienated, being held under various forms of lease and licence, which are described briefly below and in more detail in Official Year Book No. 39, pp. 329–30.

2. Pastoral, Agricultural, etc., Leases.—*Pastoral Leases*—granted for periods not exceeding 50 years.

Pastoral Homestead Leases—granted in perpetuity but available only to persons who intend to reside *bona fide* on the leased land. Companies are not eligible to hold this type of lease.

Agricultural Leases—granted in perpetuity, with area for any one lease limited according to type of farm (Cultivation Farms, Class 1, 1,280 acres, Class 2, 2,560 acres; Mixed Farming and Grazing, Class 1, 12,800 acres, Class 2, 38,400 acres).

Leases of Town Lands—except in Darwin, granted in perpetuity (in Darwin granted for periods up to 99 years).

Leases to Aborigines—granted for areas not exceeding 160 acres each for any period of years upon such terms and conditions as thought fit.

Miscellaneous Leases—granted for any prescribed or approved purpose, for periods not exceeding 21 years.

Grazing Licences—granted to graze stock on Crown lands for periods not exceeding one year.

Occupation Licences—granted for manufacturing, industrial or any prescribed purposes, for periods not exceeding 5 years.

Miscellaneous Licences—granted for periods not exceeding 12 months.

The foregoing leases and licences are granted at specified rentals or rentals fixed by the Administrator and subject to re-appraisalment, and under various prescribed or specified conditions.

3. Mining Leases, etc.—*Holdings under Miners' Rights*—entitling holder, for a fee of 5s. for 12 months from date of issue, to peg out and occupy Crown lands for mining purposes.

Gold-mining Leases—granted for a period of 21 years, renewable for further periods of 21 years, for areas not exceeding 20 acres each, at an annual rent of 2s. per acre and with payment of a royalty of 3d. in the £1 on the value of gold won, or 6d. in the £1 if on Aboriginal Reserves.

Mineral Leases—granted in blocks not exceeding 40 acres each, at an annual rent of 1s. per acre, with term, renewal, and royalty conditions as for gold-mining leases.

Dredging Claims—granted for gold or minerals claims, the area not exceeding 300 acres each, at an annual rent of 2s. per acre.

Petroleum Prospecting Permits—granted to search for oil over one, two or three areas not exceeding in the aggregate 10,000 square miles for an initial term not exceeding 12 months with provision for extensions in three-year periods up to a maximum of 10 years. The permittee must lodge a fee of £100 and enter into a bond for at least £1,000 to comply with the conditions of the permit and the provisions of the Petroleum (Prospecting and Mining) Ordinances 1954 and the regulations thereunder.

Petroleum Licences—confer an exclusive right to carry out the detailed surveys and other operations necessary to test the land for petroleum. A licence is granted only to a permittee for a fee of £20 over an area not exceeding 2,500 square miles upon the permittee entering into a bond of at least £5,000 to comply with the provisions of the licence and the Ordinance and Regulations.

Petroleum Leases—granted only to a licensee for a period of 21 years, and renewable for further periods of 21 years, in respect of an area not exceeding 500 square miles. The lessee is required to pay a royalty of 10 per cent. upon the gross value of all crude oil produced.

Coal Licences—granted to search for coal over an area not exceeding 1,000 square miles for a period of five years, at an annual fee of £10.

Coal Leases—granted for a period of 21 years, renewable for 21 years at an annual rental of 1s. per acre and a royalty fixed by regulation.

Business and Residence Areas—granted at the prescribed fee, authorizing the holder to occupy on a gold or mineral field an area not exceeding one acre for residence and carrying on business (one-quarter of an acre if for residence only).

Garden Areas—granted under prescribed conditions, on a gold or mineral field for growing fruit or other garden produce, the area of each garden not exceeding 5 acres.

There are various conditions regarding working, employment and value of machinery used, which apply to the foregoing leases and licences.

§ 7. Trade, Transport and Communication.

1. Trade.—No record is kept of the trade between the States and the Territory. In the post-war years 1945–46 to 1948–49, direct oversea imports averaged about £200,000 a year, but in the four years 1950–51 to 1953–54, the average was about £625,000 a year. In 1954–55, imports totalled £688,332. Direct oversea exports amounted to £104,239 in 1954–55.

2. **Shipping.**—Shipping services to Darwin are provided at intervals of about six weeks by ships of the Australian Shipping Board from the eastern States and a twice monthly service from Western Australia by ships of the Western Australian State Shipping Service. An oversea tanker visits Darwin approximately six times annually with supplies of aircraft fuel and other petroleum products. Other oversea vessels call at irregular intervals. During 1953–54, 45 calls were made by vessels at Darwin, landing approximately 34,000 tons of merchandise and 36,000 tons of petroleum products. In 1954–55, vessels made 51 calls and landed approximately 59,000 tons of merchandise and 36,000 tons of petroleum products.

3. **Air Services.**—There are 111 licenced aerodromes in the Territory of which 70 are included in airline scheduled services. Darwin, a first class international airport, is the first port of arrival in Australia for virtually all aircraft from Europe and Asia. Qantas Empire Airways Ltd. (under contract to the Commonwealth Government) operates, through Darwin, a Sydney–Singapore–London passenger and freight service; a Sydney–Hong Kong service; a Sydney–Manila–Japan service; and a Sydney–Johannesburg service. The Air France service from Paris to Noumea via Saigon and the British Overseas Airways Corporation London–Singapore–Sydney service also call at Darwin. Regular inland services calling at Darwin are Trans-Australia Airlines (from Adelaide, Melbourne, Sydney and Brisbane), MacRobertson-Miller Aviation (from Perth and Wyndham), and Connellan Airways, which operates services between Alice Springs, Wyndham, Borroloola, Katherine and certain minor centres. Smaller services, mainly on a charter basis, operate from Darwin. From Darwin, the Aerial Medical Service operates two aircraft and the North Australian Airways provides for local charter flights. An aero club with head-quarters at the airport also operates.

4. **Railways.**—Under the agreement made between the Commonwealth and the State of South Australia for the transfer of the Northern Territory, which was ratified by the Northern Territory Acceptance Act 1910, the Commonwealth was to construct the Northern Territory portion of the transcontinental railway line (connecting Adelaide and Darwin via Port Augusta).

The northern line from Adelaide terminates at Alice Springs, about 192 miles north of the southern boundary of the Territory. The Commonwealth Government acquired, on 1st January, 1911, the property in the line from Port Augusta to Oodnadatta (478 miles), and on 1st January, 1926, the control thereof was transferred to the Commonwealth Railways Commissioner. The extension to Alice Springs (293 miles) was opened for traffic in 1929. The line from Darwin to Pine Creek, about 146 miles, was extended to Katherine River (200 miles from Darwin) in 1917, and as far as Birdum (316 miles from Darwin) in 1929. Extensions are still under consideration. The two inland terminals, Alice Springs and Birdum, are 600 miles apart and are connected by road transport along the Stuart Highway. A road-rail passenger and freight service between Adelaide and Darwin operates twice weekly.

The Clapp plan for the standardization of Australian railways recommended, *inter alia*, the construction of a standard gauge (4 ft. 8½ in.) strategic and developmental railway between Dajarra (Queensland) and Birdum, and the conversion to standard gauge of the Birdum–Darwin line, but not the conversion of the Port Augusta–Alice Springs line nor the construction of a 4 ft. 8½ in. line between Alice Springs and Birdum. Provision for both of the last two projects, however, was included in an agreement with South Australia enacted in 1949.

The Governments of the Commonwealth and South Australia agreed in 1950 that a standard gauge railway from Stirling North to Leigh Creek coalfields (157 miles) should be constructed. A further agreement, in 1954, provided for an extension to Maree, 56 miles north of Leigh Creek. This line which is now under construction is regarded as the first step in the ultimate provision of a standard gauge railway between Port Augusta and Alice Springs.

5. **Roads.**—During the war, roads were built connecting Alice Springs with Darwin, and Mount Isa (Queensland) with Tennant Creek. The first of these roads, known as the North–South Road or Stuart Highway, is 954 miles long, and runs via Larrimah and Tennant Creek. The Mount Isa–Tennant Creek Road (Barkly Highway) is 403 miles long and joins the Stuart Highway some 14 miles north of Tennant Creek. Both were used extensively during the war, the Stuart Highway, in particular, experiencing very heavy and continuous traffic. Since the war, the Stuart Highway has been used continually as a means of transporting foodstuffs and other supplies to Darwin and northern centres. The route is used also for overland tourists and travellers from the southern States to

Darwin. With the further development of the pastoral and mining industries in the Territory, road trains are now being used on both highways for the export of cattle and ore. Both roads have good water bores and communications. There are now 12,243 miles of road in the Territory.

6. **Posts, Telegraphs, Telephones and Wireless.**—Postal communication is maintained by road and rail transport between Darwin and the capital cities of Australia. In addition, the vessels belonging to the Western Australian State Shipping Service give a regular service between Fremantle and Darwin. Mail is also carried between the capital cities of Australia and Darwin by the airway companies operating in each State. Inland, the northern part of the Territory receives its mail via Darwin or by means of the aerial services, and the southern districts are served via Adelaide.

The transcontinental telegraph line, covering a length of 2,230 miles, runs in a northerly direction from Adelaide to Darwin, and links Darwin in telegraphic communication with other parts of the world.

Long-distance telephone communication is established between Darwin and the capital cities of Australia, and oversea telephone communication through Sydney is also available.

Regional national broadcasting stations are situated at Darwin and Alice Springs. The majority of homesteads on pastoral leases are equipped with pedal wireless sets operated under licence from the Postmaster-General's Department. These stations are in daily communication with Flying Doctor Bases situated at Alice Springs (Northern Territory), Wyndham (Western Australia) and Cloncurry (Queensland), and are used for transmission of radio-telegrams and other communications.

§ 8. Education.

1. **European.**—Schools for European and part-European children in the Northern Territory are conducted for the Commonwealth on an agreed basis of reimbursement by the South Australian Department of Education which is represented in Darwin by an Assistant Supervisor of Education, Northern Territory Schools.

At the beginning of the 1956 school year, there were 10 Government schools for European children in the Northern Territory, with 1,981 pupils, providing instruction according to the South Australian curriculum. Classes up to the Intermediate Certificate are provided at Alice Springs, and at Darwin there is a separate High School with classes up to the Leaving Certificate.

Children of primary and pre-Intermediate secondary standard who live more than 10 miles from an established school receive an allowance of £70 per annum plus fare concessions if they board away from home in order to attend school. Nine exhibitions are available annually on the results of the Intermediate Certificate, the maximum benefits being £110 per annum and annual return fares if the recipients are required to board away from home in order to attend school.

Approximately 100 children receive correspondence education under the South Australian Correspondence School system. The "School of the Air" supplements normal correspondence instruction for certain children. Some of these live as much as 500 miles distant from Alice Springs, from which point the "School of the Air" is conducted. Three half-hourly sessions are given each day and the unique feature of the "School of the Air" is the "Question and Answer" section which forms a part of every session. Children with access to radio transceivers are able to ask questions of their teacher and all other pupils listen to the answers.

Six pre-school centres have been established in the Territory. Of these, four reach the required standards for subsidy by the Administration of the amount of the salary of a trained pre-school teacher. Two centres occupy buildings specially erected for the purpose at the expense of the Administration, and a third centre occupies a building purchased by the Administration. Two scholarships are offered each year for Territory girls to qualify as pre-school teachers.

2. **Native.**—The social, cultural and educational background of the aborigines has made necessary the establishment of special schools for them. It is envisaged that this necessity will ultimately pass. As from the beginning of the 1956 school year, control of these schools passed from the Commonwealth Office of Education to the Welfare Branch of the Administration. Twelve have so far been established. A special syllabus and series of readers have been prepared for use in these schools. Free mid-day meals, milk and school clothes are supplied to the pupils. In addition to the 12 Administration schools, 13 schools for aboriginal children are conducted by Missions with the aid of Government subsidies. Two schools, with similar aid, have been established on pastoral properties and the establishment of others along similar lines is planned.

3. **Theoretical Training of Apprentices.**—The recognition that technical school training is an extension of workshop training has led to the introduction of day-time classes which apprentices attend without loss of pay. Apprentices are directed by the Apprentices Board to undertake correspondence courses conducted by the Technical Correspondence School of the South Australian Education Department and the Sydney Technical School, these courses covering the work prescribed for the various trades in South Australia and New South Wales.

§ 9. Native Welfare.

The Welfare Ordinance, which the Legislative Council passed in June, 1953, established the principle that native people would be committed to the care of the State on the grounds of their need for special care and assistance and not on the grounds of race or colour and it laid on the Director of Welfare a positive responsibility for the advancement of wards in his care. The Employment Ordinance provides for the training of wards and assistance in establishing them in occupations, either on their own account or as employees. The Ordinance envisages, amongst other forms of training, apprenticeships for the better-educated wards and training on the job for those wards not yet capable of entering into apprenticeships. It also envisages financial aid to natives or groups of natives who may, under the guidance of the Director, be able to engage on activities (for example in agriculture, cattle raising, hunting or fishing) on their own behalf. The Director of Welfare is responsible for supervising employment for the wards in his care, and protective legislation for those in employment is retained. The legislation does not, of course, apply to any persons who are not wards and it is envisaged that native people who have ceased to be wards will come within the normal industrial customs of the country.

§ 10. Finance.

Details of revenue and expenditure of the Territory for the years 1950–51 to 1954–55 are shown below. The information given covers the transactions of the Commonwealth Consolidated Revenue Fund relating to the Northern Territory and the transactions of the North Australia Railway. In previous issues of the Official Year Book, the transactions of the Central Australia Railway and the Post Office in the Northern Territory were also included. These transactions are now omitted because they relate to business undertakings which extend beyond the Northern Territory.

NORTHERN TERRITORY: REVENUE AND EXPENDITURE. (£.)

Item.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
REVENUE.					
<i>Taxation—</i>					
Probate and Stamp Duties ..	9,307	6,201	5,565	6,292	9,928
Motor Registration ..	(a)	(a)	11,354	25,882	36,694
<i>Total</i>	(a)	(a)	16,919	32,174	46,622
<i>Business Undertakings—</i>					
North Australia Railway ..	38,227	48,929	42,160	68,411	69,494
Electricity Supply ..	119,054	139,572	260,521	259,687	264,969
<i>Total</i>	157,281	188,501	302,681	328,098	334,463
<i>Other—</i>					
Rent and Rates	88,307	101,263	115,758	127,852	143,152
Miscellaneous	101,939	167,536	177,839	227,110	188,169
<i>Total</i>	190,246	268,799	293,597	354,962	331,321
Grand Total ..	(b)356,834	(b)463,501	613,197	715,234	712,406

(a) Not available.

(b) Incomplete.

NORTHERN TERRITORY : REVENUE AND EXPENDITURE—*continued.*

(£.)

Item.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
EXPENDITURE.					
<i>Public Debt Charges—</i>					
Interest(a)	129,058	125,879	126,328	133,866	135,546
Debt Redemption(b)	59,798	62,783	65,907	69,194	72,651
Other	470	..	79	..	..
<i>Total</i>	<i>189,326</i>	<i>188,662</i>	<i>192,314</i>	<i>203,060</i>	<i>208,197</i>
<i>Business Undertakings—</i>					
North Australia Railway ..	69,324	90,966	114,477	139,324	158,383
Electricity Supply	202,560	280,064	266,614	268,307	275,423
Water Supply	48,771	56,151	71,104	73,495	64,736
Hostels Loss	45,259	29,185	42,653	25,159	31,607
<i>Total</i>	<i>365,914</i>	<i>456,366</i>	<i>494,848</i>	<i>506,285</i>	<i>530,149</i>
<i>Social Expenditure—</i>					
Aboriginal Affairs	175,094	286,041	278,492	354,266	413,833
Educational Services	53,718	75,838	95,476	94,578	132,311
Public Health, Recreation and Charitable	326,489	389,158	508,166	547,680	586,158
Law, Order and Public Safety	20,050	31,357	35,063	32,738	48,520
<i>Total</i>	<i>575,351</i>	<i>782,394</i>	<i>917,197</i>	<i>1,029,262</i>	<i>1,180,822</i>
<i>Capital Works and Services—</i>					
North Australia Railway ..	20,105	20,209	162,020	229,861	141,529
Water Supplies, Roads, Stock Routes, etc.	106,082	215,366	174,780	142,402	115,873
Darwin Lands Acquisition ..	112,439	..	56,209	..	..
Buildings, Works, Sites, etc.	975,675	974,058	858,459	1,162,146	1,565,381
Plant and Equipment	167,125	91,651	116,707	137,096	137,338
Additional Working Account (Northern Territory Services Trust Account) .. ..	..	..	..	10,000	..
<i>Total</i>	<i>1,381,426</i>	<i>1,301,284</i>	<i>1,368,175</i>	<i>1,681,505</i>	<i>1,960,121</i>
<i>All Other—</i>					
Territory Administration ..	553,947	529,127	683,711	735,215	772,476
Developmental Services	93,304	88,170	117,419	140,541	126,797
Municipal, Sanitary and Gar- bage Services	67,568	73,565	88,336	81,796	72,866
Shipping Subsidy	4,700	3,800	3,800	3,800	3,800
Airmail Service Subsidy	5,200	5,200	11,000	11,708	18,300
Railway Freight Concessions	15,270	26,323	22,955	20,367	24,039
Rent, Repairs and Mainte- nance, n.e.i.	149,588	125,233	153,608	152,768	178,242
<i>Total</i>	<i>889,577</i>	<i>851,418</i>	<i>1,080,829</i>	<i>1,146,195</i>	<i>1,196,520</i>
Grand Total	3,401,594	3,580,124	4,053,363	4,566,307	5,075,809

(a) Includes North Australia Railway Interest and Exchange, 1950-51, £86,209; 1951-52, £83,959; 1952-53, £84,887; 1953-54, £83,633; 1954-55, £86,403. (b) Includes North Australia Railway Debt Redemption, 1950-51, £34,579; 1951-52, £36,303; 1952-53, £38,103; 1953-54, £40,000; 1954-55, £41,997.

THE AUSTRALIAN CAPITAL TERRITORY.

1. **Introductory.**—Information regarding the selection and establishment of Canberra as the Australian capital city, the physiography of the Territory and its early history will be found in earlier issues of the Official Year Book—*See* List of Special Articles, etc., at the end of this volume under “Canberra” and “Federal Capital City”.

On 12th March, 1913, the official ceremony to mark the start of operations in connexion with the establishment of the Seat of Government was carried out. At this ceremony, the selection of “Canberra” as the name of the capital city was announced.

On 9th May, 1927, Parliament House at Canberra was officially opened by His Royal Highness Albert, Duke of York—afterwards His Majesty King George VI.—the occasion being the 26th anniversary of the opening of the first Parliament of the Commonwealth at Melbourne by His Royal Highness George, Duke of Cornwall and York—afterwards His Majesty King George V.—on 9th May, 1901. (For particulars of the opening ceremony *see* Official Year Book No. 21, p. 604.)

The development of the Territory administration prior to the taking over of control by the Federal Capital Commission on 1st January, 1925, is described in summarized form in Official Year Book No. 18, and in Official Year Book No. 22 a summary is given of the administrative activities of the Federal Capital Commission. The administration of the Territory by this authority was continued until 30th April, 1930, when the Seat of Government (Administration) Act 1924–1929 was repealed, and the powers and functions of the Commission reverted to the Government.

Since April, 1932, the general control of the Territory has been exercised by the Minister for the Interior, certain specific services, however, being undertaken by the Department of Health, the Department of Works and the Attorney-General's Department.

An amendment to the Seat of Government Acceptance Act in 1938 provides that the Territory shall be known as the Australian Capital Territory.

2. **Progress of Work.**—(i) *General.* Further progress in providing housing and allied community facilities was shown in the works programme in the Australian Capital Territory for the financial year 1954–55 and engineering services were kept abreast of developmental requirements. Planning was begun for the increase in population which will result from transferring other Departments to Canberra as the various sections of the new Administrative Building are completed.

During 1954–55, the total expenditure on capital and maintenance works in the works programme amounted to £4,762,499.

The combined labour force of the Department of Works and contractors working for the Department at 30th June, 1955, totalled 2,360 men.

(ii) *Works Programme.* (a) *Housing.* During 1954–55, 320 dwelling units were completed (293 built by contract and 27 by day labour), including 68 brick, 74 brick veneer, 68 timber, 95 monocrete and 15 Riley Newsum prefabricated. Of the total units built, 149 were built in the suburb of O'Connor, 103 in Deakin, 28 in Narrabundah and 15 in the suburb of Reid. Two hundred and ninety-six were built for the Department of the Interior, 15 for War Service Homes and 9 for the Australian National University. At 30th June, 1955, there were 601 houses and 244 flats under construction.

(b) *Other Building.* Major projects completed during the year 1954–55 included an infants school at Griffith; an occupation centre for sub-normal children at O'Connor; a new cadets' barracks and an engineering laboratory at the Royal Military College, Duntroon; and a plant repair shop and depot in the newly established industrial area at Molonglo.

Other projects completed included the domes and associated buildings for the 26-inch Yale-Columbia and 74-inch telescopes at Mount Stromlo; the telephone exchanges at Braddon and Barton; the central administrative block of the C.S.I.R.O. at Black Mountain; temporary quarters for the lay staff of the Canberra Community Hospital at Acton; and alterations and additions to the Canberra Post Office, East Block.

Further progress was made on the permanent Administrative Building at Parkes and at 30th June, 1955, the erection was about 55 per cent. complete. The concrete structure of "A" and "C" blocks has been completed, whilst pouring of concrete on "B" block, the largest of the three, is 99 per cent. complete. "A" block has since been occupied.

Further progress was made on the construction of a 20-chamber Hoffman brick kiln at Westridge and the installation of a modern crushing and screening plant at Mugga Quarry was commenced.

At 30th June, 1955, work was well advanced on the Yarralumla infants' school, while the new primary schools at Turner and Griffith were about 15 per cent. complete. Additional classrooms at the Ainslie Primary School, and additions to the Canberra High School providing increased classroom and laboratory accommodation were well advanced.

The construction of the Olympic Swimming Pool at Parkes and additional nursing quarters at the Canberra Community Hospital was nearing completion.

Other major building works under construction at 30th June, 1955, were the erection of Marston shedding at Duntroon to provide additional storage for the Australian War Memorial, an air-conditioned brick insectory for the C.S.I.R.O. at Black Mountain and an additional building for the Department of Works Government Stores at Kingston.

(c) *Engineering Works and Services.* During 1954-55, 9 miles of sub-divisional roads were constructed to serve newly built areas, bringing the length of city roads at 30th June, 1955, to 217 miles, comprising 3 miles of concrete, 112 miles of bitumen paved and 102 miles of gravel. At the same date, the length of city footpaths was 123 miles. During 1954-55, about 2 miles of city roads were sealed and road maintenance works included the resealing of 17 miles of city roads. Major projects were the completion of an access road from Harman Naval Station to the new transmitting station at "Bonshaw", sub-divisional roads in Yarralumla and Deakin and roads constructed at the Molonglo industrial area. Other projects carried out were the widening of a section of London Circuit, the formation and gravelling of a considerable portion of Cooma Road and the construction of an access road to the Upper Cotter Dam site which is almost completed.

During 1954-55, 66,449 feet of water mains were laid to reticulate water services to new buildings. At 30th June, 1955, 6,958 houses were connected to the water supply system and of this number 5,854 were metered. The consumption for 1954-55 was 1,857 million gallons with an average daily consumption of about 167 gallons per head.

Construction of the 24" main from Lower Red Hill to London Circuit and a 36" suction main at the Cotter is nearing completion. This will effect a major improvement to the Canberra water supply system following the installation during the year of new pumps at the recently extended Cotter pumping station.

Investigational work is being carried out at the site of the proposed new dam on the Upper Cotter River.

During the same period, 51,427 feet of sewer mains were laid to connect newly built houses to the sewerage system and 6,676 houses and buildings had been connected to the sewerage system by 30th June, 1955.

3. *Forestry.*—A considerable amount of reforestation work has been undertaken and plantations (mainly *Pinus radiata*) have been established at Uriarra, Mount Stromlo, Pierce's Creek, Green Hills and Kowen. Experimental plots have been established in the Brindabella mountains and soil conservation areas at various locations throughout the Territory.

The total area of softwood plantations at 30th June, 1955, was 17,500 acres, of which 15,500 acres were *Pinus radiata*, the balance consisting of other softwood species, chiefly *Pinus ponderosa* and *Pinus laricio*.

Forestry operations in the Territory were begun on Mount Stromlo in 1915. Plantings up to 1925 were chiefly on decorative lines, but since then a much wider programme has been undertaken. Sawmill timber is now being obtained from the logs resulting from thinning operations and clear felling of mature plantations. The yearly output of pine timber has increased

from 30,000 super. feet in 1930-31 to approximately 12 million super. feet at the present time, the total amount cut to date being about 103 million super. feet. The present output consists of approximately 50 per cent. saw log timber, producing building material, and 50 per cent. case-making materials.

In 1926, a comprehensive review was undertaken of the Territory's potentialities for forest development. A system of forest management was instituted in the existing forest area, and a considerable amount of survey and assessment work has been completed, resulting in the extension of operations, including fire protection, to 100,000 acres of hardwood forests in the Cotter catchment area. Hardwood produced during 1954-55 amounted to 1,400,000 super. feet log measure all of which was used in building operations in Canberra. The total amount of hardwood cut from Australian Capital Territory forests to date is about 30,900,000 super. feet.

4. **Lands.**—(i) *General.* Reference has been made in previous issues of the Official Year Book to the general conditions of land tenure in the Australian Capital Territory and to the area of alienated and leased land, and Chapter IV.—Land Tenure and Settlement, of this issue contains statistical information on the subject.

Under the Seat of Government (Administration) Act 1910, Crown lands in the Territory may not be sold or disposed of for any estate in freehold except in pursuance of some contract entered into before the commencement of that Act. Leases of land in the city area are granted under the City Area Leases Ordinance 1936-1951, and leases of other lands under the Leases Ordinance 1918-1937. Land is also leased for various purposes in the city area under the Church Lands Leases Ordinance 1924-1932 and the Leases (Special Purposes) Ordinance 1925-1943, while one lease under the Church of England Lands Ordinance 1926 has been granted for church purposes.

As considerable portions of the Territory lands are not required in connexion with the establishment of the city, large areas have been leased under special improvement conditions in regard to the extermination of noxious weeds and the destruction of rabbits and other pests. The lands are classified into three grades of agricultural and three grades of grazing land. Leases may be granted for grazing, fruitgrowing, horticulture, agriculture or other purposes for a period not exceeding 25 years. The annual rental is 4 per cent. of the assessed value of the land, including improvements which are the property of the Crown, plus the amount of rates payable. No person may hold under lease land of a greater value than £10,000, exclusive of the value of buildings and fences thereon.

Under the City Area Leases Ordinance 1936-1951, the Government may grant leases in the city area of any Crown land for business or residential purposes. Such leases may be issued for a period not exceeding 99 years at a rental equal to 5 per cent. of the unimproved value of the land, which value is subject to re-appraisal at the expiration of 20 years, and thereafter every 20 years. A suitable building must be commenced within 6 months and completed within 12 months unless an extension of time is allowed.

(ii) *Jervis Bay Territory.* The Commonwealth acquired from the State of New South Wales sovereign rights over the area comprising about 28 square miles of land and water at Jervis Bay for possible use as a port in connexion with the Australian Capital Territory. The Royal Australian Naval College was established in this area on a site known as Captain's Point, but was removed in 1930 to Flinders Naval Base, Victoria. Leases have been granted over an area of about 13,000 acres in the Jervis Bay area.

5. **Transport and Communication.**—Canberra is connected with the railway system of New South Wales at Queanbeyan by a line $4\frac{1}{2}$ miles long. This line was opened for goods traffic on 25th May, 1914, and for passenger traffic on 15th October, 1923. The railway terminus is situated in the suburb of Kingston. A daily passenger service operates between Canberra and Sydney and Canberra and Melbourne.

Two airlines provide several services daily each way on the Sydney-Canberra-Melbourne route.

Regular motor-coach services link Canberra with towns in New South Wales, Victoria and South Australia.

There are three radio broadcasting stations in the Australian Capital Territory, 2CY and 2CN of the national broadcasting system and 2CA, a commercial station.

6. **Population.**—From 1911 until 1921, the population of the Australian Capital Territory remained at about 2,000 persons. In 1922, it commenced to rise, and by 1927 was nearing 6,000. The following year, with the transfer of departments from Melbourne, it passed 8,000.

The population at the Census of 30th June, 1947, was 16,905 persons—15,156 in the city area, 1,389 in the rural districts and 360 in the Jervis Bay area and at the Census of 30th June, 1954, it was 30,315 persons, 28,277 being in the Canberra city area and 517 in the Jervis Bay area. In June, 1956, the population of Canberra was estimated to be 32,440 and that of the Territory, 34,481.

7. **Production.**—During 1954–55, the production of the more important items of the agricultural and pastoral industry was—Wheat, 15,141 bushels; wool, 2,232,000 lb.; whole milk, 725,000 gallons; butter, 4 tons; meat (bone-in weight, fresh), 3,067 tons. The numbers of livestock depastured at 31st March, 1955, were—Horses, 810; cattle, 8,590; sheep, 245,500; and pigs, 104.

8. **Education.**—The Commonwealth Department of the Interior is primarily responsible for the education of children in the Australian Capital Territory. The New South Wales Education Department, however, provides teachers and the curriculum for schools in the Territory and is reimbursed annually for expenses incurred.

There are two public secondary schools in Canberra providing courses to the Leaving Certificate standard, Canberra High School, Acton, and Telopea Park High School, Barton. Entrance to the Canberra High School is on a competitive basis.

Eleven schools provide courses for children in infants and primary classes, including two in the Jervis Bay area and three in rural districts. A school for mentally handicapped children was opened early in 1955.

There are eight private schools in Canberra. Of these, St. Edmund's Christian Brothers College, St. Christopher's Convent, Canberra Grammar School (Boys) and Canberra Church of England Girls' Grammar School provide courses leading to the Leaving Certificate Examination.

The Australian Capital Territory Education Ordinance provides for the compulsory attendance at school of children between the ages of six and fifteen years.

Fourteen pre-school centres, an occasional care centre and a mobile unit which visits outlying areas provide pre-school facilities for approximately 1,000 children between the ages of three and five years.

The Canberra Technical College, which follows the curricula set by the New South Wales Technical Education Department, provides trades courses for apprentices, vocational (non-trades) courses including accountancy, women's handicrafts, and sheep and wool courses, hobbies courses including ceramics, dressmaking, art, woodwork and motor maintenance and courses for Commonwealth authorities including workshop practice for Royal Military College cadets, motor maintenance for Australian Forestry School cadets and shorthand and typing courses for the Public Service Board. In addition, the Technical College undertakes the trade testing of migrants seeking to enter skilled trades.

Education at university level is provided by the Canberra University College, details of which will be found in Chapter XII.—Education.

An area of about 250 acres has been set aside at Acton, for the Australian National University. Provision has been made for the University to establish such research schools as may be thought desirable, including a School of Medical Research, and Research Schools of Physical Sciences, Social Sciences and Pacific Studies. Further reference to this University appears in § 8 of Chapter XII.—Education.

9. Finance.—Details of revenue and expenditure for the years 1950–51 to 1954–55 are given in the following table :—

AUSTRALIAN CAPITAL TERRITORY : REVENUE AND EXPENDITURE.
(£.)

Item.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
REVENUE.					
<i>Taxation—</i>					
Motor Registration	30,267	37,723	41,973	47,998	53,768
Liquor	12,978	15,689	21,034	22,756	25,436
Rates	15,717	18,271	22,312	30,306	38,333
Other	1,042	765	1,196	935	1,149
<i>Total</i>	<i>60,004</i>	<i>72,448</i>	<i>86,515</i>	<i>101,995</i>	<i>118,686</i>
<i>Business Undertakings—</i>					
Railways	14,995	10,246	24,493	14,557	29,233
Electricity Supply	192,739	230,363	328,108	471,410	510,852
Water Supply and Sewerage	18,534	24,086	22,002	25,390	26,706
Abattoirs	16,953	22,337	28,706	27,115	29,254
<i>Total</i>	<i>243,221</i>	<i>287,032</i>	<i>403,309</i>	<i>538,472</i>	<i>596,045</i>
<i>Rent—</i>					
Housing	290,664	334,020	409,915	502,096	556,725
Land	53,215	77,832	91,038	110,080	88,150
Miscellaneous	20,775	11,246	13,299	16,196	8,473
<i>Total</i>	<i>364,654</i>	<i>423,098</i>	<i>514,252</i>	<i>628,372</i>	<i>653,348</i>
<i>Interest</i>					
Fees for Services and Fines	5,302	11,798	17,335	22,300	25,032
Mortgages—Principal	13,568	18,456	21,325	21,559	40,273
Sale of Houses	114,434	267,399	128,037	155,596	113,453
Other	44,532	73,644	61,619	94,628	88,400
Grand Total	845,715	1,153,875	1,232,392	1,562,922	1,805,535
EXPENDITURE.					
<i>Public Debt Charges—</i>					
Interest	183,629	173,836	172,579	183,086	180,659
Debt Redemption	77,720	81,530	85,605	89,884	94,323
Other	3,045	..	42	..	336
<i>Total</i>	<i>264,394</i>	<i>255,366</i>	<i>258,226</i>	<i>272,970</i>	<i>275,318</i>
<i>Business Undertakings(a)—</i>					
Railways	26,260	37,058	45,802	42,721	39,705
Electricity Supply	330,113	329,707	436,271	504,559	542,939
Water Supply and Sewerage	54,307	59,040	69,279	83,047	81,642
Abattoirs	14,065	17,736	20,310	20,379	20,933
Brickworks Loss	(b)	(b)	25,000	30,000	18,000
Transport Services(c)	46,000	63,000	60,000	60,000	64,000
Firewood Supplies Loss	1,000	1,000	1,000	1,000	1,000
Hostels(d)	92,483	64,688	26,513	33,542	9,075
<i>Total</i>	<i>564,228</i>	<i>572,229</i>	<i>684,175</i>	<i>775,248</i>	<i>777,294</i>

NOTE.—For notes see end of table, page 118.

AUSTRALIAN CAPITAL TERRITORY : REVENUE AND EXPENDITURE

—continued.

(£.)

Item.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
EXPENDITURE—continued.					
<i>Social Expenditure(a)—</i>					
<i>Education—</i>					
Primary and Secondary ..	127,718	158,298	183,356	239,525	296,783
Technical College ..	26,479	28,005	39,191	38,490	42,190
University ..	40,800	48,100	60,300	64,882	79,625
Science, Art, Research, etc. ..	4,453	4,444	5,459	5,727	5,691
Nursery Schools and Pre-School Centres ..	8,886	12,690	18,724	18,749	19,624
Public Health and Recreation..	45,068	62,218	75,369	88,820	89,755
<i>Charitable—</i>					
Hospital—General ..	96,421	135,487	144,733	135,328	141,831
Relief of Aged, Indigent, etc. ..	1,021	2,933	2,739	3,227	3,241
Other ..	6,914	8,459	11,250	14,801	17,225
<i>Law, Order and Public Safety—</i>					
Justice ..	11,953	14,297	17,399	22,467	25,767
Police ..	45,140	63,995	74,492	86,413	87,126
Public Safety ..	11,170	16,264	18,499	20,559	19,658
<i>Total ..</i>	<i>426,023</i>	<i>555,190</i>	<i>651,511</i>	<i>738,988</i>	<i>828,516</i>
<i>Capital Works and Services(e)—</i>					
<i>Business Undertakings—</i>					
Railways ..	200	7,620	3,166	2,562	7,432
Electricity Supply ..	230,507	223,297	272,038	138,162	160,045
Water Supply and Sewerage ..	298,228	362,735	364,006	408,365	408,781
Abattoirs ..	4,477	8,558	9,856	4,992	9,526
Transport Services ..	94,740	46,844	41,956	18,996	44,191
Hostels(f) ..	7,231	1,918	420	..	..
Brickworks ..	..	..	7,738	21,154	..
<i>Total ..</i>	<i>635,383</i>	<i>650,972</i>	<i>699,180</i>	<i>594,231</i>	<i>629,975</i>
<i>Social Expenditure—</i>					
Primary and Secondary Education ..	..	..	169,628	151,192	193,081
Technical College ..	..	..	..	..	..
University ..	..	..	..	..	..
Public Health and Recreation ..	12,476	3,631	17,884	23,741	10,309
Hospital—General ..	36,426	37,361	66,285	64,674	86,147
Police ..	839	146	3,238	2,485	..
Public Safety ..	173	2,214	5,528	3,664	8,212
<i>Total ..</i>	<i>49,914</i>	<i>43,352</i>	<i>262,563</i>	<i>245,756</i>	<i>297,749</i>
<i>Other—</i>					
Roads and Bridges ..	120,506	110,616	264,307	208,391	249,980
Parks and Gardens, etc. ..	30,776	24,695	26,540	23,927	21,348
Lands and Surveys ..	251	72	2,509	1,367	1,052
Forestry ..	35,121	80,370	33,050	45,871	67,805
Housing ..	1,934,352	2,287,179	1,578,790	1,168,499	1,507,204
Public Works, n.e.i. ..	907,072	661,900	382,661	356,351	573,934
<i>Total Capital Works and Services ..</i>	<i>3,713,375</i>	<i>3,859,156</i>	<i>3,249,600</i>	<i>2,644,393</i>	<i>3,349,047</i>

NOTE.—See next page for notes.

AUSTRALIAN CAPITAL TERRITORY : REVENUE AND EXPENDITURE

—continued.

(£.)

Item.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
EXPENDITURE—continued.					
<i>All Other—</i>					
Roads and Bridges	126,027	184,824	243,480	208,733	199,111
Parks and Gardens, etc. ..	161,971	189,546	204,905	220,008	246,933
Lands and Surveys	33,602	43,584	43,910	53,125	47,745
Agriculture and Pasture ..	23,570	26,162	19,291	18,386	22,208
Forestry	50,898	12,000	10,000	7,000	5,000
Housing	80,307	94,038	102,220	101,254	121,179
Legislative and General Administration	147,218	175,458	183,442	211,726	266,081
Public Works, n.e.i.	68,421	27,112	28,093	25,828	30,290
Miscellaneous	4,750	(g) 60,641	(g) 79,380	(g) 64,036	(g) 9,039
<i>Total</i>	<i>696,764</i>	<i>813,365</i>	<i>914,721</i>	<i>910,096</i>	<i>947,586</i>
Grand Total	5,664,784	6,055,306	5,758,233	5,341,695	6,177,761

(a) Other than Capital Works and Services. (b) Details not available. (c) Payment to Australian Capital Territory Transport Trust Account (loss on omnibus service). (d) Includes loss on operations, 1950-51, £75,559; 1951-52, £54,900; 1952-53, £12,700; 1953-54, £24,000; and 1954-55, £7,500. (e) Excludes repairs and maintenance. (f) Expenditure on plant and equipment by Department of Interior only. (g) Includes restoration of bushfire damage, 1951-52, £54,441; 1952-53, £72,783; 1953-54, £53,701; and 1954-55, £3,582.

The following table, which was prepared by the Department of the Interior, shows the total receipts and expenditure of the Australian Capital Territory from 1901-2 to 30th June, 1955:—

**AUSTRALIAN CAPITAL TERRITORY: RECEIPTS AND EXPENDITURE TO
30th JUNE, 1955.**

Receipts.	£	Expenditure.	£
Commonwealth Treasury—		Lands	932,454
Parliamentary Appropriations—		Engineering works	11,313,250
Revenue	42,387,902	Architectural works	20,090,095
Loan	5,699,468	Other capital expenditure, sundry debtors, etc.	4,050,610
		Seat of Government Establishment Account, being maintenance and administration less revenue; expenditure of a capital nature for which assets no longer exist; profit and loss accounts of trading activities, etc.	a 11,700,961
Total Receipts	48,087,370	Net Expenditure	48,087,370

(a) Excludes interest £5,905,639.

The foregoing figures exclude part cost of national buildings (Parliament House, the Secretariats, etc.), federal highways within the Territory, the Queanbeyan-Canberra Railway, the housing loan, etc.

NORFOLK ISLAND.

1. **Area, Location, etc.**—Norfolk Island, discovered by Captain Cook in 1774, is situated in latitude 29° 3' 30" South, longitude 167° 57' 5" East. Its total area is 8,528 acres, the island being about 5 miles long and 3 miles wide. From Sydney, it is distant 930 miles, and from Auckland, 660 miles. The length of the coast line is 20 miles, and its form that of an irregular ellipse. Except for a portion on the south side and the landing place at Cascade on the northern side, almost inaccessible cliffs rise from the water's edge. The climate is equable, the temperature ranging between 49° and 85° F. with a mean of 68° F. The average annual rainfall is 53 inches. It has been said that the healthy climate together with the beauty of its landscapes and seascapes, should make Norfolk Island "the Madeira of the Pacific". The island, both pre-war and post-war, has been popular as a tourist resort. Pre-war the only means of transport to the island was by ship. However, with the inauguration of direct air services from Australia and New Zealand the majority of tourists now take advantage of these services.

2. **Settlement and Population.**—The first colonization, in 1788, was by Lieutenant King, who in H.M.S. *Supply* established a small penal station as a branch settlement of that at Port Jackson. The settlement was abandoned in 1813, and for 13 years thereafter its chief use was as a whaling station and place of call for British warships.

From 1826 to 1855, it was again a penal station. In 1844, it was annexed to Van Diemen's Land (Tasmania).

The descendants of the *Bounty* mutineers, having become too numerous to subsist on Pitcairn Island, were removed to Norfolk Island in 1856. The new community, numbering 94 males and 100 females, were the descendants of British sailors and Tahitian women. The last of those transferred died at Norfolk Island on 1st March, 1943. The population of the island as disclosed by the Census of 30th June, 1954, was 942, consisting of 478 males and 464 females. The estimated population at 30th June, 1955, was 880 persons.

3. **Administration.**—In 1856, the island was created a distinct and separate settlement under the jurisdiction of New South Wales. In 1896, it was made a dependency under the Governor of that Colony, and finally by the passage of the Norfolk Island Act 1913 it was accepted by the Federal Parliament as a territory of Australia. From July, 1914, until 1st January, 1929, Norfolk Island was administered by the Department of Home and Territories, and then, until 25th June, 1941, by the Territories Branch of the Prime Minister's Department, but is now controlled by the Minister for Territories through an Administrator. An amending measure, the Norfolk Island Act 1935, provided for the establishment of an Advisory Council of eight elected members which may advise the Administrator on matters affecting Norfolk Island.

4. **Economic Activity.**—The major economic activities of the island are primary production, the tourist trade and employment by Government instrumentalities.

(i) **Primary Industries.** The soil on the island is particularly fertile, the climate equable, and the rainfall fairly evenly distributed except for a pronounced dry period in November. This enables a wide range of temperate and semi-tropical products to be cultivated. However, the island's comparative isolation and trading difficulties with New Zealand have hampered production in the past. A recent relaxation of some restrictions enabled out-of-season fruit and vegetables up to a limit of 3,000 lb. per week to be sent by air freight to Auckland, but the air service was reduced to fortnightly from August, 1956.

Prior to 1939, the principal primary product was passion fruit pulp. However, the introduction of disease together with the high cost of trellising and land reclamation has led to the curtailment of this industry. The production of bean seed has now become the main export industry. The island's isolation from many plant diseases found on the mainland, plus the fairly reliable dry period (which is conducive to the setting and maturing of seed), together with improved prices, induced a rapid expansion of production. In 1954-55, 2,460 bushels were exported and prices ranged from £6 to £9 10s. per bushel. These conditions also favour the production of other types of seed. Some cut flowers are exported to New Zealand at suitable periods.

Island conditions are also conducive to good pasture growth but for a number of reasons meat production is insufficient to satisfy the demands of both the tourists and the local inhabitants. However, as a joint product to pastoral pursuits, quantities of hides and wool are exported.

Fish and, in certain months, whales abound off the island. In the past, a number of ventures have been formed to exploit these resources. They have been short-lived owing, for the most part, to the lack of a sheltered harbour. However, a modern whaling station was started on the island in 1955 and production commenced during the second half of 1956.

(ii) *Tourists.* The unique history and unusual beauty of the island had always attracted a number of tourists in pre-war days. The building of the airstrip during the war has made the island far more accessible and a considerable tourist industry has developed, particularly with visitors from New Zealand. The industry is at present limited only by the accommodation available. Approximately 120 can now be catered for and accommodation is being continually expanded.

(iii) *Government Instrumentalities.* A large proportion of the population is employed by Commonwealth Government instrumentalities, namely:—Department of Civil Aviation, Norfolk Island Administration, Overseas Telecommunications Commission and Department of the Interior (Meteorological Branch). The bulk of the finance for the operation of these instrumentalities is supplied by the Commonwealth Government and this greatly increases the income of the island.

5. Trade, Transport and Communication.—Imports to Norfolk Island in 1938–39 amounted to £27,590, mainly from Australia. Since the 1939–45 War, they have risen from £32,402 in 1945–46 to £229,195 in 1954–55. The major proportion (£186,686 or 81 per cent.) still came from Australia, in 1954–55, while New Zealand supplied 19 per cent. Exports were valued at £16,970 in 1938–39, and have risen from £9,024 in 1945–46 to £42,521 in 1954–55. Australia is again the principal country concerned (£32,740), with New Zealand's proportion of the trade showing a steady increase from negligible amounts pre-war and early post-war to one-quarter or one-third of the total exports in recent years.

No duties are chargeable on goods imported into Australia from Norfolk Island if the goods are (a) the produce or manufacture of Norfolk Island; (b) shipped direct to Australia; and (c) not goods which if manufactured or produced in Australia would be subject to excise duty.

A shipping service to the Territory is maintained at approximately seven-weekly intervals by Burns Philp & Co. Ltd., Sydney. The route is from Sydney via Norfolk Island to the New Hebrides, Solomon Islands and other island groups and thence back to Sydney. The shipping service between Norfolk Island and New Zealand is infrequent.

The construction of the aerodrome on the island was completed during 1943. A fortnightly passenger and air freight service between Sydney and Norfolk Island maintained by Qantas Empire Airways Ltd. connects with a fortnightly air service from New Zealand.

There are approximately 50 miles of usable road on Norfolk Island. As a substantial section of the population possesses private motor cars, and taxi-cab services are available, transport is almost exclusively by motor vehicle.

The cable from Great Britain via Vancouver, Fanning Island, and Fiji bifurcates at Norfolk Island, one line connecting with New Zealand, the other with Brisbane. Until 10th June, 1947, the post office at Norfolk Island was part of the Commonwealth postal system, but as from that date Norfolk Island was established as a separate postal administration with its own issue of stamps.

6. Social Condition.—Education is free and compulsory up to the age of fifteen years. The school conforms to the Australian standard of public education, ranging from kindergarten to the intermediate certificate, with a two years' super-primary course of instruction in cultural subjects and in woodwork, needlework, leatherwork, basketry and hat-making. The headmaster and assistant teachers are lent by the New South Wales Education Department, but they are paid by the Norfolk Island Administration. The number of scholars enrolled at 30th June, 1955, was 136. Dental examination and free dental service are provided for school children.

The Court of Norfolk Island is a court of record with dual jurisdiction. Sitting in its Limited Jurisdiction, the Court has power to hear and determine actions of claims not exceeding £30 and to punish summarily all crimes and offences involving a pecuniary penalty or a sentence of imprisonment not exceeding six months. In its Full Jurisdiction, the Court can hear and determine all actions, punish all crimes and offences, grant probate and

letters of administration, hear and determine appeals from any conviction of the Court sitting in its Limited Jurisdiction, and exercise authority in all other matters. An appeal lies to the High Court of Australia from any judgment, order, decree or sentence of the Court sitting in its Full Jurisdiction when constituted by a Judge or the Chief Magistrate.

7. *Finance*.—The revenue of the Territory, together with an annual grant from the Commonwealth Government in aid of administrative expenses, is paid to the credit of the Norfolk Island Trust Fund, and advances for administrative and developmental expenses are drawn from the account. The principal sources of revenue in 1954–55 were:—Sale of liquor, £25,747; Commonwealth subsidy, £33,619; customs duties, £10,712. The total revenue was £113,959. Major items of expenditure in 1954–55 were:—administrative, £14,003; miscellaneous services, £23,540; repairs and maintenance, £23,656; capital works and services, £17,724; business undertakings, £41,030. Total expenditure amounted to £132,399.

PAPUA AND NEW GUINEA.

§ 1. Administration.

Following the outbreak of the Pacific War, civil administration in Papua and New Guinea was suspended on 11th February, 1942, and military control commenced. The Territory of New Guinea came under Japanese occupation in 1942, but the greater part had already been recaptured by Australian and Allied Forces when the Japanese surrendered in August, 1945. Information relating to the transfer back from military to civil control under the Papua-New Guinea Provisional Administration Act 1945–1946 may be found in Official Year Book No. 39 and earlier issues.

The Papua-New Guinea Provisional Administration Act 1945–1946 was repealed by the Papua and New Guinea Act 1949 which came into force on 1st July, 1949. The latter Act approved the placing of the Territory of New Guinea under the International Trusteeship system and provides for an Administrative Union, one Administrator, one Supreme Court and one Public Service.

Provision is made for an Executive Council of not less than nine officers of the Territory, who shall be appointed by the Governor-General, and a Legislative Council consisting of twenty-nine members, namely:—(a) the Administrator; (b) sixteen officers of the Territory (who shall be known as *official members*); (c) three *non-official members* possessing such qualifications as are provided by Ordinance and elected, as provided by Ordinance, by electors of the Territory; (d) three *non-official members* representing the interests of the Christian missions in the Territory; (e) three *non-official native members*; and (f) three *non-official members*.

The Legislative Council was inaugurated on 26th November, 1951, by His Excellency Sir John Northcott, while Administrator of Australia.

Subject to the Act, provision may be made by Ordinance for the establishment of Advisory Councils for Native Matters and Native Village Councils.

The Act also makes provision for the continuance of the existing laws of the Territory of Papua and the Territory of New Guinea.

§ 2. Finance.

The following table shows particulars of the financial operations of the Papua and New Guinea Administration for the years 1950–51 to 1954–55. Further information on each Territory will be found on pages 130 and 137.

TERRITORY OF PAPUA AND NEW GUINEA: REVENUE AND EXPENDITURE.
(£.)

Particulars.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
REVENUE.					
Taxation—					
Customs Duties	970,881	1,475,117	1,455,055	1,931,851	2,089,143
Motor Registration	10,498	27,374	30,914	36,544	42,372
Stamp Duties	13,267	10,742	7,217	36,266	32,043
Licences	10,915	13,221	20,785	24,759	26,312
Business Undertakings—					
Post Office	69,966	94,946	158,013	126,861	134,653
Harbour Dues, Wharfage, etc. .. .	144,707	111,566	87,901	52,818	63,650
Electricity Supply	48,455	65,573	91,401	111,699	168,869
Sale of Timber	22,087	85,872	72,415	110,491	96,384
Copra and Rubber Production .. .	61,497	65,786	54,100	41,352	44,508
Other Agricultural Production .. .						9,873	12,345	16,760	13,970
Water Supply and Sewerage .. .	422	375	9,371	23,462	15,267
Lands—					
Mining—					
Royalty on Gold	67,844	79,684	109,246	71,480	66,446
Other	10,955	9,079	9,612	8,977	9,412
Forestry	11,349	19,804	21,947	34,388	58,588
Land Sales, Rents, etc.	19,835	36,450	47,296	52,838	101,618
Commonwealth Grant	4,354,563	5,285,559	4,657,022	5,421,981	7,125,687
Fees and Fines	43,552	49,837	55,620	55,597	67,485
All Other	360,019	235,568	191,095	233,259	123,632
Total	6,220,812	7,676,426	7,091,355	8,391,383	10,280,039
EXPENDITURE.					
Business Undertakings—					
Post Office	183,769	246,527	255,187	275,457	363,989
Harbours	70,656	91,330	55,375	56,588	65,434
Electricity Supply	153,460	258,296	294,142	310,137	321,598
Saw-mill	48,657	52,958	87,646	88,897	85,358
Water Supply and Sewerage .. .	29,407	60,699	58,160	71,693	83,284
Social Expenditure—					
Education	331,944	376,799	331,172	389,590	466,291
Grants to Missions for Education .. .	68,831	68,994	85,959	90,342	107,036
Public Health, Hospitals, etc. .. .	1,183,126	1,362,027	1,092,459	1,245,493	1,655,817
Mission Medical Services—Grants .. .	153,532	117,517	153,200	130,043	191,295
Law, Order and Public Safety .. .	487,295	557,380	511,523	542,221	608,729
District Services and Native Affairs—					
Compensation to Natives for War Damage	116,422	286,653	280,505	196,504	92,135
Other	837,106	951,419	737,692	750,218	808,941
Capital Works and Services	1,413,234	1,755,970	1,592,690	2,258,150	3,142,899
All Other	1,308,973	1,509,688	1,586,464	1,929,765	2,255,997
Total	6,386,412	7,696,257	7,122,174	8,335,098	10,248,803

§ 3. Agriculture and Animal Industry.

1. Soils.—Although a large proportion of Papua and New Guinea is covered by skeletal soils unsuitable for agriculture, there are extensive areas in all parts where fertile soils occur, suitable for growing a wide range of crops. Most of the agriculture of the Territory up to the present has been on soils on the coastal plains, which, apart from the swamp soils, consist mainly of alluvium and podsolized alluvium. So far, these have been mostly under coconut plantations, although other crops such as rubber and cocoa have also been grown. The swamp soils, of which there are extensive areas in the Delta plains and other parts of the Gulf of Papua, and in smaller areas, are found intermittently around the coasts and along the lower reaches of the rivers, and are in general quite unsuited to any form of agricultural development.

Volcanic soils probably offer the greatest prospects for development. They are found mostly on the Central Plateau and southern foothills of the main island, but there are also areas in New Britain (particularly in the Gazelle and Willaumez Peninsulas),

Bougainville and New Ireland, as well as in numbers of smaller islands. Other rich soils are the alluvials of the river valleys. The largest single area of this type is in the trough occupied by the Ramu and Markham Rivers.

2. Climate.—The climate, particularly the rainfall, over so wide an area as Papua and New Guinea, with its numerous islands and varying elevations, naturally presents many variations. Generally speaking, the climate is moist and tropical, except at high altitudes. There are only small differences in both daily and seasonal extremes. The Territory has no winter and summer, and thus no great variation in day-length over the year. The two seasons which are experienced are generally described as the "south-east" and the "north-west", corresponding with the periods of the year when the south-east trade winds and the north-west monsoons direct the main Territory air-flow. The south-east season prevails approximately from May to October, the trade winds attaining maximum velocities during July and August. The north-west monsoon operates over a considerably shorter period, between the end of December and about March. During the periods between these seasons, November and early December, and about March to April, there are two short spells of calm weather.

Rainfall varies considerably, from an average annual rainfall of 245 in. at Gasmata in New Britain and 231 in. at Kikori in Papua, to about 88 in. at Wewak in New Guinea and 40 in. at Port Moresby.

Although the Territory has no summer and winter, it has a wide temperature range, due to differences in altitude, varying from an absolute highest temperature of about 100° F. along the coast, to freezing point on its highest peak, Mt. Wilhelm (15,400 ft.).

Humidity in the Territory is very high throughout the year. Some coastal stations register an average relative humidity of more than 90 per cent. Humidities below 60 per cent. are rare at coastal stations, average figures varying from 80 per cent. at 9 a.m. to 65 per cent. at noon and 75 per cent. at 3 p.m. Humidity in mid-mountain forests appears to be higher than in the lowlands, while in the mossy forests there are periods when the whole belt is saturated.

3. Suitable Crops.—The crops which can be grown in Papua and New Guinea include coconuts, rubber, tea, coffee, cocoa, jute, kenaf, manila hemp, sisal, rice, pepper, tobacco, peanuts, kapok, cassava, ginger, cinchona, nutmeg, vanilla, tropical fruits and vegetables, sago and tung oil.

The agricultural commodities which, because of their marketing prospects and suitability for production in the Territory, are considered to have the best possibility for development, are copra, rubber, cocoa and coffee.

4. Plantation Agriculture.—The principal plantation crops cultivated are coconuts, rubber, cocoa and coffee.

Coconuts. Territory coconut plantations suffered severely from damage and neglect during the 1939–45 War, but rehabilitation has been rapid and about 500 plantations together with native coconut stands produced 79,582 tons of copra for export in 1954–55, valued at £5,676,978. The area (excluding native stands) planted with coconut palms in March, 1955, was 245,430 acres. In addition, 8,660 tons of coconut oil valued at £1,215,662 and about 3,000 tons of coconut meal and cake valued at £81,523 were exported in 1954–55. A copra crushing mill was established at Rabaul in 1952. Native stands produce about 20 per cent. of the copra exported.

A contract with the United Kingdom commenced on 1st March, 1949, for a period of nine years, for the sale of Territory copra in excess of Territory and Australian requirements. The price of copra sold for the first contract year, 1949, was £60 per ton f.o.b. Territory ports, and the contract provides that the price for each subsequent year is to be not more than 10 per cent. higher or lower than that for the preceding year and is to be negotiated before the end of the preceding year. Early in 1952, the termination date of the contract was varied to 31st December, 1957, and prices are now negotiated on the basis of calendar years. The price for the calendar year 1956 was £73 2s. 6d. per ton f.o.b. Territory ports for fair merchantable sun-dried copra with small price differentials for other grades.

Rubber. Rubber exports have more than doubled since before the Japanese invasion, increasing from an average of 1,352 tons per year during the three years 1937–38 to 1939–40 to 3,592 tons in 1954–55, valued at £953,623. A total area of 27,623 acres had been planted with rubber trees up to March, 1955.

Cocoa. Exports of cocoa beans increased from 207 tons in 1949–50 to 1,106 tons in 1954–55, valued at £525,518. The area (excluding native stands) planted with cocoa trees in March, 1955, was 27,767 acres.

Coffee. Exports of coffee beans increased from 21 tons in 1949–50 to 107 tons in 1954–55, valued at £74,854. The area (excluding native stands) planted with coffee trees in March, 1955, was 1,807 acres.

5. **Native Agriculture.**—Most of the native inhabitants of Papua and New Guinea are agriculturalists producing fruit and vegetables for their own consumption. The crops grown vary according to environment and altitude, and include yams, taro and sweet potatoes, coconuts, bananas, papaws, maize, sugar-cane, cassava, beans, peanuts, rice, cucurbits and tobacco. Sago is the staple food in the extensive semi-inundated areas which occur along the lower valleys of the major rivers. In these areas, it is usually cut largely from naturally occurring stands. In other parts of the country, small areas of sago are grown along stream banks and in swampy patches and are regarded as a reserve in times of poor harvest. In recent years, the natives have taken up the production of introduced crops such as peanuts, rice, cucurbits and maize for their own consumption and cocoa and coffee for export. In coconut areas, large quantities of copra are produced. In 1954–55, native copra production was estimated at about 20,000 tons.

In many localities, the natives follow a farming system known as “Bush Fallowing Rotation”. The inhabitants of each village have, at any one time, a number of distinct and separate cleared garden areas in the land surrounding the village. The garden clearings may be located some miles from the village and are not usually contiguous. Each garden area may be made up of a number of distinct plots owned by individual natives or families. Communal ownership of gardens is rare. The number of garden clearings (and their area) attached to each village depends on the size of the village and the fertility of the land.

The method of cultivation followed is for the jungle trees to be felled and undergrowth cleared with axes and knives, the larger trees being usually left standing. The timber and foliage is allowed to dry out and then burnt. In some localities, there is a little cultivation before the crops are planted, and root vegetables are placed in holes dug with a stick. In other places, however, there is careful preparation of the soil. Some weeding is done while the crops are growing. After harvesting, a second crop is rarely planted immediately in that garden area, but a new area of land is selected, cleared, burnt and planted. The natives return to the first area to harvest fruit from trees, such as papaw and banana, that may have been planted in the garden, but these are soon submerged in the new growth which quickly appears. The plot is allowed to lie fallow for a number of years, the period varying from 7 to 10 years or even longer, depending upon the local population pressure. During this time, high secondary jungle has probably grown. Ultimately the natives return to the original plot, and clear, burn and plant again. The cycle continues year by year throughout the agricultural land belonging to the village. The foregoing is a broad generalization of the method followed. There are, however, many variations.

The business of growing food is done by both the men and women. The division of work is usually clearly defined within the village itself but this division is not necessarily the same in all areas. Generally it is found that felling the forests is always done by the men, and carrying the harvested food home to the village is nearly always done by the women. Other work, however, such as cultivating, planting and weeding may be done by either men or women according to the customs of the particular village or area.

The advancement of native agriculture for local food supply and improved land use in village gardens, as well as for economic production of crops for sale, has a high priority in Government policy for the Territory.

6. **Animal Industry.**—At 31st March, 1955, the livestock in the Territory consisted of 9,352 cattle, 1,466 sheep, 4,145 goats, 5,310 pigs, besides horses, mules and poultry. These figures exclude native-owned livestock. The introduction of rabbits, foxes, hares and monkeys is prohibited.

A number of British breeds of cattle are represented in Territory herds. For dairying, Jersey and Australian Ilawarra Shorthorns are most popular; Black Polled, Polled and Horned Shorthorns, and Red Polled cattle are raised for meat production. Under good management these breeds have done well in the Territory.

Most of the sheep now in the Territory are Romney Marsh breed located at Nondugl in the highlands of New Guinea. This breed has been tried in various parts of the Territory. It produces a good carcass, and in drier parts a useful sheep. There are also

some Asiatic sheep, and crossed with Romney Marsh they produce good carcasses and are hardy. Current investigations on sheep raising which include tests and observations to determine the most suitable breeds and areas for grazing for both mutton and wool are based on the Hallstrom Livestock Station in New Guinea.

7. *Co-operative Societies.*—There has been a rapid increase in organised co-operative societies in recent years. Societies now total 198, membership, 54,250, and turnover, £962,603.

PAPUA.

§ 1. General Description.

1. *Early Administration.*—Particulars of the early administration of Papua are given in Official Year Book No. 19, p. 576.

2. *Administration by the Commonwealth of Australia.*—The Territory was placed under the authority of the Commonwealth on 1st September, 1906, by proclamation issued in pursuance of Letters Patent of 18th March, 1902, and was accepted by the Commonwealth by the Papua Act, 1905, which came into force by virtue of the aforesaid proclamation. The transfer was made under the authority of Section 122 of the Constitution. The Territory is now under the control of the Commonwealth, but not included within it, and is divided into six magisterial districts, namely, Southern Highlands, Western, Gulf, Central, Milne Bay and Northern.

3. *Area, etc.*—Papua lies wholly within the tropics. The northernmost point touches 5° S. latitude ; its southernmost portion, comprising Tagula and Rossel Islands, lies between 11° S. and 12° S. latitude. It is separated from Australia by Torres Strait. The length of Papua from east to west is upwards of 920 miles ; towards either end the breadth from north to south is about 200 miles, but about the centre it is considerably narrower. The Territory comprises also the islands of the Trobriand, Woodlark, D'Entrecasteaux and Louisiade groups. The length of coast-line is estimated at 3,664 miles—1,728 on the mainland, and 1,936 on the islands. The total area is about 90,600 square miles, of which 87,806 are on the mainland, and 2,794 on the islands. A reference to the physical characteristics of the Territory appears in previous issues of the Official Year Book (*see* No. 18, p. 633).

§ 2. Population.

1. *Non-indigenous Population.*—At the Census of 30th June, 1954, the non-indigenous population of Papua was 3,867 males, 2,446 females, 6,313 persons. Corresponding figures at the Census of 30th June, 1947, were, respectively, 2,057, 1,182 and 3,239.

The European population of Papua increased slowly, and with some reversals in trend, from less than 700 in 1906, the year in which the Territory came under Commonwealth control, to 1,343 at the Census of 1921. It numbered only 1,148 at the 1933 Census, but at the 1954 Census amounted to 5,295 (3,372 males and 1,923 females).

The non-European section of the non-indigenous population at 30th June, 1954 was 1,018, of whom 34 were full-bloods and 984 were half-castes with one of the parents a European. Comparable figures as at the 1947 and 1933 Censuses, respectively, were :—full-bloods—194 and 786 ; half-castes—503 and 227.

2. *Native Population.*—It is not possible to give exact data regarding the number of natives, because part of the interior is not as yet under complete Government control. However, the enumerated and estimated population of the Territory of Papua at 30th June, 1955 numbered 439,369 persons. This comprised 289,569 enumerated persons (153,301 males and 136,268 females) and 149,800 estimated. The total number was distributed through districts as follows :—Southern Highlands, 115,712 ; Western, 47,422 ; Gulf (including the former Delta district), 64,098 ; Central, 83,275 ; Milne Bay, 82,583 ; and Northern, 46,279.

§ 3. Native Labour, Taxation and Health.

1. *Native Labour.*—The laws relating to the employment of natives are uniform in Papua and New Guinea, and are contained in the Native Labour Ordinance 1950–53. They provide for the engagement of natives under a permit. Permits are issued by a District Officer, and authorize the holder to engage natives for employment on his own

behalf, or on behalf of a registered employer who has authorized him to act on his behalf. Under this Ordinance, a native may be issued with a Native Assistant's Permit, which authorizes him to solicit natives to work for his employer, or for other employers who have authorized him to act on their behalf.

Natives are employed under written agreements which have been sanctioned and attested by a District Officer. The period of the agreement must not exceed two years, but one further agreement, for a period not exceeding one year, may be drawn up, if both parties desire it. The period, in both cases, begins on the day on which the agreement is sanctioned and attested. Both parties may, by mutual consent, and with the approval of a District Officer, cancel an agreement. On the termination of an agreement, employers are required to repatriate workers to their own villages.

Natives under the age of sixteen years may not be employed. Employers must provide native employees with housing, medical attention, food and clothing free of charge. A minimum monthly wage of fifteen shillings and a working week of 44 hours are prescribed by Ordinance. Provision is also made for compensation in the case of injury or death.

2. **Native Taxes.**—No direct taxes have been levied on natives since the war. Native Village Councils (which are formed voluntarily by the natives) are, however, empowered to levy rates on villagers for the purpose of providing for local services carried out by the Councils.

3. **Health.**—The Department of Health has the general oversight of all medical and dental services. It maintains a large number of hospitals, which are staffed by fully-trained European medical personnel and trained native assistants, for both European and native patients. The Department has adequate facilities for research in tropical medicine.

At 30th June, 1955, there were in the Territory three European hospitals (one privately controlled); 33 native hospitals (one private and 14 mission); one mental hospital; 242 village aid posts (76 mission); 112 welfare clinics (35 mission); and three Hansende colonies. The Missions employ their own doctors and nurses in their medical establishments. A training school has been established for the purpose of training natives in first aid, elementary physics, chemistry, anatomy, physiology and pathology in preparation for their employment as Native Medical Assistants. Natives are also attending the Central Medical School at Suva, Fiji, to be trained as Native Medical Practitioners and for other medical occupations. The chief complaints treated in hospital are malaria, yaws, tropical ulcers, respiratory infections, hookworm, venereal and skin diseases.

§ 4. Land Tenure.

The basic principle of the land laws of Papua is that all land not specifically alienated by due process from the natives, or established to be vacant and ownerless, is native land. At 30th June, 1955, of the total estimated area of Papua, approximately 58,000,000 acres, only 1,895,437 acres had been alienated. The distribution of alienated land at 30th June, 1955, according to tenure, was as follows:—Held by private non-indigenous inhabitants—freehold, 24,280 acres, leasehold, 301,456 acres; held by administration, 1,502,374 acres; native reserves, 67,327 acres; total, 1,895,437 acres.

Although, as the figures above show, a small amount of freehold land exists in Papua, no further estates in freehold can be granted under the provisions of the Land Ordinance 1911-1952 of Papua. Leases of various kinds may be granted by the Administration. The principal types of leases available are agricultural leases, pastoral leases, leases of town allotments, business leases and residence leases of other than town allotments, and various forms of special leases and licences over land. Leasehold terms are liberal and, in general, leases may be granted for periods of up to 99 years. Rent is based on the unimproved value of the land. For agricultural leases, the rental rate per annum is 5 per cent. of the unimproved value and for pastoral leases the rate is 2½ per cent. Concessions regarding freedom from, or reduction of, rents apply during the early developmental periods of agricultural and pastoral leases. All leases are subject to improvement conditions which may be varied or relaxed under certain circumstances. The following classes of leases were in force in Papua at 30th June, 1955:—Agricultural, 655—256,618 acres; pastoral, 28—42,373 acres; residence, 155—216 acres; special, 174—938 acres; mission, 330—861 acres; business, 112—222 acres; town allotment, 548—224 acres; agricultural lease granted to mission, 1—4 acres; total, 2,003—301,456 acres.

Leases of Crown land are granted by the Administrator following a land use examination, advertisement of leases available and consideration of applications by the Land Board. Dealings in privately-owned land are a matter for private treaty. Native-owned land, however, cannot be acquired or leased from the native owners by private individuals. The Administration alone may purchase native-owned land, and then only if the owners are willing to sell and the Administration is satisfied that the owners do not require, and are not likely to require, the land.

The registration of titles, interests and dealings in alienated land is provided for under the Real Property Ordinance 1913-1951 modelled on the Torrens system of land registration. A start has been made on the recording of native land ownership under the Native Land Registration Ordinance 1952.

§ 5. Production.

1. *General.*—The products of the Territory are obtained from its agricultural, forest mining and fishing industries. A factory for the extraction of cutch from mangrove bark has been established at Kikori in the Gulf District. Native subsistence agriculture, fishing and hunting produce most of the food requirements of the native population. The main native agricultural products are taro, yams, sweet potatoes, bananas and papaw. Peanuts are becoming of increasing importance in native diet. Non-indigenous enterprise produces most of the commodities exported. Natives however, do produce copra for export and native enterprise in other fields of agricultural production for export purposes, e.g., cocoa, coffee and passion fruit, is being encouraged. The principal agricultural products of Papua for the export trade are copra and rubber. Practically all the timber milled during 1954-55 was absorbed by local building requirements. The main products of fisheries exported from Papua are trochus and green snail shell. Gold and manganese, zinc-lead and copper ores have been mined in commercial quantities.

Agricultural and pastoral conditions in Papua and New Guinea have, for the sake of convenience, been dealt with as a whole, and reference should be made to pp. 122-125 for information on the soils, climate, crops, methods of cultivation, etc., throughout both Territories. The following paragraphs relate to forestry, mining, fisheries and water-power resources in Papua.

2. *Forestry.*—(i) *General.* A general description of the forest policy which applies in Papua as well as in the Trust Territory of New Guinea is given under the heading "Timber" on page 133.

(ii) *Timbers.* Mixed species tropical rain forest covers most of Papua, although north-east of Port Moresby there is an area of monsoonal savannah country. Because of the mixed nature of the timbers in any one area, their utilization on an economical basis is somewhat difficult. Kwila, the most important hardwood found in millable quantities in Papua and New Guinea occurs in important stands east of Port Moresby. Mangroves occur in large areas fringing the Gulf of Papua and are cut for the preparation of cutch from the bark.

(iii) *Survey Work.* Forestry field work is being carried out in Papua with a view to assessing the forest resources available and to survey areas that will be thrown open for cutting. In the middle of 1956, tenders were called for approximately 50 million super. feet of logs on the Brown River area near Port Moresby.

(iv) *Permits.* At 30th June, 1955, fourteen permits were current. The total area of forest involved was 70,753 acres. Cutting on private land brought the total number of mills to 22, and the total sawn-timber produced for the year to 2.5 million super. feet. Ten tons of cutch were exported, but exports of timber were negligible.

3. *Mining.*—(i) *Variety of Minerals.* Although a large number of minerals have been found in Papua including platinum, gold, silver, copper, tin, lead, zinc, cinnabar, iron, osmiridium, manganese, sulphur, chromite, gypsum and lignite, most deposits are not of economic importance.

Gold was discovered in 1888 and has been found in many parts of Papua. Before the 1939-45 War, gold was an important item in the Territory's production and in 1938-39 (valued at more than £150,000) was the major export, but since the war gold production has dwindled to insignificance. Gold production in 1954-55 was 994 fine oz. and in 1953-54 280 fine oz. compared with an average of almost 28,000 fine oz., for the last three pre-war years. During 1954-55 the production of gold realized £15,532, bringing the total value of gold won up to 30th June, 1955, to £3,315,368.

Manganese ore valued at £1,290 was exported from Papua during the year ended 30th June, 1955. Large quantities of copper ore were mined and exported, up to 1940. Good samples of galena (sulphide of lead) have been obtained, but other minerals are not found in commercial quantities.

(ii) *Oil Search.* Since the search for oil began in Papua in 1911, nearly £20 million has been spent. The existence of petroleum has been traced at scattered intervals over a large area, but commercial quantities have not been discovered. At 30th June, 1955, three companies held petroleum prospecting permits under the provisions of the Petroleum (Prospecting and Mining) Ordinance 1951-1954. Oil prospecting is, at present, confined mainly to the Gulf and Western Divisions.

4. *Fisheries.*—Surveys have been carried out of the resources of swimming fish. They have been demonstrated to be considerable and efforts are being made to increase the small degree of utilization. Shell fishing, particularly trochus, provides the main cash return, exports being valued at £112,000 in 1954-55.

5. *Water Power.*—Most of the rivers in Papua carry a large volume of water from a great height over a relatively short distance, thereby offering opportunities for the installation of hydro-electric power plants. It is estimated that there is at least 10 million horse-power available for this purpose.

§ 6. Trade, Transport and Communication.

1. *Customs Tariff.*—The present customs tariff has been in operation since 1st July, 1950. It provides high revenue rates on ale, spirits, wines, timepieces, cigarette papers, fancy goods and jewellery. Of 78 items now mentioned in the import schedule, 59 are on the free list and two are partially free. The tariff allows duty-free treatment of most necessities, but increases rates on non-necessities. There is a by-law provision under the Customs Tariff to enable duty-free admission to be granted for plant and machinery to be used mainly for developmental purposes and for goods imported by passengers. The general rate of duty on items not specified in the schedule is 5 per cent. *ad valorem*. No preferential rates are specified in the schedule. Export duties are imposed on copra, cocoa, rubber, mother-of-pearl, trochus and burgos shell, and gold.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1936 for the free entry into Australia of certain goods produced in and imported direct from Papua (*see* Chapter X.—Trade), and a proclamation of 25th September, 1935, exempted from primage duty goods produced or manufactured in the Territory.

2. *Imports and Exports.*—(i) *Total Values.* The table below summarizes and compares the values of imports and exports for the pre-war year 1938-39 and the post-war years 1952-53 to 1954-55.

TERRITORY OF PAPUA : IMPORTS AND EXPORTS.

(£.)

Particulars.	1938-39.	1952-53.	1953-54.	1954-55.
<i>Imports</i>	514,808	4,895,869	5,722,166	8,218,343
<i>Exports</i> —				
Domestic Exports	410,666	1,985,535	1,616,786	2,344,471
Non-Domestic Exports	79,492	337,370	304,376	308,170
<i>Total Exports</i>	490,158	2,322,905	1,921,162	2,652,641

(ii) *Imports.* The following table summarizes the countries of origin of imports. In the post-war years Australia has supplied a far greater proportion of the imports than was the case pre-war and this proportion has continued to increase in each successive post-war year. The increase in total imports in 1954-55 was due partly to increased purchasing power arising from the higher Commonwealth Government grant and from increased exports.

TERRITORY OF PAPUA : COUNTRY OF ORIGIN OF IMPORTS.

(£.)

Country of Origin.	1938-39.	1952-53.	1953-54.	1954-55.
Australia	239,105	3,691,696	4,167,341	5,630,933
Canada	(a)	22,102	4,305	(a)
China .. .. .	..	6,861	11,670	(a)
Hong Kong .. .. .	..	55,426	132,236	162,565
India .. .. .	..	36,038	36,199	(a)
United Kingdom	56,699	276,570	420,071	681,788
United States of America	73,446	332,307	422,658	884,764
Other Countries	145,558	474,869	527,686	858,293
Total Imports	514,808	4,895,869	5,722,166	8,218,343

(a) Not available, included in "Other countries".

(iii) *Exports. (a) Countries of Destination.* The countries of destination of Papuan exports are shown below. The increase during 1954-55 in the value of total exports, and of exports to Australia in particular, was due mainly to the higher price of rubber. Australia imports practically the whole of the Territory's production of this crop.

TERRITORY OF PAPUA : COUNTRY OF DESTINATION OF EXPORTS.

(£.)

Country of Destination.	1938-39.	1952-53.	1953-54.	1954-55.
Australia	409,408	1,917,493	1,690,060	2,122,788
United Kingdom	25,840	342,014	154,483	472,540
Other Countries	54,910	63,398	76,619	57,313
Total Exports	490,158	2,322,905	1,921,162	2,652,641

(b) *Principal Commodities.* The following table provides details of the value of the principal domestic exports for the same years. The increase in value of total domestic exports during 1954-55 was caused mainly by higher returns from rubber, copra and shell.

TERRITORY OF PAPUA : PRINCIPAL DOMESTIC EXPORTS.

(£.)

Commodity.	1938-39.	1952-53.	1953-54.	1954-55.
Rubber	114,949	736,073	612,788	953,623
Copra	57,999	848,177	883,814	1,208,317
Other Coconut Products	48,140	328,134	27,617	..
Cocoa Beans .. .. .	..	3,111	3,638	13,314
Kenaf Fibre .. .. .	..	5,740	1,308	1,926
Gold	152,103	2,051	4,785	16,548
Shell (Marine)	9,600	41,220	38,803	111,652
Hides and Skins (Crocodile)	105	13,823	23,038	22,136
Other	27,770	7,206	20,995	16,955
Total Domestic Exports	410,666	1,985,535	1,616,786	2,344,471

3. **Shipping.**—In 1953–54, 150 British and one vessel of other nationality called at Territory ports and discharged 62,035 tons of cargo and loaded 27,111 tons. Corresponding figures for 1954–55 were 154, four, 88,602 and 29,106 respectively.

Regular passenger and freight services operate between Australia, New Guinea and Papua. Vessels trading between Australia and the East also call at Territory ports, and there are occasional ships to the United Kingdom and the United States of America. Coastal and inter-island shipping services are maintained by vessels operating from the two principal ports of Port Moresby and Samarai.

4. **Other Forms of Transport and Communication.**—Air services link Papua with Australia, New Guinea and the British Solomon Islands. There were 38 aerodromes and seaplane alighting areas in Papua at 30th June, 1955, and of these, 18 were the responsibility of the Department of Civil Aviation, 12 were operated and maintained by the Administration, and eight owned and maintained by Missions, plantations and mining interests. Much of the internal traffic and freight is carried on a charter basis. Regular air services operate from Port Moresby to Daru and Lake Kutubu in the West, Samarai and Esa Ala in the East, and to various centres in New Guinea.

There are nearly 1,180 miles of road in Papua, of which about 516 miles are suitable for medium and heavy traffic, the greater proportion being located in the Central and Northern Districts, which are north-east of Port Moresby.

Telephone services operate in the main centres. The radio station at Port Moresby for both transmission and reception is jointly shared by the Overseas Telecommunications Commission and the Administration. The former provides a service between Papua, Australia and the Territory of New Guinea, while the latter operates radio telephone and radio telegraph services from Port Moresby and Samarai to outstations.

Medium and short-wave programmes are broadcast from the Australian Broadcasting Commission stations 9PA and VLT located at Port Moresby.

§ 7. Finance.

The principal source of revenue for the Territory of Papua is the annual grant received from the Commonwealth Government, which in 1954–55 amounted to £2,729,478. Customs duties, £724,330 in 1954–55, are next in importance. The total revenue during 1954–55 was £3,875,385 compared with £3,296,593 in 1953–54. Of a total expenditure of £3,844,149 in 1954–55, £1,804,021 was spent on public works, £600,773 on medical services, £231,552 on native affairs and £1,207,803 on ordinary votes. Expenditure amounted to £3,240,309 in 1953–54.

For particulars of the finances of the combined Territory administration, see p. 121.

TRUST TERRITORY OF NEW GUINEA.

§ 1. General Description.

The land area of the Territory of New Guinea is about 93,000 square miles and the area, including the sea; within the lines drawn through its extreme outer points is more than one million square miles. As the coast of the Territory has not been completely surveyed, the areas of the various islands are known only approximately.

The approximate areas of the principal islands, together with the small islands adjacent thereto, are as follows :—North-East New Guinea, also called the mainland, 70,200 sq. miles; Bismarck Archipelago—New Britain, 14,100 sq. miles, New Ireland, 3,340 sq. miles, Lavongai, 460 sq. miles, Admiralty Islands, 800 sq. miles, total Bismarck Archipelago, 18,700 sq. miles; Solomon Islands—Bougainville, 3,880 sq. miles, Buka, 220 sq. miles, total Solomon Islands, 4,100 sq. miles; grand total, 93,000 sq. miles.

Information regarding physiography and climate will be found in Official Year Book No. 22, p. 613, and in the *Official Handbook of the Territory of New Guinea*.

§ 2. Government.

1. **The Military Occupation (1914–18 War).**—On 17th September, 1914, the Acting Governor of German New Guinea signed terms of capitulation with the officer commanding a Naval and Military Expedition sent from Australia, and thereafter the Territory was under military administration until the establishment of Civil Government on 9th May, 1921.

2. **Mandate (1920).**—In 1919, it was decided by the Principal Allied and Associated Powers that the Territory of New Guinea, which Germany gave up as one of the terms of peace, should be entrusted under Mandate from the League of Nations to the Government of the Commonwealth. The issuing of the Mandate was, however, delayed, and it was not until 17th December, 1920, that its terms were settled, and the Mandate itself did not reach Australia until April, 1921.

The terms of the Mandate are given in *Official Year Book No. 33* (see p. 264).

3. **1939–45 War.**—For the events following the outbreak of the Pacific War and the formation of the Papua-New Guinea Provisional Administration in 1945, see p. 121 of this chapter and earlier issues of the *Official Year Book*.

4. **Trusteeship (1946).**—The Commonwealth Government undertook to place the Territory of New Guinea under the Trusteeship System established under the Charter of the United Nations. The Trusteeship Agreement for the Territory, under which the Government of Australia is the sole administering authority, was approved by the General Assembly of the United Nations Organization on 13th December, 1946. The terms of the Agreement are shown in *Official Year Book No. 39*, pp. 355–7.

5. **Administration.**—For particulars of the administration of the Territory of New Guinea prior to the setting-up of the Papua and New Guinea Administration see *Official Year Book No. 36* and earlier issues.

For administrative purposes, the Territory is divided into the following nine districts :—New Britain, comprising New Britain and adjacent islands ; Morobe, Madang, Eastern Highlands, Western Highlands, and Sepik on the mainland ; New Ireland, comprising New Ireland, Lavongai and adjacent islands ; Manus, comprising the Admiralty Group ; and Bougainville in the Solomon Islands. Each district is administered by a District Commissioner.

§ 3. Population.

1. **Non-indigenous Population.**—At the Census of 30th June, 1954, the non-indigenous population of the Territory of New Guinea was 7,201 males, 4,241, females 11,442 persons. The total non-indigenous population at the Censuses of 1921, 1933 and 1947 was, respectively, 3,173, 5,216 and 6,200 persons.

The European population of the Territory increased from 64 in 1885 to 3,191 at the Census of 1933, and it reached its pre-war peak of 4,608 in 1939. At the 1954 Census, the European population numbered 8,020 (5,185 males and 2,835 females).

Malays seem to have been the first Asians brought by the Germans to German New Guinea ; 37 of them were recorded on the mainland in 1885. About 1889, the New Guinea Company began to bring Chinese, Malays and Javanese in growing numbers from Singapore and Java to work on the plantations ; in the year 1892, there were about 1,800 Asians on the mainland. By 1898, the number had decreased to 300 or 400, but it had risen to 1,830 at the time of the 1933 Census, and at 30th June, 1941, numbered 2,228, mostly Chinese. At the Census of 30th June, 1954, non-Europeans numbered 2,404, of whom Chinese (2,192) constituted the major proportion, whilst half-castes with one of the parents a European numbered 1,018.

2. **Native Population.**—The enumerated and estimated native population of the Territory of New Guinea as at 30th June, 1955 numbered 1,241,615 persons, comprising enumerated, 1,086,518 (577,602 males and 508,916 females), and estimated, 155,097. The total population was distributed throughout the several districts as follows :—Eastern Highlands, 302,537 persons ; Western Highlands, 222,801 ; Sepik, 211,309 ; Madang, 119,142 ; Morobe, 194,777 ; New Britain, 90,857 ; New Ireland, 35,596 ; Bougainville, 49,042 ; Manus, 15,554.

§ 4. The Natives.

1. **General.**—The natives are divided into two main groups—Melanesian and Papuan—the former, with a few exceptions, constituting the population of the Bismarck Archipelago, the Solomon Islands, and the coastal districts of the New Guinea mainland, the latter inhabiting the interior of the mainland. Some tribes of Negritos exist in the mountains of New Guinea. There is a strain of Papuan, and possibly, of Polynesian blood in the Admiralty Islanders, while the Western Islanders and the inhabitants of the small islands east and south-east of New Ireland are Micronesians. (See *Official Year Book No. 16*, p. 670, and *Official Handbook of the Territory of New Guinea*, Pt. V.)

2. **Land Tenure.**—Native customs in regard to the ownership and use of land may be briefly outlined as follows. The ownership and use of the land are generally individual, although, in some rare cases, particularly in North Bougainville, the communal system exists. In districts where a great many coconut palms are growing on native lands, it is often found that the land is the property of a chief or of one of the old men of the tribe, and that the coconut palms growing thereon are divided into small groves, and are the property of several members of the tribe. Customs with regard to the use of unoccupied forest lands vary. Right of inheritance to land is almost invariably through the maternal branch. (See Official Year Book No. 17, p. 634, and *Official Handbook of the Territory of New Guinea*.)

3. **Research Work.**—Research work among the native peoples of New Guinea was initiated under the German Administration and this work has been continued since on a wider scale.

4. **Education.**—Education in the Territory is provided by the Administration and various mission organizations. Schools for natives have also been established by Native Village Councils. The Education Ordinance 1952 enables the Administrator to establish an education advisory board, district education committees, European and native schools and to grant financial aid for educational purposes. European teachers are recruited from Australia, and native teachers are trained in the Territory by the Administration and the Missions. During the year ended 30th June, 1955, 95 schools were maintained by the Administration for 5,498 children, of whom 546 were Europeans, 403 Asians, 18 of mixed race and 4,531 natives. The total number of pupils in the various grades of mission schools was 106,559, of whom there were 80 Europeans, 342 Asians and 181 of mixed race. To assist the educational work of the Missions, the Administration provides expert advice, educational equipment and text-books. In addition, the sum of £70,040 was distributed among the Missions as grants-in-aid during the year ended 30th June, 1955.

5. **Health of Natives.**—The main diseases affecting the natives are malaria, yaws, respiratory diseases, dysentery, tropical ulcers, hookworm and filariasis. The Department of Health is engaged in combating these diseases with a staff of fully-trained medical officers, medical assistants and orderlies in native hospitals at Administration stations and sub-stations. Its staff also supervises hospitals on plantations. It has adequate facilities for research in tropical medicine, and a training scheme for natives as medical orderlies. The Department also provides the Missions with much of their medical stores and supplies, and maintains two Hansenide colonies for the treatment of natives suffering from Hansen's Disease. The Department also undertakes the general oversight of sanitary conditions in the Territory.

6. **Missions.**—A number of mission societies operate in the Territory.

The Society of the Sacred Heart of Jesus works in the Bismarck Archipelago, the Society of the Holy Ghost, the Franciscan Order and the Society of the Divine Word along the coast of north-east New Guinea from Sepik to the Dutch border and in the Central Highlands, and the Marists in Buka and Bougainville. These are Roman Catholic Missions. The Protestant Missions include the Methodist Overseas Mission in New Britain and New Ireland, the New Zealand Methodist Mission in Bougainville, the Lutheran Mission (supported and staffed by the Lutheran Churches in Australia and America) which works in Morobe, Madang, the Eastern and Western Highlands, New Britain and Manus, the New Guinea Anglican Mission in New Britain, the Seventh Day Adventist Mission in Bougainville, New Britain and the mainland of New Guinea, the East and West Indies Bible Mission and the Baptist Mission in the Central Highlands. The South Seas Evangelical Mission (Udenominational) and the Assemblies of God Mission are also working in the Sepik area. All these societies include teaching with their missionary work.

§ 5. Land Tenure.

The principles governing the acquisition and ownership of land and types of tenure available in New Guinea are in general similar to those which obtain in Papua and, although under the Land Ordinance 1922–1951 grants of freehold estates may be made, as a matter of policy all grants are now restricted to leaseholds. In New Guinea, however, the amount of freehold land of earlier origin held by private non-indigenous owners amounts to more than half a million acres. Freehold titles to this land, which includes a good deal of plantation land, may be transferred by purchase subject only to the general provision that dealings in land require the approval of the Administrator.

The area of the Territory of New Guinea is estimated at 59,520,000 acres, of which at 30th June, 1955, 1.89 per cent. was alienated. The following was the distribution of alienated land according to tenure at 30th June, 1955 :—held by private non-indigenous inhabitants—freehold, 518,490 acres, leasehold, 234,835 acres ; held by Administration, 342,226 acres ; native reserves, 26,926 acres ; total, 1,122,477 acres.

Leases in force at 30th June, 1955 were as follows :—Agricultural, 690—198,136 acres ; dairying, 6—1,300 acres ; pastoral, 9—24,606 acres ; residential and business, 1,228—1,171 acres ; special, 135—2,818 acres ; mission, 591—2,147 acres ; leases granted to Chinese in towns, 454—142 acres ; long period leases from German regime, 104—4,515 acres : total, 3,217—234,835 acres.

Under German law there was a system of registration of titles in a " Ground Book ", but registration did not confer an indefeasible title. The German system has been replaced by one modelled on the Torrens plan, embodied in an Ordinance entitled the Lands Registration Ordinance 1924—1951. The land registers were lost during the 1939—45 War, and provision for restoration of the lost titles is made in the New Guinea Land Titles Restoration Ordinance 1951—53. A start has been made on the recording of native land interests under the Native Land Registration Ordinance 1952.

§ 6. Production.

1. **General.**—The products of the Territory are obtained from its agricultural, mining, fishing and forestry industries. A joint government-private enterprise copra crushing mill at Toboi, near Rabaul, is producing coconut oil at the rate of about 8,000—10,000 tons a year. A company (Commonwealth-New Guinea Timbers Ltd.), in which the Commonwealth Government has a controlling interest, has erected a modern factory at Bulolo for the manufacture of high-quality, moisture resistant plywood and veneer. Production commenced in February, 1954. Native subsistence agriculture, fishing and hunting produce most of the food requirements of the native population. The main native agricultural products are taro, yams, sweet potatoes, coconuts, bananas and papaw. Non-indigenous enterprise produces most of the commodities exported. Natives, however, produce copra for export and, in recent years, have taken up the production of introduced crops such as peanuts, rice, cucurbits and maize for their own consumption and cocoa and coffee for export. The principal agricultural products of New Guinea for the export trade are copra and cocoa. Most of the timber milled during 1954—55 was absorbed by local building requirements, exports of sawn timber amounting to approximately 10 per cent. of production. The main products of fisheries exported from New Guinea are trochus and green snail shell, including that collected by natives. Gold is the principal mineral mined.

For information on the agricultural and pastoral industries, which, for the sake of convenience covers the Territory of Papua and New Guinea as a whole, see pp. 122—125. The following paragraphs relate to the timber, fishing and mining industries in the Territory of New Guinea.

2. **Timber.**—Various species of timber are found in the Territory, but the only pure stand is the valuable pine forests of the Bulolo Valley. The main use of this timber is for the production of plywood and veneer by Commonwealth-New Guinea Timbers Ltd., which is consuming a little over 10 million super. feet of logs per annum to produce the equivalent of approximately 35 million square feet of plywood on a $\frac{3}{8}$ inch basis. Exports of plywood in 1954—55 were 21 million square feet, valued at £645,000, while veneer exports of 3.5 million square feet were valued at £36,000. Two and a half million super. feet of logs (some suitable for plywood manufacture) to the value of £59,000, and 1.5 million super. feet of sawn timber valued at £84,000 were also exported in the year. The Territory forests also provided fitches, battery veneer and egg-case parts for export.

The Administration sawmill previously operated at Yalu has been moved to Lae. It and the Administration mill at Keravat in New Britain, provide a considerable amount of sawn timber for local consumption, and serve as a training centre for operatives in the sawmilling industry. The Administration also operates a training centre for forestry workers, nurseries and a herbarium.

The Forestry Ordinance 1936—1951 provides for the issue of permits and licences to cut timber. Present policy calls for the orderly development of the timber industry on sound forestry principles to ensure no waste of the resources and no over-exploitation ; the grant of emergency timber permits to assist in providing timber for Territory requirements ; the disposal by public tender of timber areas designated by forest officials of the Territory ;

and the development of the pine stand in the Bulolo Valley by Commonwealth-New Guinea Timbers Ltd. Timber growing on native lands cannot be acquired by private purchasers direct from the natives but must be obtained through the Administration. A prescribed royalty is payable on all forest produce taken under permit or licence. Re-forestation on areas dedicated for forestry in perpetuity is carried out by the Administration. The forest area being exploited in 1954–55 was approximately 263,900 acres.

3. **Fisheries.**—The wealth of the waters of the Territory has been little exploited, but as the result of surveys and the development of the Administration fisheries service, action is being commenced to promote increased use of the resources. Fish are caught at many places along the coast to supply the small local demand of the natives and of the few resident Europeans. Trochus shell to the value of £173,000 and green snail shell to the value of £46,000 were exported during 1954–55.

4. **Mining.**—The production of gold and associated silver is the most important mining activity in New Guinea. Gold has been discovered on the Waria, the Ramu, the Francisco, and the Markham Rivers, and in tributaries of the Sepik River. Rich gold deposits were discovered in the Morobe District in 1926; the field is situated about 80 miles (40 by air) inland from Lae, the nearest coastal port. Communication is established with the coast by regular air service and by road transport. Silver is found, usually associated with the gold in these deposits. Osmiridium is reported to have been found on the upper tributaries of the Ramu, and platinum on the Kabenau River. Copper has been discovered in the form of chalcopyrite and malachite in the Baining District. Iron occurs as magnetite and haematite in the Baining District, apparently in large quantities. Sulphur occurs in several localities in the volcanic regions of the Territory. Brown coal has been found on the mainland in the vicinity of Astrolabe Bay, and in the southern portion of New Ireland. The commercial production of minerals, other than gold and silver has not been undertaken to date.

The granting of rights, leases and claims for mining purposes is provided for in the Mining Ordinance 1928–1947 and Regulations thereunder.

The production of gold in New Guinea during the last three pre-war years averaged about 228,000 fine oz. a year, valued at £2,000,000. In 1940–41, it amounted to 263,113 fine oz., valued at £2,808,835. Although the market price of gold has been fixed at a much higher level than in 1938–39, mining costs have risen to a much greater extent and consequently production since the war has been on a much smaller scale, averaging 91,000 fine oz., at a value of £1,200,000 a year over the five years ended 1951–52. Production in 1954–55 amounted to 85,726 fine oz., valued at £1,339,474, and in 1953–54 to 90,856 fine oz., valued at £1,409,480.

The Petroleum Ordinance 1936 has been superseded by the Petroleum (Prospecting and Mining) Ordinance 1951–1954, which has facilitated the carrying out of geological surveys and prospecting activities generally. At present one company has a permit to search for petroleum in the Sepik River area.

§ 7. Trade, Transport and Communication.

1. **Customs Tariff.**—The present customs tariff has been in operation since 1st July, 1950. It provides high revenue rates on ale, spirits, wines, timepieces, cigarette papers, fancy goods and jewellery. Of 78 items now mentioned in the import schedule, 59 are on the free list and two are partially free. The tariff allows duty-free treatment of most necessities, but increases rates on non-necessities. There is a by-law provision under the Customs Tariff to enable duty-free admission to be granted for plant and machinery to be used mainly for developmental purposes and for goods imported by passengers. The rate of duty on items not specified in the schedule is 5 per cent. *ad valorem*. No preferential rates are specified in the schedule.

Export duties are imposed on cocoa, copra, trepang, tortoise shell, mother-of-pearl and trochus shell, cassowary, crown pigeon and heron feathers, rubber, sulphur and sulphur-bearing substances.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1936 for the free entry into Australia of certain goods produced in and imported direct from the Territory of New Guinea (*see* Chapter X.—Trade), and a proclamation of 25th September, 1935 exempted from primage duty goods produced or manufactured in the Territory.

2. **Imports and Exports.**—(i) *Total Values.* The table below summarizes and compares the values of imports and exports for the pre-war year 1938–39 and the post-war years 1952–53 to 1954–55.

TERRITORY OF NEW GUINEA : IMPORTS AND EXPORTS.

(£.)

Particulars.	1938-39.	1952-53.	1953-54.	1954-55.
<i>Imports</i>	1,340,835	7,175,612	9,444,628	10,534,758
<i>Exports—</i>				
Domestic Exports	2,960,753	7,515,646	8,681,788	8,912,626
Non-Domestic Exports	13,142	975,750	510,322	471,324
<i>Total Exports</i>	2,973,895	8,491,396	9,192,110	9,383,950

(ii) *Imports.* The following table summarizes the countries of origin of imports. In the post-war years, Australia has supplied a far greater proportion of the imports than she did pre-war and this proportion has continued to increase in each successive post-war year until 1954-55 when it showed a slight decline. The increase in total imports in 1954-55 was due partly to increased purchasing power arising from the higher Commonwealth Government grant and from increased exports.

TERRITORY OF NEW GUINEA : COUNTRY OF ORIGIN OF IMPORTS.

(£.)

Country of Origin.	1938-39.	1952-53.	1953-54.	1954-55.
Australia	563,594	4,756,600	6,319,501	6,476,957
Canada	6,333	27,721	15,931	(a)
China	69,831	2,614	693	(a)
Hong Kong	(a)	238,272	418,468	574,701
India	20,235	222,355	151,667	(a)
United Kingdom	154,501	386,314	579,443	771,676
United States of America	265,591	687,965	991,191	1,070,242
Other Countries	260,750	853,771	967,734	1,641,182
<i>Total Imports</i>	1,340,835	7,175,612	9,444,628	10,534,758

(a) Not available ; included under " Other Countries ".

(iii) *Exports. (a) Countries of Destination.* The countries of destination of New Guinea exports are shown below. The growth in total exports has been outstanding and still continues. A decline in exports to Australia in 1953-54 was caused by decreased production of gold.

TERRITORY OF NEW GUINEA ; COUNTRY OF DESTINATION OF EXPORTS.

(£.)

Country of Destination.	1938-39.	1952-53.	1953-54.	1954-55.
Australia	2,313,127	4,344,448	3,493,369	4,167,996
United Kingdom	337,605	3,864,907	4,754,945	4,573,815
Other Countries	310,021	282,041	943,796	642,139
<i>Total Exports</i>	2,960,753	8,491,396	9,192,110	9,383,950

(b) *Principal Commodities.* The following table provides details of the value of the principal domestic exports for the same years. The increase in value of total domestic exports arose mainly from increased exports of timber, cocoa, coffee and shell which more than offset the continued decline in the returns from gold and the lower prices received for coconut products.

TERRITORY OF NEW GUINEA: PRINCIPAL DOMESTIC EXPORTS.

(£.)

Item.	1938-39.	1952-53.	1953-54.	1954-55.
Copra	727,949	4,425,057	5,031,676	4,467,661
Other Coconut Products	72,274	523,369	1,503,882	1,304,790
Cocoa Beans	6,580	171,876	245,950	512,204
Coffee Beans	843	30,332	58,367	72,575
Peanuts	105	20,853	28,809	27,628
Gold	2,129,263	2,147,766	1,409,480	1,339,473
Silver .. .. .	..	23,399	18,402	17,590
Shell (Marine)	10,649	87,894	170,321	218,965
Timber	6,911	75,833	181,139	902,047
Other	6,179	9,267	33,762	49,693
Total Domestic Exports	2,960,753	7,515,646	8,681,788	8,912,626

3. *Shipping.*—Regular passenger and freight services operate between Australia, Papua and the Territory of New Guinea. Vessels trading between Australia and the East also call at Territory ports and there are some ships to the United Kingdom and the United States of America. Coastal and inter-island shipping services are maintained by vessels operating from the principal ports of the Territory. Shipping within the Territory is regulated by the Shipping Ordinances 1951 and the Coastal Shipping, Ports and Harbours Regulations.

Main ports of call for oversea vessels are Lae, Madang and Wewak (mainland), Rabaul (New Britain), Kavieng (New Ireland), Lorengau (Manus), and Kieta (Bougainville). Ports proclaimed under the Coastal Shipping, Ports and Harbours Regulations for the service of local vessels are, in addition to the main ports above-mentioned, Salamaua, Aitape and Wanimo (mainland), Gasmata and Talasea (New Britain), Namatanai (New Ireland), and Buka Passage (Bougainville).

There are no prepared inland waterways. The natural river system is not generally suitable for vessels except those of small tonnage.

In 1953-54, 180 British vessels and 53 vessels of other nationalities called at Territory ports and discharged 106,489 tons of cargo and loaded 111,589 tons. Corresponding figures for 1954-55 were 196, 73, 114,433 and 114,923 respectively.

4. *Other Forms of Transport and Communication.*—Although the present means of communication on land are scanty, and there are no railways, an extensive road construction programme is progressively being undertaken to assist the economic development of the Territory. Road transport services operate in the main towns and on the trunk roads linking Rabaul and Kokopo; Lae, Bulolo and Wau; Kavieng and Namatanai; and on the network in the Eastern and Western Highland Districts centred on Goroka and Mt. Hagen. The total mileage of roads in the Territory of New Guinea at 30th June, 1955, was 3,095, of which 1,100 were suitable for heavy traffic.

The discovery of gold in New Guinea resulted in great aviation activity in the vicinity of the goldfields. On account of the mountainous country and dense under-growth between the coast and the goldfields, the task of transporting food and stores to the fields and of bringing the gold to the seaboard by land was a slow and costly process. The goldfields are situated about 90 miles (40 by air) inland from Lae and air transport played an important part in the development of the area.

Air services link the Territory with Papua, Australia, Netherlands New Guinea and the British Solomon Islands. There are 99 aerodromes and seaplane alighting areas in New Guinea, and of these 28 are controlled by the Department of Civil Aviation, 35 by the Administration, 35 by private interests and one by the Royal Australian Air Force.

Telephone services operate in the main centres. Radio telephone trunk circuits link Port Moresby with Lae, Rabaul and Madang and service is available from subscribers telephones in Port Moresby, Lae and Rabaul, and from the Post Office at Madang. Six zone or group centres for radio telephone communication with outstations have been established at Lae, Madang, Rabaul, Kavieng, Wewak and Lorengau. From these centres radio telegraph services are also available to 111 outstations.

§ 8. Revenue and Expenditure.

The principal sources of revenue for the Territory of New Guinea are the grant by the Commonwealth Government and customs duties. Total revenue in 1954-55 amounted to £6,404,654, towards which the grant contributed £4,396,209 and customs duties, £1,428,463. The major groupings into which expenditure during 1954-55 may be classed were as follows:—Health, £1,228,694; district services and native affairs, £629,409; education, £347,869; justice, £347,773; agriculture, etc., £315,044; customs and marine, £107,709; forestry, £162,893; capital works and services, £1,856,707; maintenance, £673,833. Total expenditure in 1954-55 was £6,404,654 as compared with £5,094,789 in 1953-54.

For information on the finances of the combined Territory administration *see* Papua and New Guinea, § 2, p. 121.

TRUST TERRITORY OF NAURU.

1. *General.*—Nauru is an oval-shaped atoll about 12 miles in circumference, having an area of about 5,263 acres, of which approximately two-thirds is phosphate-bearing. It is situated in latitude 0° 32' south and longitude 166° 55' east. Portion of the island between the sandy beach and the coral cliffs is fertile, and it is there that most of the Nauruans reside. With the exception of a small fringe around an inland lagoon, the plateau which contains the phosphate deposits possesses few food plants and is uninhabited, but portion of the area has been planted with fruit trees. The system of land tenure is governed by an old custom, and, with the exception of small allotments held by the Government, the British Phosphate Commissioners and the Missions, the whole of the island is owned by individual natives. The temperature range is from 76° F. at night to 94° F. during the day and the average humidity about 80 per cent. Normally the rainfall is comparatively low for islands of the Pacific, the average for twenty years from 1920 to 1940 being 80.5 inches. However, falls as high as 181.76 inches during 1940 and as low as 12.29 inches during 1950 have been recorded.

2. *History.*—The island, discovered by Captain Fearn in 1798, was annexed by Germany in 1888, and prior to 1914 was part of the protectorate of German New Guinea.

In November, 1914, Nauru was occupied by a detachment from the Australian Naval and Military Expedition at Rabaul, and it was included in the cession of colonies made by Germany in 1919 to the Allied and Associated Powers, whose representatives agreed that a mandate for its administration should be conferred upon His Britannic Majesty. The mandate was confirmed by the Council of the League of Nations on 17th December, 1920. On 2nd July, 1919, the British, Australian and New Zealand Governments agreed that the administration (which, since 1915, had been in charge of an official appointed by the British Colonial Office) should be vested in an Administrator, who took up duty in June, 1921. The agreement between the three Governments was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and is shown in the Schedule to that Act. A supplementary agreement concerning Nauru was drafted in May, 1923, and ratified by the Commonwealth Parliament by the Nauru Island Agreement Act 1932.

On 25th August, 1942, nine months after the outbreak of the war in the Pacific, communications with Nauru ceased, and the island was occupied by Japanese forces. It was re-occupied by a joint Australian Naval and Military Force on 14th September 1945, and civil administration was re-established on 1st November, 1945.

3. *Trusteeship Agreement.*—On 1st November, 1947, the General Assembly of the United Nations approved a Trusteeship Agreement for the Territory of Nauru submitted by the Governments of Australia, New Zealand and the United Kingdom in substitution

for the terms of the mandate under which the Territory had been administered. This Agreement designates the Governments of Australia, New Zealand and the United Kingdom as the Joint Administering Authority, with the Government of Australia continuing, on behalf of the Administering Authority, to exercise full powers of legislation, administration and jurisdiction in and over the Territory. The terms of the Agreement were given in Official Year Book No. 39, pp. 370-1.

4. **Administration.**—The administration of the island is vested in an Administrator, who is obliged to conform to instructions issued by the Government which appointed him. Until the Government of Australia ceases to exercise full powers of legislation, administration and jurisdiction in and over the Territory on behalf of the Administering Authority in pursuance of Article 4 of the Trusteeship Agreement, all ordinances made by the Administrator are subject to confirmation or disallowance by the Governor-General of Australia acting on the advice of the Federal Executive Council. All administration expenses are met from local revenue and phosphate royalties. Native industries such as canoe-building, fishing, mat-making, etc., are encouraged by the provision of prizes at annual competitions. An agency of the Commonwealth Savings Bank has been established. There is a co-operative store managed to a large extent by Nauruans. The store books, however, are audited by Government officers. Natives are not allowed to carry or be in possession of firearms, and the use by them of intoxicating liquors and deleterious drugs is prohibited.

5. **Population.**—The Nauruan component of the population numbered about 1,100 in 1921, but had grown to more than 1,800 before the Japanese invasion in August, 1942. In 1946, it numbered less than 1,400 but by 30th June, 1955, had risen again to 1,935. Chinese have for many years formed a considerable part of the population of Nauru; their numbers increased, with some reversals of trend, from about 600 in 1921 to more than 1,500 before the 1939-45 War. After the war, they increased from about 800 in 1946 to 1,491 in 1950, but at 30th June, 1955, numbered only 568. The number of other Pacific islanders in the early 1920's was almost 300, but they subsequently declined to less than 40. In recent years, the numbers have increased, and at 30th June, 1955, there were 911 persons. The European population after 1921 fluctuated, but with a generally upward trend, between one and two hundred persons, and in 1940 numbered 192. In 1948, it numbered 247 and in 1955 it was 262. The total non-indigenous population of Nauru at 30th June, 1955, was 1,741 persons. The total population was 3,676.

6. **Health.**—Cases of the usual diseases known in the Pacific occur. Venereal disease is rare, but elephantiasis is occasionally met with. An area has been set apart for the segregation of sufferers from Hansen's disease and, the latest methods of treatment are applied. The total number of persons receiving treatment at 30th June, 1955, was 41 of whom 7 were in segregation at the Hansenide colony. Two hospitals are maintained on the island, one by the Administration for Nauruans, and one by the British Phosphate Commissioners for their employees. In common with other natives, the Nauruans are very susceptible to tuberculosis and influenza, and in 1921 an influenza epidemic caused the deaths of 230 islanders. Dysentery, both amoebic and bacillary, is endemic. A regular anti-mosquito campaign is conducted. Steps have been taken by the authorities to improve the water supply and to provide efficient sanitation generally. Every Nauruan is required to undergo a medical examination at intervals of three months. Baby clinics have been established to give help and advice to Nauruan mothers in regard to infant nurture.

7. **Education.**—The Administration assumed full responsibility for education on 1st October, 1923. Prior to that date, the education of native children was undertaken by the Missions, which were subsidized by the Administration. There are five primary schools and two secondary schools for natives, together with one primary school for Europeans. At 30th June, 1955, 382 Nauruans, 95 other Pacific Islanders, 21 Chinese and 46 Europeans were enrolled in the primary schools, and 106 at the secondary schools. A teacher, who is on loan from the Victorian Education Department, is in charge of the European school, but education generally is controlled by a Director of Education.

The curriculum is based on that used in Australian schools, and the teaching is generally in English. Education is compulsory for native children from six to sixteen years of age. At 30th June, 1955, 33 Nauruans were attending secondary schools in Australia, or undertaking post-secondary training, eighteen as scholarship holders and the balance sponsored by their families. In addition to these, there were three students at the Central Medical School, Suva.

8. **Judiciary.**—The judicial power is vested in the Administrator, in a Central Court and a District Court. The right of appeal is provided.

9. **Religion.**—The London Missionary Society (Protestant) and the Sacred Heart of Jesus Mission (Roman Catholic) operate in Nauru.

10. **Phosphate Deposits.**—(i) *General.* From 1906 to 1919, the deposits were worked by the Pacific Phosphate Company, which also worked the deposits on Ocean Island (about 165 miles east of Nauru and part of the Gilbert and Ellice Islands Colony administered by the Colonial Office). The quantity remaining on Nauru has been estimated at about 70 million tons, and the exports average 85 per cent. to 88 per cent. of tricalcium phosphate.

The interests of the Pacific Phosphate Company in the two islands (though not in other islands in the Pacific in which it had workings) were bought by the British, Australian and New Zealand Governments in 1919 for £3,500,000, the purchase money being contributed in the proportions of 42, 42 and 16 per cent. respectively. The Agreement of 2nd July, 1919, provides for the working of the deposits by three British Phosphate Commissioners, one appointed by each Government, and the three countries are entitled to receive the output in the same proportions of 42, 42, and 16 per cent.

(ii) *Royalty on Phosphate.* Under an agreement between the British Phosphate Commissioners and the Nauruan landowners, an increased royalty of 1s. 6d. per ton of phosphate exported was payable from 1st July, 1953, as follows:—

- (a) 3d. to the Nauru Royalty Trust Fund to be used for the benefit of Nauruans;
- (b) 10d. to the landowner, being an immediate payment of 8d. per ton, and 2d. per ton to be invested on his account;
- (c) 5d. to the Nauruan Community Long Term Investment Fund.

From 1st July, 1947, the lump sums payable to landowners from whom phosphate-bearing lands are leased were also increased to £45 per acre, with a minimum payment of £7 10s. for areas less than an acre.

(iii) *Nauru and Ocean Island Phosphate Industry.* Exports of phosphate from Nauru and Ocean Island in 1939–40 amounted to 1,243,428 tons, of which Australia received 54 per cent. and New Zealand 32 per cent. Following the interruption to production by the war in the Pacific, this figure was not exceeded until 1949–50 when 1,285,998 tons were exported (76 per cent. to Australia, 24 per cent. to New Zealand). Figures for 1954–55 were:—1,549,870 tons exported, 55 per cent. to Australia, 35 per cent. to New Zealand and 10 per cent. to the United Kingdom.

Receipts from the sale of phosphate in 1939–40 amounted to £1,041,418, and the f.o.b. cost, including interest on capital sinking fund, etc., amounted to £1,037,208. In 1946–47, sales and costs each amounted to about £500,000, but they have since increased to more than £3,000,000. In 1954–55, receipts from sales, etc., amounted to £3,053,393, and costs, etc., to £3,032,353.

During the period of the Japanese occupation from August, 1942, to September, 1945, while waiting to resume activities at Nauru and Ocean Island, the Commissioners were engaged in meeting the phosphate requirements of Australia and New Zealand from other available sources. A programme of improvements and additions to equipment has been commenced.

The amount due by the British Phosphate Commissioners to the partner Governments for purchase-money and other capital sums was £3,666,457 on 30th June, 1921, and at 30th June, 1942, this had been reduced to £3,024,373. The partner Governments agreed to a suspension of interest and sinking fund payments from 1st July, 1942, while operations at Nauru and Ocean Island were curtailed. Modified payments were resumed in 1946–47, pending a review of the position.

The review was carried out in 1950, and as a result the revised capital indebtedness of the Commissioners to the partner Governments at 30th June, 1950, was determined at £3,881,711. Interest and sinking fund payments were resumed with effect from 1st July, 1950, on the basis of repayment of the revised capital indebtedness in 35 years.

(iv) *Employees.* Apart from a limited number of Europeans, the employees are Chinese and Pacific Islanders engaged under a one year contract. Increasing numbers of Nauruans are being employed, mainly in trade capacities.

(v) *Christmas Island Phosphates.* It may be appropriate to refer here to the phosphate deposits on Christmas Island in which the Australian Government is interested. The concession to work phosphate at Christmas Island, situated in the Indian Ocean near Java, was held from 1897 by the Christmas Island Phosphate Company Limited, a private company incorporated in England.

The Australian and New Zealand Governments, jointly, acquired the Company's interests and assets at Christmas Island as at 31st December, 1948.

The undertaking is controlled by a Board of Commissioners appointed by the Australian and New Zealand Governments. Phosphate is distributed by the British Phosphate Commissioners who have been appointed by the Board as its managing agents.

11. **Transport.**—There is no regular air service to Nauru, but when the need arises charter flights are made to the island. The airstrip is being brought up to the international standard for a short range regular international airport.

There is relatively frequent sea communication with the island. During 1954–55, 154 vessels called there. Most of the vessels are run or chartered by the British Phosphate Commissioners for the carriage of phosphate. Many of them also provide for the carriage of passengers and other cargo as required.

12. **Trade.**—The Customs Tariff of Nauru provides for the free admission of all goods other than cigars, cigarettes, tobacco, spirits, wines, beer, cider and perry, and cylinder blocks for motor cycle engines. Articles imported by the Administration for its own use and spirits for scientific purposes are exempt. The tariff rates apply to all countries alike. Imports into Nauru were valued at £192,749 in 1940 and exports, 808,400 tons of phosphate, at £541,168. In 1954–55, imports were valued at £706,238 and exports, 1,237,236 tons of phosphate, at £2,165,163. Of the total imports in 1954–55, Australia supplied 68 per cent. valued at £481,729; the balance came mainly from the United Kingdom, New Zealand, the United States and Hong Kong in that order.

In 1954–55, 663,580 tons of phosphate were exported to Australia, 423,306 tons to New Zealand and 150,350 tons to the United Kingdom.

13. **Revenue and Expenditure.**—The revenue of the Administration has risen from £33,084 in 1939 to £303,674 in 1954–55, and expenditure from £29,391 to £276,783.

Of the revenue for the year ended 30th June, 1955, payments by the British Phosphate Commissioners amounted to £290,623, post office and radio receipts, £7,046, and customs duties, £2,779. Main items of expenditure were salaries and general expenses, £127,560, miscellaneous services (health, education, etc.), £50,377 and capital works and services, £98,846.

TERRITORY OF HEARD AND McDONALD ISLANDS.

On 26th December, 1947, by an exchange of notes with the United Kingdom Government, the United Kingdom sovereignty over the Heard and McDonald Islands was transferred to the Commonwealth of Australia. The laws of the Australian Capital Territory were declared to be in force in the Territory of Heard and McDonald Islands by the Heard and McDonald Islands Act passed 18th March, 1953.

At the end of 1947, an Australian scientific post was established on Heard Island and maintained as a scientific base. Following on the establishment of a base at Mawson, on MacRobertson Land in the Australian Antarctic Territory, the Heard Island base has been discontinued. Heard Island lies 2,500 miles south-west of Fremantle in the South Indian Ocean, and is about 27 miles long and 13 miles wide. The McDonald Islands are 26 miles to the west of Heard Island. They are small, rocky and precipitous.

AUSTRALIAN ANTARCTIC TERRITORY.

On 13th February, 1954, the Australian National Antarctic Research Expedition established a base on MacRobertson Land at latitude 67° 36' S. and longitude 62° 53' E. The base was named Mawson in honour of Sir Douglas Mawson and is the first permanent Australian station to be set up on the Antarctic continent. Meteorological and other scientific research is conducted at Mawson, which is the centre for coastal and inland survey expeditions.

TERRITORY OF COCOS (KEELING) ISLANDS.

1. *General.*—The Cocos (Keeling) Islands, two separate atolls comprising some 27 small coral islands with a total area of about five square miles, are situated in the Indian Ocean in latitude 12° 5' S. and longitude 96° 53' E. They lie some 1,720 miles north of Perth and 2,290 miles almost due west of Darwin, whilst Johannesburg is some 3,800 miles further distant to the south-west, and Colombo is 1,400 miles to the north-west of the group.

The main islands of the Territory are West Island, the largest, about 6 miles from north to south, on which is the aerodrome and most of the European community; Home Island, the head-quarters of the Clunies Ross Estate; Direction Island on which is situated the Cable and Wireless Station, the Admiralty Wireless Station and the Department of Civil Aviation's Marine Base; and Horsburgh. North Keeling Island, which forms part of the Territory, lies about 15 miles to the north of the group and has no inhabitants.

Main settlements are on West Island, Home Island and Direction Island. The group of atolls is low-lying, flat and thickly covered by coconut palms, and surrounds a lagoon which has a harbour in the northern part but which is extremely difficult for navigation.

The climate is equable and pleasant, being usually under the influence of the south-east trade winds for about three-quarters of the year. However, the winds vary at times and meteorological reports from the Territory are particularly valuable to those engaged in forecasting for the eastern Indian Ocean. The temperature varies between 70° and 89° F., the rainfall is moderate and there are occasional violent storms. In 1909, the islands were struck by the worst cyclone in their recorded history; about 400,000 coconut palms were uprooted or decapitated and the accompanying tidal wave left only five buildings standing.

2. *History.*—The islands were discovered in 1609 by Captain William Keeling of the East India Company. They were uninhabited and remained so until 1826 when the first settlement was established on the main atoll by an Englishman, Alexander Hare, who quitted the islands in about 1831. In the meantime, a second settlement was formed on the main atoll by John Clunies Ross, a Scottish seaman and adventurer, who landed with several boat-loads of Malay seamen. In 1857, the islands were annexed to the Crown and formally declared part of the British Dominions, and in 1878 responsibility for their supervision was transferred from the Colonial Office to the Government of Ceylon, and subsequently, in 1882, to the Government of the Straits Settlements. By indenture in 1886, Queen Victoria granted the land comprised in the islands to John Clunies Ross in perpetuity, and until about 10 years ago the patriarchal rule of the head of the Clunies Ross family was recognized. The head of the family had semi-official status as resident magistrate and representative of the Government. However, in 1946, when the islands became a dependency of the Colony of Singapore, a Resident Administrator, responsible to the Governor of Singapore, was appointed.

Other items of significance in the islands' history are:—1901—small cable relay station was established at Direction Island; 1903—*islands were incorporated in the Settlement of Singapore*; 1909—worst cyclone in the history of the islands struck; 1914—German cruiser *Emden* raided Direction Island but was defeated by H.M.A.S. *Sydney*; 1944—Islands were under military administration with allied troops stationed there (a military Administrator was appointed during the minority of the Clunies Ross heir who came of age in 1949); 1945—a R.A.F. air-strip was constructed on West Island; 1946—Civil administration was re-established.

3. *Transfer to the Commonwealth of Australia.*—On 23rd November, 1955, the Cocos Islands ceased to form part of the Colony of Singapore and were placed under the authority of the Commonwealth of Australia. The transfer was effected by an Order in Council made by Her Majesty Queen Elizabeth the Second under the Imperial Act entitled the Cocos Islands Act 1955, and by the Cocos (Keeling) Islands Act 1955 of the Commonwealth, whereby the islands are declared to be accepted by the Commonwealth as a Territory under the authority of the Commonwealth, to be known as the Territory of Cocos (Keeling) Islands.

4. *Administration.*—Responsibility for the administration of the Territory, in terms of the Cocos (Keeling) Islands Act 1955, rests with the Minister for Territories. An Official Representative was appointed on 23rd November, 1955, to take charge of the local administration of the Territory under delegation from the Minister. The laws of the

Colony of Singapore which were in force in the islands immediately before the date of the transfer have, with certain exceptions, been continued in force by the Cocos (Keeling) Islands Act 1955. Those laws may be amended or repealed by Ordinances made under the provisions of that Act which empower the Governor-General to make Ordinances for the peace, order and good government of the Territory.

5. **Population.**—The population of the Territory in December, 1955, was estimated to be 652, comprising 131 Europeans, 460 Cocos Islanders and 61 Asians. The Cocos Islanders reside on Home Island.

6. **Transport.**—An airport is established on West Island under the control of the Department of Civil Aviation. This is a re-fuelling point for aircraft of the oversea air-service between Australia and South Africa operated by Qantas Empire Airways Ltd. at for nightly intervals, via Darwin. Although there is no regular shipping service, vessels from Australia and Singapore call at intervals.

CHAPTER VI.

LABOUR, WAGES AND PRICES.

NOTE.—Reference is made in this chapter to retail and wholesale price indexes. For particulars of the Export Price Index, *see* Chapter X., § 15, and of the Farm Production Price Index, *see* Chapter XXX., § 2.

A. RETAIL PRICES AND PRICE INDEXES.

§ 1. General.

The information on retail prices and price indexes presented in this chapter is extracted from the annual *Labour Report* of the Commonwealth Bureau of Census and Statistics. For a full explanation of methods adopted and an analysis of problems involved *see* the detailed reference in Chapter I. of *Labour Report* No. 43, 1954.

Retail prices of food and groceries and average rentals of houses for years extending back to 1901 were collected by the Commonwealth Statistician, and in some cases have been recorded by the Statisticians of various States as far back as 1864.

Retail prices of a more extensive range of commodities (including clothing) and certain services in common demand have been ascertained at frequent and regular intervals since 1923 for each of the six capital cities and for 27 of the more important towns of Australia. Comparable information is available for the month of November in each year from 1914 to 1922 for each of the six capital cities. The list of items priced for index purposes was published in *Labour Report* No. 41, 1952.

§ 2. Previous Retail Price Indexes.

1. **General.**—Four series of retail price indexes had been compiled at various times for Australia by the Commonwealth Statistician prior to 1954. Each of these was continued until changed conditions required the compilation of indexes more directly relevant to current conditions. The respective indexes were:—

- (i) *The "A" Series Index* (covering food, groceries and house rents) was first compiled in 1912 with the year 1911 as base = 1,000. It was discontinued in June, 1938.
- (ii) *The "B" Series Index* (covering food, groceries and rent of 4 and 5 roomed houses) was first compiled in 1925 and continued until December Quarter, 1953. It was the food and rent constituent of the "C" Series Index and was designed to replace the "A" Series Index for general statistical purposes.
- (iii) *The "C" Series Index* (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking and some other miscellaneous items) was first compiled in 1921 and published at quarterly intervals from June Quarter, 1922. It was used by the Commonwealth Court of Conciliation and Arbitration for purposes of quarterly wage adjustments from May, 1934, to August,

1953. Some State tribunals use or consider it in their proceedings. Its publication in mimeograph each quarter will be continued for the present in the customary form and on its customary basis. For general statistical purposes it has been replaced by the Interim Retail Price Index (1952-53 base year) described at length in a Statistical Bulletin published on 24th March, 1954, and briefly in the following section of this chapter.

- (iv) *The "D" Series Index* derived by combining the "A" and "C" Series Indexes was used by the Commonwealth Court of Conciliation and Arbitration from May, 1933 to May, 1934, and then discontinued.

Of the four retail price indexes described above, only the "C" Series is now compiled. The new Interim Index will continue in its present form until the components of certain groups are finalized.

2. **The "Court" Index.**—In 1937 the Commonwealth Court of Conciliation and Arbitration introduced a "Court" Index for the purpose of its system of making automatic quarterly adjustments to the basic wage within its jurisdiction. By decision of the Court the "Court" Index ceased to be issued by the Industrial Registrar as at the December Quarter, 1953. "Court" Index numbers were an arithmetical conversion of the "C" Series Index.

§ 3. The Interim Retail Price Index (1952-53 Base Year).

1. **Origin of the Interim Retail Price Index (1952-53 Base Year).**—The list of component items and the weighting pattern of the "C" Series Retail Price Index were first adopted in 1922 but were reviewed by Conference of Statisticians in 1936. (*See Labour Report* No. 41, 1952, page 33.)

From the outbreak of war in 1939 to late in 1948 periodic policy changes in regard to various war-time controls (including rationing) caused recurrent changes in consumption and the pattern of expenditure. This rendered it impracticable either to produce a new index or to revise the old one on any basis that would render the index more representative, than it already was, of the changing pattern.

When commodity rationing had virtually ceased in the latter part of 1948, action was taken by the Statistician to collect price data of about 100 additional items and to gather information as to current consumption and expenditure patterns. By the middle of 1949 a considerable number of new price series were coming into being and the body of data available as to expenditure and consumption (in the post-rationing period) was beginning to indicate something of the new weighting pattern likely to be appropriate for post-war review of the components and construction of the "C" Series Index.

There supervened in the next two years conditions which caused wide price dispersion, a very rapid rise in prices and a new sequence of changes in consumption and the pattern of wage earner expenditure. Under these conditions it was not possible to devise any new weighting pattern for the years 1949-50, 1950-51 and 1951-52 likely to be better suited to the index or more continuously representative of conditions then current than was the existing "C" Series Index on the 1936 revision. Conference of Statisticians therefore deferred revision of the weighing system and component items of the "C" Series Index until it was advised by the Acting Commonwealth Statistician in June, 1953 (a) that although the aggregate "C" Series Index (as verified by supplementary indexes) was still reasonably reliable for current use, some of the component groups (more particularly food and miscellaneous) were not satisfactory individually; and (b) that the time had arrived either to produce a new index or to reconstruct the "C" Series Index extensively.

The Interim Retail Price Index has been compiled pursuant to Resolution 13 of the Conference of Statisticians in June, 1953, reading:—

" 13. Retail Price Indexes—

- (a) That in view of the persistence of recurrent changes in the pattern of consumer expenditure in the post-war period, it is undesirable to make a general revision of the list of items and weighting system of the "C" Series Retail Price Index at present, unless industrial tribunals expressly desire some revision for special purposes.

- (b) That an Interim Retail Price Index be compiled with putative weights and components representative, as nearly as may be, of the post-war pattern of consumer usage and expenditure.
- (c) That, having regard to the complexities of the problem and the limit of staff resources available, such interim indexes relate only to each capital city and to the six capital cities combined.
- (d) That attention be drawn again to the statement already published that the "C" Series Retail Price Index cannot measure changes in relative retail price levels as between capital cities consistently with its main purpose of measuring periodic changes in retail price levels for each city.
- (e) That the problem of measuring comparative retail price levels as between cities at any point of time differs in principle from the problem of measuring periodic variations in price level in an individual city".

The Interim Retail Price Index (1952-53 base year) is used as the current retail price index in statistical publications of the Commonwealth Statistician for general statistical purposes. It relates only to six capital cities of Australia because it is not practicable with existing staff resources to collect price data for the greatly enlarged list of items for 28 other cities and towns. These will continue to be covered as to the less extensive list of items used for the "C" Series Index.

In respect of any divergency in trends shown by the new index as compared with the old, the following comment is paraphrased from comment made in the course of the Statistician's memoranda to the Commonwealth Court of Conciliation and Arbitration in 1949: It is to be expected that the new index will for a period show much the same trend as does the "C" Series Index. If there is any appreciable difference in trend, it is certain that the new index would be the more accurate reflex of price movements relevant under current conditions.

2. **Definition of the Interim Retail Price Index.**—This index provides the interim results of researches designed to measure retail price variations (with 1952-53 = 100 as base year) on the basis of:—

- (a) a current pattern of wage earner expenditure using recent consumption weights for foods and recent expenditure weights for combining groups of items into the aggregate index;
- (b) a wider range of commodities and services than that covered by any existing price index in order to provide greater representativeness; and
- (c) individual city weights for such items as electricity, gas and fares.

The components and weighting of the Interim Retail Price Index will be reviewed in the light of data derived from the *Census of Retail Sales (1952-53)* as to consumer expenditure on various kinds of goods, estimates of consumer expenditure on services relevant to construction of a retail price index of this type and data as to rents and housing derived from the *Census of 30th June, 1954*. It is proposed to cast the index into final form as soon as possible.

3. **Differences between the Structure of the Interim Retail Price Index and the "C" Series Retail Price Index.**—The main differences between the structure of the Interim Retail Price Index and that of the "C" Series Retail Price Index are (a) the group weights and item weights of the Interim Index relate broadly to the consumption pattern 1950-53, while those of the "C" Series Index relate to pre-war years; and (b) the Interim Index includes a large number of items not included in the "C" Series Index.

A full list of the items used in the Interim Index was shown in Appendix III. of the *Statistical Bulletin* of 24th March, 1954, and on pages 10-13 of *Labour Report* No. 43, 1954. The changes in structure of each group of items as adopted for the Interim Retail Price Index are summarized on the following page.

(i) *Food Group*.—The weights of some of the main items (e.g., milk, eggs, meat, potatoes and flour) in the Interim Index are substantially different from those of the "C" Series Index. Twenty-four new items extend the group coverage over a wider field. The total number of items in the Food Group of the Interim Index is 60 as compared with 38 in the "C" Series Index. The principal new items are lamb, packaged breakfast foods, biscuits, ice cream, processed cheese, honey, sandwich spreads, coffee, cocoa, soft drinks and certain types of confectionery.

(ii) *Clothing and Drapery Group*.—In the Interim Index, 17 new items have been added to the Clothing and Drapery Group, and 25 items each formerly represented by one type of article are now each represented by two or more types. Consequential adjustments have been made in weights of individual items. The principal new items added to this group are:—sports coat, sports trousers, cardigan (and other types of knitted wear), overalls, piece-goods (rayon, cotton and woollen) and knitting wool.

(iii) *Rent Group*.—Only minor changes have been made in the Rent Group. Available data indicate (a) that, in general, very few new houses have been built by private owners for renting in the post-war years; (b) that in some cities considerable numbers of new government houses have been built for renting or occupancy on a quasi-rental basis; and (c) that there has been a substantial increase in the numbers of owner-occupied houses, including new instalment-purchase or quasi-instalment-purchase houses under governmental and private housing schemes. In recent years the difficulty of obtaining data suitable for the housing component of a price index has therefore intensified. The facts will be reviewed in the light of data obtained at the Census of 30th June, 1954, and further study given to the hitherto intractable problems associated with measuring at quarterly intervals "housing price" variations in a form suitable for use in a retail price index in respect of owner-occupied houses, instalment-purchase houses, and houses occupied under the various types of governmental housing schemes.

(iv) *Other Groups*.—Six new sub-groups are included in the Interim Index, comprising 75 items as compared with 32 in the "C" Series Index. The principal new items are garden tools, floor coverings, shaving cream, toilet soap, etc., patent medicines, baby foods, haircuts, dry cleaning, shoe repairs, postage, etc. Necessary adjustments have been made to bring the group weight into conformity with recent expenditure and consumption patterns. The weight of this group is much greater than it was in the "C" Series Index.

(v) *Group Weights*.—The group weights in the new Interim Index have been brought into general conformity with the estimated group distribution of wage earner household expenditure in recent years over the field covered. In some cases the weights are putative weights assessed on available data and are subject to some revision.

In the year 1952-53 the ratio of the individual group "aggregate expenditure" to the "aggregate expenditure" of the whole index for the six capital cities combined was as follows:—

Group.	"C" Series Retail Price Index.	Interim Retail Price Index.
	Per cent.	Per cent.
Food	41.0	37.1
Clothing and Drapery	33.0	26.8
Rent	11.3	9.0
Other Groups	14.7	27.1
	{ 4.5 { 5.3 { 2.8 { 2.1	{ 4.6 Fuel and Light { 4.6 Household Sundries { 2.5 Certain Repairs and Services { 3.0 Cinema, Radio, Newspapers { 6.6 Rail, Tram and Bus Fares { 5.8 Tobacco and Cigarettes
	100.0	100.0

In the Interim Index common weights are adopted for all groups and items in the index for each city except in respect of fares, gas, electricity and some minor items. The resultant indexes show price variations for each city on a basis appropriate to that city. They are not constructed to provide a precise measure of the relative "cost of living", comparing one city with another. For that reason the Interim Index for each city in the base year 1952-53 is 100.

4. Comparison of Trends of the Interim Retail Price Index with Trends of the "C" Series Retail Price Index.—The following table shows for each of the years 1950-51 to 1954-55 and for each quarter from September Quarter, 1952 to December Quarter, 1955 the Interim Index for the six capital cities combined, with the year 1952-53 as base = 100, in comparison with the "C" Series Index arithmetically converted to the same base:—

Period.	Six Capital Cities: Weighted Average. (Base: Year 1952-53 = 100.)	
	"C" Series Index.	Interim Index.
Year ended June—		
1951	74.8	74.9
1952	91.7	91.4
1953	100.0	100.0
1954	102.8	102.5
1955	103.7	103.6
Quarter ended—		
1952—September	99.0	98.8
December	99.2	99.3
1953—March	100.3	100.4
June	101.4	101.6
September	102.7	102.4
December	102.9	102.2
1954—March	102.9	102.7
June	102.8	102.7
September	102.6	102.7
December	103.2	103.2
1955—March	103.9	103.8
June	105.0	104.7
September	106.6	105.7
December	107.7	107.0

The figures appearing after the decimal point possess little significance for general statistical purposes. They are inserted merely to avoid the distortion that would occur in rounding off the figures to the nearest whole number. For instance, if the Interim Indexes for each quarter of 1953 were rounded off to 100, 102, 102 and 102 respectively, they would suggest a rise of 2 per cent. in June Quarter, 1953 and no change in September Quarter, 1953. The figures for the Interim Index as presented in the table indicate a rise of the order of 1 per cent. in June Quarter, 1953 and 1 per cent. in September Quarter, 1953. Price indexes cannot measure aggregate price variations with an accuracy of the order of one-tenth of 1 per cent.

With changing conditions significant divergencies may occur between the movements shown by a retail price index (such as the "C" Series Index) constructed on pre-war weights and a comparatively limited range of major items and a retail price index (such as the Interim Index) constructed on 1950-53 weights and a broader list of items.

Due regard should be paid to the fact that a composite price index is necessarily an approximate summary which combines into one aggregate price variations of many items. Any more rigid use of the index for specific purposes is the responsibility of the bodies or persons using the indexes.

§ 4. Tabular Statements of Retail Price Index Numbers.

1. General.—Information on retail price movements is published as follows:—

(i) *Monthly*. The *Monthly Review of Business Statistics* contains annual and quarterly index numbers to the latest available date.

(ii) *Quarterly*. Statements are issued about three weeks after the end of each quarter relating to the Interim and the "C" Series Retail Price Indexes respectively for that quarter and immediately preceding quarters. The *Quarterly Summary of Australian Statistics* contains annual, quarterly and monthly index numbers to the latest available date. This publication also contains certain average prices of items of food and groceries for the latest available quarter.

(iii) *Annual*. The *Labour Report* contains index numbers for past years, and the quarterly results for recent years. Certain average prices for the latest year of items of food and groceries are also published in this report.

2. The "C" Series Retail Price Index.—A table of "C" Series index numbers for the weighted average of the six capital cities combined together with index numbers for each of the four main groups of items in the "C" Series Index for each year from 1914 to 1955 is shown on page 151. Detailed tables were last published in *Labour Report* No. 41, 1952, pp. 19–31.

3. The Interim Retail Price Index.—On this and the following page are published:—

(i) the Interim Retail Price index numbers for each of the years ended June from 1951 to 1955, and for each quarter during the period September Quarter, 1952 to December Quarter, 1955, for the weighted average of the six capital cities combined, together with separate indexes for each of the four groups of items (*see* table below);

(ii) the Interim Retail Price index numbers for each of the years ended June, from 1951 to 1955, and for each quarter during the period December Quarter, 1954 to December Quarter, 1955, for each capital city and for the six capital cities combined, together with separate indexes for each of the four groups of items (page 149).

INTERIM RETAIL PRICE INDEX—GROUP INDEXES.

WEIGHTED AVERAGE OF SIX CAPITAL CITIES.

(Base : Year 1952–53 = 100.)

Period.	Food.	Clothing and Drapery.	Rent.(a)	Other Items.	All Groups.
Year ended June—					
1951	67.9	78.1	90.3	76.3	74.9
1952	89.4	93.8	92.6	91.3	91.4
1953	100.0	100.0	100.0	100.0	100.0
1954	103.7	101.6	105.0	100.9	102.5
1955	104.6	102.4	109.6	101.4	103.6
Quarter ended—					
1952—September	99.8	98.0	97.0	98.7	98.8
December	98.5	99.6	99.0	100.0	99.3
1953—March	100.0	100.4	101.4	100.6	100.4
June	101.7	102.0	102.6	100.7	101.6
September	103.9	101.5	103.3	101.0	102.4
December	103.4	101.6	103.9	100.5	102.2
1954—March	104.0	101.8	104.9	101.2	102.7
June	103.7	101.5	107.7	100.9	102.7
September	103.0	101.6	108.9	101.2	102.7
December	103.7	102.3	109.3	101.2	103.2
1955—March	105.3	102.4	109.7	101.2	103.8
June	106.4	103.3	110.5	101.9	104.7
September	108.2	103.3	111.4	102.8	105.7
December	109.0	103.4	112.0	106.2	107.0

(a) See note (b) on page 149.

INTERIM RETAIL PRICE INDEX NUMBERS.

(Base of each Index: Year 1952-53 = 100.)

NOTE.—The index numbers hereunder are designed to measure aggregate variations in retail prices of specified groups of items for specified cities individually. They measure variations from time to time and not differences in price level as between cities nor comparative costs of groups of items.

City.	Year ended June, 1951.	Year ended June, 1952.	Year ended June, 1953.	Year ended June, 1954.	Year ended June, 1955.	1954.		1955.		
						Dec. Qtr.	Mar. Qtr.	June Qtr.	Sept. Qtr.	Dec. Qtr.
GROUP I.—FOOD.										
Sydney ..	66.1	89.9	100.0	102.4	103.6	102.8	104.6	105.1	106.5	107.2
Melbourne ..	69.2	89.1	100.0	104.6	104.3	103.4	104.8	106.2	110.1	111.5
Brisbane ..	69.2	90.1	100.0	104.1	104.2	103.3	105.2	106.0	106.8	105.6
Adelaide ..	69.2	90.5	100.0	103.5	106.2	104.9	106.5	108.2	109.2	109.7
Perth ..	69.3	87.0	100.0	106.3	109.5	108.0	109.0	111.2	109.6	109.8
Hobart ..	66.4	86.8	100.0	107.7	106.8	105.0	107.3	108.7	110.5	113.4
Six Capitals(a)	67.9	89.4	100.0	103.7	104.6	103.7	105.3	106.4	108.2	109.0

GROUP II.—CLOTHING AND DRAPERY.										
Sydney ..	78.6	93.6	100.0	101.7	102.3	102.6	102.2	102.8	103.0	103.1
Melbourne ..	77.6	93.4	100.0	101.3	102.2	101.9	102.2	103.6	103.8	103.9
Brisbane ..	78.7	94.6	100.0	101.7	102.9	102.8	102.8	103.8	103.5	103.2
Adelaide ..	77.0	93.9	100.0	102.2	102.9	102.7	103.1	103.9	102.8	103.3
Perth ..	78.8	95.5	100.0	100.9	101.6	101.5	101.7	102.7	102.7	103.1
Hobart ..	78.9	94.7	100.0	102.6	103.1	103.0	103.3	103.7	103.9	104.4
Six Capitals(a)	78.1	93.8	100.0	101.6	102.4	102.3	102.4	103.3	103.3	103.4

GROUP III.—RENT(b) (4 AND 5 ROOMED HOUSES).										
Sydney ..	86.6	87.7	100.0	107.7	109.5	109.5	109.6	109.7	110.6	111.1
Melbourne ..	99.4	99.6	100.0	100.8	102.3	101.8	102.3	102.3	102.7	102.9
Brisbane ..	93.7	97.7	100.0	102.9	105.2	105.1	105.5	105.7	106.4	106.4
Adelaide ..	82.8	86.0	100.0	102.7	105.6	104.5	105.0	109.3	112.1	113.6
Perth ..	82.1	94.4	100.0	110.8	149.6	148.3	149.5	153.1	154.9	157.0
Hobart ..	85.1	91.4	100.0	108.8	109.4	109.5	109.5	109.5	109.5	110.3
Six Capitals(a)	90.3	92.6	100.0	105.0	109.6	109.3	109.7	110.5	111.4	112.0

GROUP IV.—OTHER ITEMS.(c)										
Sydney ..	78.3	93.6	100.0	100.5	100.9	101.0	100.6	100.9	101.5	103.2
Melbourne ..	73.5	88.7	100.0	100.9	101.3	100.9	101.3	101.8	102.9	110.1
Brisbane ..	78.5	92.7	100.0	103.0	104.5	104.3	104.8	104.9	106.0	109.6
Adelaide ..	76.9	90.2	100.0	99.3	99.9	99.3	99.4	101.7	102.7	102.7
Perth ..	74.6	89.6	100.0	100.8	101.9	101.4	101.6	103.3	104.5	105.1
Hobart ..	72.7	89.0	100.0	108.2	105.1	105.0	105.0	105.5	108.9	109.0
Six Capitals(a)	76.3	91.3	100.0	100.9	101.4	101.2	101.2	101.9	102.8	106.2

ALL GROUPS.

Sydney ..	74.6	91.7	100.0	102.2	103.1	102.9	103.4	103.8	104.6	105.4
Melbourne ..	75.2	91.0	100.0	102.4	102.7	102.2	102.9	104.0	105.8	108.3
Brisbane ..	76.4	92.7	100.0	103.0	104.0	103.6	104.5	105.1	105.6	106.0
Adelaide ..	74.7	90.9	100.0	102.0	103.6	102.8	103.5	105.4	106.0	106.4
Perth ..	74.5	90.7	100.0	103.9	109.6	108.7	109.3	111.2	111.1	111.6
Hobart ..	73.1	89.9	100.0	106.6	105.6	104.9	105.8	106.6	108.2	109.6
Six Capitals(a)	74.9	91.4	100.0	102.5	103.6	103.2	103.8	104.7	105.7	107.0

(a) Weighted average. (b) Rent.—The rent index numbers shown in the tables in this chapter measure the proportionate rise and fall in the average weekly rentals paid for houses of four and five rooms taking corresponding houses throughout. They are "price" indexes in the strict sense, i.e., they are designed to measure only the "price" element in rent fluctuations. Rentals of new tenanted houses completed since the end of the war are not taken into account. (c) A group of items under the following headings—Electricity, Gas, and Firewood; Household Sundries; Services; Cinema Admission, Radio Licence, and Newspapers; Fares; and Tobacco and Cigarettes.

§ 5. The "C" Series Retail Price Index: 1914-1955.

1. **Construction.**—Full particulars relating to the construction, items, weights and method of tabulation of the "C" Series Retail Price Index were last published in *Labour Report* No. 41, 1952, pp. 10-18. Tabular statements of index numbers were shown on pp. 19-27 and historical particulars of the index, and its relation to automatic basic wage variations prior to 12th September, 1953, on pp. 32-40.

2. **Significant Dates.**—The following table furnishes index numbers for the six capital cities as a whole for certain significant dates since November, 1914—the earliest date for which this index is available.

"C" SERIES RETAIL PRICE INDEX NUMBERS.

WEIGHTED AVERAGE OF SIX CAPITAL CITIES.

(Base: *Weighted Average of Six Capital Cities, 1923-27 = 1,000.*)

1914, November	.. .. .	687	(Beginning of War I.)
1918, November	.. .. .	905	(End of War I.)
1920, November	.. .. .	1,166	(Post-War peak)
1922, November	.. .. .	975	(Post-War trough)
1929, Year	.. .. .	1,033	(Pre-Depression peak)
1933, Year	.. .. .	804	(Depression trough)
1939, September Quarter	.. .. .	916	(Pre-War II.)
1943, March Quarter	.. .. .	1,123	(Pre-Price Stabilization)
1943, June Quarter	.. .. .	1,143	(War II. peak)
1945, September Quarter	.. .. .	1,126	(End of War II.)
1948, September Quarter	.. .. .	1,311	
1950, September Quarter	.. .. .	1,572	
1952, September Quarter	.. .. .	2,238	
1953, September Quarter	.. .. .	2,321	
1954, December Quarter	.. .. .	2,333	
1955, December Quarter	.. .. .	2,435	

The index rose by approximately 32 per cent. during the first world war, and by a further 29 per cent. in the two post-war years (November, 1918 to November, 1920). From November, 1920 to November, 1922, there was a fall of 16 per cent. and the index remained relatively stable until the onset of the depression in 1929. During the four years of the depression 1929 to 1933 the index fell by 22 per cent., rising thereafter steadily until 1939 when it was nearly 14 per cent. above the level of 1933, and approximately at the level it had occupied at the date of the Armistice of 1918. Between the outbreak of war (September, 1939) and March, 1943 (pre-price stabilization) the index rose by approximately 23 per cent. to a level slightly below that reached at the height of the post-war boom in 1920. Compared with that for the March Quarter, 1943, the index number at the close of the war was practically unchanged.

Immediately after the outbreak of the war, price control was established by the Government under Regulations dated 28th September, 1939, and a national policy of price stabilization was applied as from 12th April, 1943, backed by more stringent price control and price subsidies. The retail price level, as measured by the index, remained relatively steady throughout 1944 and 1945 at the level of March, 1943. This stabilized level was approximately 23 per cent. above that of 1939 and 63 per cent. above the level prevailing at the beginning of the 1914-18 War. After June Quarter, 1946, war-time controls, subsidies, etc., were progressively modified and by early 1949 had been virtually eliminated. In the latter part of 1950 export prices (especially for wool) rose very substantially and have remained relatively very high. In December, 1950, the Commonwealth Court of Conciliation and Arbitration raised the basic wage by approximately 14 per cent. Concurrently, public works expenditure and private investment rose to very high levels.

This retail price index rose by 16 per cent. in the three years following the end of the 1939-45 War (i.e., to September Quarter, 1948) and by 77 per cent. in the next five years

to September Quarter, 1953, and remained relatively stable at that level until December Quarter, 1954. From December Quarter, 1954 to December Quarter, 1955, it increased by 4 per cent.

3. "C" Series Retail Price Index, Six Capital Cities, 1914 to 1955.—The movement in the various groups of the index and in the index as a whole for each year for which it has been compiled is shown in the following table for the six capital cities combined:—

**"C" SERIES RETAIL PRICE INDEX AND ITS "GROUP" INDEX NUMBERS(a)
FOR THE SIX CAPITAL CITIES COMBINED.**

(Base of Each Group: Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

Period.	Food and Groceries.	Rent (4 and 5 Roomed Houses).(b)	Clothing.	Miscellaneous.	Total "C" Series Index.
1914 (c)	641	649	754	749	687
1915 (c)	842	659	792	786	782
1916 (c)	812	665	881	802	795
1917 (c)	836	685	992	882	847
1918 (c)	861	722	1,097	972	905
1919 (c)	1,026	768	1,238	1,036	1,022
1920 (c)	1,209	851	1,365	1,194	1,166
1921 (c)	950	877	1,246	1,010	1,013
1922 (c)	945	929	1,052	999	975
1923	1,009	950	1,045	999	1,003
1924	969	988	1,003	1,004	987
1925	998	1,008	991	992	997
1926	1,023	1,026	986	998	1,011
1927	1,000	1,030	975	1,008	1,002
1928	985	1,066	997	1,010	1,009
1929	1,044	1,073	996	1,007	1,033
1930	941	1,047	951	999	975
1931	826	901	853	973	873
1932	796	817	804	958	830
1933	751	804	787	950	804
1934	783	810	785	944	817
1935	806	839	783	946	832
1936	825	879	792	947	850
1937	851	912	811	960	873
1938	886	942	829	961	897
1939	927	965	841	962	920
1940	939	973	956	998	957
1941	947	976	1,118	1,060	1,008
1942	1,031	976	1,308	1,112	1,091
1943	1,037	975	1,440	1,160	1,131
1944	1,026	976	1,435	1,165	1,126
1945	1,034	975	1,425	1,161	1,126
1946	1,036	976	1,505	1,167	1,145
1947	1,100	977	1,566	1,199	1,188
1948	1,256	979	1,744	1,257	1,295
1949	1,394	982	1,997	1,338	1,415
1950	1,566	987	2,286	1,435	1,560
1951	2,041	1,009	2,749	1,679	1,883
1952	2,526	1,057	3,096	1,958	2,196
1953	2,641	1,138	3,223	2,053	2,302
1954	2,671	1,192	3,218	2,062	2,326
1955	2,811	1,226	3,237	2,081	2,393
1955—March Quarter ..	2,730	1,213	3,218	2,046	2,349
June	2,770	1,222	3,240	2,070	2,375
September	2,854	1,232	3,243	2,081	2,411
December	2,891	1,238	3,248	2,128	2,435

(a) "Group" index numbers in the above table cannot be compared with each other in order to show the relative cost of Food and Groceries, Rent, Clothing or Miscellaneous requirements, since each "Group" has its own base = 1,000, namely, the weighted average cost for the six capital cities as a whole during the five-year period 1923-27. (b) See note (b) on page 149. (c) November.

A graph showing "C" Series retail price index numbers appears on page 173.

§ 6. International Comparisons.

The following table shows the increases in retail prices in recent years in Australia and certain other countries.

RETAIL PRICE INDEX NUMBERS.
(FOOD, RENT, CLOTHING, MISCELLANEOUS HOUSEHOLD EXPENDITURE.)
(Base: September Quarter, 1939 = 100.)

Period.	Australia.	United Kingdom.	Canada.	New Zealand.	Union of South Africa.	United States of America.
1939—					(a)	
September Quarter ..	100	100	100	100	100	100
1940—Year	105	119	105	104	104	100
1941— "	110	128	111	108	109	105
1942— "	119	129	116	111	118	116
1943— "	124	128	117	114	126	123
1944— "	123	129	118	116	130	125
1945— "	123	131	119	118	133	127
1946— "	125	131	123	119	135	138
1947— "	130	(b) 102	134	122	141	158
1948— "	141	108	154	132	149	170
1949— "	154	111	160	(c) 134	154	168
1950— "	170	114	165	142	160	171
1951— "	206	124	183	157	172	185
1952— "	240	136	186	170	187	189
1953— "	251	140	184	177	194	190
1954— "	254	143	185	186	197	191
1955— "	261	149	185	190	204	191
1955—March Quarter ..	256	146	185	189	202	190
June "	259	148	185	190	203	190
Sept. "	263	150	185	191	204	191
Dec. "	266	153	186	191	205	191

(a) Food, Rent and Miscellaneous Expenditure. (b) New series (Base: 17th June, 1947 = 100), commencing from September Quarter, 1947. (c) Consumers' Retail Price Index from March Quarter, 1949, onwards. Index numbers for earlier periods (shown for purposes of comparison) are obtained by linking the movement in the Retail Price Index (base 1926-30) with the new index.

B. WHOLESALE PRICES AND PRICE INDEXES.

§ 1. General.

Two indexes of wholesale prices have been compiled by the Commonwealth Bureau of Census and Statistics. These are:—

- (i) The Melbourne Wholesale Price Index;
- (ii) The Wholesale Price (Basic Materials and Foodstuffs) Index.

Particulars of the Melbourne Wholesale Price Index, which is now obsolescent, are given in § 3 commencing on page 154.

After reviewing the regimen and weighting of this index, the 1930 Conference of Statisticians resolved that a new index of wholesale prices of basic materials and foodstuffs should be compiled. This index—the Wholesale Price (Basic Materials and Foodstuffs) Index—which extends back to the year 1928 and is compiled monthly, is a special purpose index and one of a series of wholesale price indexes designed for special purposes.

§ 2. Wholesale Price (Basic Materials and Foodstuffs) Index.

1. **Price Quotations.**—The prices used in the index have in the main been obtained directly from manufacturers and merchants, and, with a few important exceptions, from Melbourne sources. Apart from locally-produced building materials and one or two minor commodities, however, the price movements may be taken as representative of variations in wholesale prices of basic materials in most Australian markets.

Commodities in the index are priced in their primary or basic form wherever possible and in respect of imported materials as nearly as may be at the point where they first make effective impact on the local price structure. Thus the price of imported goods is not taken at the time of import, but rather on an ex-bond (or into factory) basis.

Broadly, where home-consumption prices exist for local products, they have been used in this index. During the year 1950–51 wool for local manufacture was subsidized, and the home-consumption price for wool was used to calculate the index numbers shown in the table on page 154.

2. **Commodities and Grouping.**—For purposes of this index “basic” materials (as opposed to certain of the foodstuffs) are commodities in the primary or basic forms in which they first enter into productive processes carried out in Australia. The list of items comprises 80 commodities, divided into seven main groups. Each group is sub-divided into goods which are mainly imported, and goods which are mainly home-produced. The percentage of the total aggregate in 1950 contributed by each group is shown in the following table:—

Group.	Percentage of Total Aggregate, 1950.		
	Principally Imported.	Principally Home-produced.	Total.
Metals and Coal	0.05	15.51	15.56
Oils. Fats and Waxes	10.90	0.24	11.14
Textiles	1.10	5.11	6.21
Chemicals	1.18	2.77	3.95
Rubber and Hides	1.17	0.68	1.85
Building Materials	5.07	4.31	9.38
Foodstuffs and Tobacco	12.31	39.60	51.91
All Groups	31.78	68.22	100.00

A full list of the commodities, showing the quantity-multipliers (weights) for each commodity and the percentage of the total aggregate in 1950 contributed by each commodity and group, was set out on page 395 of Official Year Book No. 39.

3. **Method of Construction.**—The index is constructed on the simple aggregative fixed-weights formula. The weights (quantity-multipliers) are based on estimates of the average annual consumption of the commodities in Australia during the period 1928–29 to 1934–35 inclusive. Changes in usage, changes of category as between “imported” and “home-produced” for some commodities, and changes in the industrial structure have affected the validity of some of the weights in the index.

The Bureau is currently developing a plan designed to provide a series of special purpose indexes within an extended field.

4. **Index Numbers.**—Index numbers for each group of commodities and for all groups combined for the index of wholesale prices of basic materials and foodstuffs are given in the following table. Current index numbers, on the base: Average of three years ended June, 1939 = 100, are published in the *Monthly Review of Business Statistics*, and a table showing index numbers computed to the base 1928 = 100 will be found in the *Labour Report*. A graph showing wholesale price index numbers for the period 1911 to 1955 appears on page 173.

WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS.

(Base of each Group : Average, 3 years ended June, 1939 = 100.)

Period.	Basic Materials.							Food-stuffs and Tobacco.	Basic Materials and Foodstuffs.		
	Metals and Coal.	Oils, Fats and Waxes.	Textiles.	Chemicals.	Rubber and Hides.	Building Materials.	Total.		Goods principally Imported (a)	Goods principally Home-produced.	Total All Groups.
1928-29	127	106	129	121	115	95	114	107	91	118	110
1929-30	126	111	99	116	87	94	107	110	94	118	111
1930-31	116	117	80	117	73	96	105	91	100	99	99
1931-32	108	113	77	119	74	95	101	86	100	92	95
1932-33	104	109	75	119	69	95	98	80	97	87	90
1933-34	103	84	102	111	80	94	92	84	89	89	90
1934-35	97	90	78	102	77	93	89	87	92	89	90
1935-36	92	95	100	99	88	93	90	92	95	92	93
1936-37	96	99	118	99	111	99	99	97	99	98	98
1937-38	101	101	100	100	97	104	102	100	102	100	101
1938-39	103	100	82	101	92	97	99	103	99	102	101
1939-40	105	115	104	107	116	108	109	101	111	103	105
1940-41	107	137	111	124	126	128	122	107	133	106	114
1941-42	117	151	118	137	135	135	133	117	153	112	124
1942-43	129	167	147	142	138	163	149	128	176	121	137
1943-44	131	170	150	143	140	174	153	129	182	122	140
1944-45	131	168	152	143	140	175	152	131	182	123	141
1945-46	130	156	152	142	140	177	149	135	178	126	141
1946-47	132	145	191	140	131	180	149	138	177	129	143
1947-48	146	161	283	148	126	190	166	153	192	145	159
1948-49	185	173	342	159	130	198	188	175	201	173	181
1949-50	214	184	434	187	143	225	214	198	223	198	205
1950-51	256	196	641	242	292	268	264	232	256	242	246
1951-52	343	220	577	314	298	370	321	281	288	305	300
1952-53	392	234	607	350	224	404	350	294	292	331	320
1953-54	388	222	566	323	191	363	332	313	271	343	321
1954-55	391	214	510	314	246	372	330	311	277	338	320
1955—											
Jan. ..	394	215	501	315	237	365	329	305	279	331	316
Feb. ..	395	215	505	315	257	373	332	313	281	338	322
Mar. ..	396	214	507	315	264	381	334	319	282	344	326
Apr. ..	397	214	496	315	271	387	335	314	283	341	324
May ..	396	214	497	315	294	389	337	318	283	344	326
June ..	396	214	485	315	306	398	338	324	287	348	330
July ..	397	214	486	315	307	398	338	331	281	357	334
Aug. ..	397	215	452	315	323	398	337	329	282	354	333
Sept. ..	405	215	441	315	333	398	340	329	290	352	334
Oct. ..	405	215	441	315	336	398	340	325	289	350	332
Nov. ..	404	216	437	317	347	407	342	331	291	355	336
Dec. ..	404	216	447	317	342	407	342	326	291	352	334

(a) Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in the price of all imports.

NOTE.—The figures given in this table are comparable in the vertical columns, but are not directly comparable horizontally.

§ 3. Melbourne Wholesale Price Index.

1. General.—An index of Melbourne wholesale prices was first computed in 1912. It relates chiefly to basic materials and foods weighted in accordance with consumption in the years immediately preceding that date. Neither the component items of the list of items nor the weighting have been varied, except as indicated in footnote (a) to the following table. Consequently, the index is outmoded for current use but it has some historical significance as a measure of changes in the prices of its component items combined in the proportions in which they were in common use about the year 1910. It is used mainly as an approximate indication of long-term trends since the year 1861, for which it was first compiled. It is now published only on an annual basis and consideration is at present being given to the form of its future publication. A description of the index and a list of the commodities included in it were published in *Labour Report* No. 38, 1949, pp. 43-35.

2. **Index Numbers.**—Index numbers for each group of commodities as well as for all groups combined are shown in the following table :—

MELBOURNE WHOLESALE PRICE INDEX NUMBERS.

(Base of each Group : Year 1911 = 1,000.)

Year.	Metals and Coal.	Wool, Cotton, Leather, etc.	Agri-cultural Produce, etc.	Dairy Produce.	Groceries.	Meat.	Building Materials.	Chemicals.	All Groups.
1861 ..	1,438	1,381	1,583	1,008	1,963	..	1,070	2,030	1,538
1871 ..	1,096	1,257	1,236	864	1,586	..	1,044	1,409	1,229
1881 ..	1,178	1,115	1,012	935	1,421	..	1,091	1,587	1,121
1891 ..	895	847	1,024	995	1,032	888	780	1,194	945
1901 ..	1,061	774	928	1,029	1,048	1,345	841	917	974
1911 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1921 ..	2,173	1,361	1,767	2,000	1,977	2,158	2,733	2,303	1,903
1931 ..	1,826	1,040	1,121	1,398	1,794	1,512	2,025	2,166	1,429
1941 ..	1,960	1,402	1,721	1,554	1,883	1,776	3,138	2,527	1,796
1949 ..	3,502	3,966	2,876	2,309	2,558	3,356	4,611	3,221	3,191
1950 ..	3,902	5,464	3,155	2,459	2,829	4,616	(a)5,567	3,263	3,816
1951 ..	5,080	7,943	4,512	2,930	2,850	6,438	(a)7,074	3,294	5,098
1952 ..	6,481	7,365	5,038	4,024	3,455	6,289	(a)9,338	3,723	5,647
1953 ..	6,615	6,950	4,958	4,533	3,767	6,303	(a)8,519	4,691	(b)5,631

(a) The list of items and weighting of the original Building Materials group of this index are omitted in respect of recent years. The movement shown here for this group between 1949 and 1953 has been calculated in accordance with the movement occurring in the Building Materials group of the Basic Materials and Foodstuffs Index. (b) The "All Groups" index number for the year 1954 was 5,384 and for 1955 was 5,548.

NOTE.—The figures given in this table are comparable in the vertical columns but are not directly comparable horizontally.

C. CONTROL OF PRICES DURING AND SINCE THE 1939-45 WAR.

1. **General.**—An account of the measures taken by the Commonwealth Government to control prices from September, 1939 (immediately after the outbreak of war), until 29th May, 1948 (the date of the Prices Referendum), was given in Official Year Book No. 37, pp. 458-464.

2. **Transfer of Price Control to the States.**—Consequent upon the rejection of the proposal embodied in the Prices Referendum held on 29th May, 1948, that permanent power to control rents and prices (including charges) be conferred on the Commonwealth Government, responsibility for price fixation was assumed by the State Governments and steps were taken to pass State Prices Acts. These acts were proclaimed to operate simultaneously on 20th September, 1948. Except in the case of Queensland, each Act was to remain in force for a specific period, but the period varied from State to State.

On 20th September, 1948, each State Government issued declarations covering uniform lists of goods and services, which were brought under price control. Existing Commonwealth Prices Regulation Orders continued to apply to these goods and services until specially varied in accordance with the terms of the State legislation. At the same time, the Commonwealth Government issued an identical list of declared items to operate in the Australian Capital Territory and other Territories of the Commonwealth.

In the operation of State price control, the State Prices Commissioners collaborated closely. Conferences of Commissioners were held at intervals of approximately two months. Thus a large degree of uniformity was attained in controlling and decontrolling items and in the fixation of margins and prices of major items.

Since 1952 price control has been progressively modified in most States. Price control ceased in Western Australia on 31st December, 1953; Tasmania on 31st October, 1954; Victoria on 31st December, 1954; and the Australian Capital Territory on 10th February, 1955. In New South Wales general control of prices was suspended on 15th April, 1955 but was temporarily restored on some items from July, 1955 to September, 1956.

3. **Price Stabilization.**—Expenditure by the Commonwealth Government on price stabilization subsidies reached a peak in 1947-48 and since then the Commonwealth Government has progressively reduced the range of commodities eligible for subsidy.

In addition to those subsidies which had been an integral part of the Price Stabilization Plan, the Commonwealth Government paid bounties and subsidies for assistance to primary production, and these payments also had a stabilizing influence on prices.

For particulars of expenditure by the Commonwealth Government on price stabilization and other subsidies and bounties, see Chapter XXI.—Public Finance.

D. WAGES.

§ 1. Arbitration and Wages Boards Acts and Associated Legislation.

1. **General.**—Particulars regarding the operation of Commonwealth and State Laws for the regulation of wages, hours and conditions of labour were first compiled for the year 1913, and revised particulars have appeared annually in the *Labour Report* and in issues of the Official Year Book prior to No. 38.

2. **Commonwealth.**—Under placitum (xxxv) of section 51 of the Commonwealth of Australia Constitution, the Commonwealth Parliament is empowered to make laws with respect to “conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State”. The Parliament has made such a law, namely, the Conciliation and Arbitration Act.

This Act defines an “industrial dispute” as “a dispute (including a threatened, impending or probable dispute) as to industrial matters which extends beyond the limits of any one State and a situation which is likely to give rise to a dispute as to industrial matters which so extends”.

An amendment to the Conciliation and Arbitration Act assented to on 30th June, 1956 altered the structure of the arbitration machinery by separating the judicial and arbitral functions. The Commonwealth Industrial Court was set up to deal with judicial matters under the Act and the Commonwealth Conciliation and Arbitration Commission to handle the function of conciliation and arbitration.

This amending legislation was introduced in an endeavour to streamline the arbitration process and was prompted to some extent by the implications of the High Court judgment in the *Boilermakers’ Case* delivered on 2nd March, 1956. In this case, the High Court upheld a challenge by the Boilermakers’ Union to the validity of sections 29 (1.) (b) and (c) and 29A of the Conciliation and Arbitration Act 1904–1952, the sections under which the Boilermakers’ Union was required to observe a provision in an award which prohibits bans, limitations or restrictions on the performance of work in accordance with the award, and was found guilty of contempt of the Arbitration Court by wilfully disobeying this order and fined £500. An appeal against the decision of the High Court was upheld by the Privy Council, in its decision of 19th March, 1957.

The Commonwealth Industrial Court is composed of a Chief Judge and two other Judges. The Commonwealth Conciliation and Arbitration Commission comprises a President, not less than two Deputy Presidents, a Senior Commissioner, not less than five Commissioners and a number of Conciliators. Judges of the Commonwealth Court of Conciliation and Arbitration were made either members of the Commonwealth Industrial Court or presidential members of the Commonwealth Conciliation and Arbitration Commission. Conciliation Commissioners become non-presidential members of the Commission.

The jurisdiction of the Commonwealth Industrial Court shall be exercised by not less than two Judges. However, a single Judge may exercise the jurisdiction of the Court with respect to the dismissal or injury of an employee on account of industrial action, interpretation of awards, appeals to the Court from an act or decision of the Registrar, questions concerning eligibility of membership of an organization, the adoption, alteration or enforcement of rules of an organization, disputes between an organization and its members and a prescribed matter of practice or procedure. A single Judge may refer a question of law for the opinion of the Court constituted by not less than two Judges. The Court is a Superior Court of Record with the same power to punish contempts of its power and authority as is possessed by the High Court. In general, decisions of the Industrial Court are final; however, an appeal lies to the High Court but only when the latter grants leave to appeal.

The Commonwealth Conciliation and Arbitration Commission is empowered to prevent or settle industrial disputes by (a) effecting a reconciliation between parties to industrial disputes; (b) preventing and settling industrial disputes by amicable agreement; and (c) preventing and settling, by conciliation or arbitration, industrial disputes not prevented or settled by amicable agreement. The Commission may exercise its powers on its own motion or on the application of a party.

The President may assign a Commissioner to deal with industrial disputes relating to particular industries, or members of the Commission to deal with a particular industrial dispute. However, subject to the approval of the President, it is the duty of the Senior Commissioner to organize and allocate the work of the Commissioners and of the Conciliators.

When an industrial dispute occurs or is likely to occur, a Commissioner shall take steps for the prompt prevention or settlement of that dispute by conciliation or, if in his opinion conciliation is unlikely to succeed or has failed, by arbitration. A Commissioner may arrange with the Senior Commissioner for a Conciliator to assist the parties to reach an

amicable agreement. If an agreement is reached, a memorandum of its terms shall be made in writing, and may be certified by a Commissioner. A certified memorandum shall have the same effect as an award.

The Commission in Presidential Session, that is, the Commission constituted by at least three presidential members, and not otherwise, is empowered to deal with the making of awards, or certifying agreements in so far as they concern standard hours, basic wages and long service leave.

Upon application by a party to an industrial dispute, a Commissioner shall decide, in consultation with the President, whether in the public interest the dispute should be dealt with by a Commission constituted of not less than three members nominated by the President. The President may direct this Commission to hear the dispute ; however, after consideration the Commission may refer the dispute back for determination to the Commissioner originally dealing with the dispute.

An appeal against the decision of a Commissioner shall be heard by not less than three members nominated by the President, of whom at least two are presidential members of the Commission, thereby allowing for the first time a lay member of the Commission to participate in the hearing of an appeal. However, an appeal will not be heard unless the Commission considers it is a matter of public interest.

The Act also provides for the registration of associations of employees and employers and for inquiries to be held concerning disputed elections in organizations, and certain powers in connexion therewith are, by the Act, given to the Industrial Court.

Provision is also made in the Act for a presidential member of the Commission to handle industrial matters in connexion with the Maritime Industries, Snowy Mountains Area and Stevedoring Industry, except in those matters where the Act requires that the Commission shall be constituted by more than one member.

Before the 1956 amendment of the Act outlined above, industrial disputes were dealt with, in part, by an Arbitration Court constituted under the Act and otherwise by Conciliation Commissioners appointed under the Act. However, the division of work between the Court and Conciliation Commissioners has varied with successive amendments to the Act. Prior to 1947 a dispute was dealt with by either one or other part of the tribunal, except that questions about basic wages and standard hours could be dealt with only by the Court constituted by at least three Judges. Decisions of Conciliation Commissioners were subject to appeal to the Court. An amending Act of 1947 gave Conciliation Commissioners the same power as the Court, except in the matter of standard hours, basic wages and annual leave, and made decisions of Conciliation Commissioners final. However, a further amending Act in 1952 provided a right of appeal to the Arbitration Court against decisions of Conciliation Commissioners.

A further amendment to the Conciliation and Arbitration Act, No. 103 of 1956 (assented to on 15th November, 1956), altered the definition of an industrial dispute to read as follows :—

“(a) a dispute (including a threatened, impending or probable dispute) as to industrial matters which extends beyond the limits of any one State ; and (b) a situation which is likely to give rise to a dispute as to industrial matters which so extends ; and includes—(c) such a dispute in relation to employment in an industry carried on by, or under the control of, a State or an authority of a State ; (d) a dispute in relation to employment in an industry carried on by, or under the control of, the Commonwealth or an authority of the Commonwealth, whether or not the dispute extends beyond the limits of any one State ; and (e) a claim which an organization is entitled to submit to the Commission under section eleven A of the *Public Service Arbitration Act 1920-1956* or an application or matter which the Public Service Arbitrator has refrained from hearing, or from further hearing, or from determining under section fourteen A of that Act, whether or not there exists in relation to the claim, application or matter a dispute as to industrial matters which extends beyond the limits of any one State.”

The amendment also empowered the Commonwealth Conciliation and Arbitration Commission to deal with disputes and industrial matters, interstate or intra-state, associated with undertakings or projects of the Commonwealth Government which have been declared by the Minister to be Commonwealth projects for the purposes of this Act. In effect, this placed employees of Commonwealth projects, so declared, under the jurisdiction of the Commonwealth Conciliation and Arbitration Commission, whereas formerly some employees on the projects may have been working under conditions prescribed by other Industrial Tribunals. The Minister has the power to exempt certain persons or classes of persons working on the project from the jurisdiction of the Commonwealth Conciliation and Arbitration Commission.

Special provision was also made concerning the right of audience before the Commonwealth Industrial Court. Briefly, except in proceedings which, in general, involve questions of law or offences against the Act, parties are able to elect whether to appear personally or to be represented by lawyers or officials. Even in proceedings involving questions of law, except appeals from other Courts to the Industrial Court, the parties may, if they wish and the Court grants leave, be represented by officials.

Section 54 of the Principal Act which provided that "The Commission shall not include in an award a provision requiring a person claiming a benefit of an award to notify his employer that he is a member of an organization bound by the award" was repealed.

The amending Act enabled the Commissioner to make an award in relation to an industrial dispute concerning employees of a "Commonwealth Project" or when the Public Service Arbitrator refrains from dealing with claims made by a Public Service employee organization or consents to the claims being presented to the Commission, though such an award may be inconsistent with a law of the Commonwealth relating to salaries, wages, rates of pay or terms or conditions of service of employees in the Public Service as defined by section three of the Public Service Arbitration Act 1920-1956, not being the Commonwealth Employees' Compensation Act 1930-1954, the Commonwealth Employees' Furlough Act 1943-1953, the Superannuation Act 1922-1956 or any other prescribed Act.

The Public Service Arbitration Act was amended by Act No. 104 of 1956 (assented to on 15th November, 1956), which provided that an organization of employees in the Public Service may submit a claim to the Commonwealth Conciliation and Arbitration Commission with the consent of the Public Service Arbitrator or where the Arbitrator has, otherwise than on the ground of triviality, refrained from hearing or determining the claim.

The Australian National Airlines Act, No. 105 of 1956, and the Aluminium Industry Act, No. 106 of 1956, transferred employees of the Australian National Airlines Commission and the Aluminium Production Commission from the jurisdiction of the Public Service Arbitrator to that of the Commonwealth Conciliation and Arbitration Commission.

3. *States.*—In each State, Industrial Tribunals have been established to regulate and arbitrate in industrial matters. The chief of these are the Industrial Commission of New South Wales, the Industrial Courts of Queensland and South Australia, and the Western Australian Court of Arbitration, together with Wages Boards for specific industries or occupations which operate in Victoria, South Australia and Tasmania. Further details concerning the functions and powers of these authorities may be found in *Labour Report* No. 43.

§ 2. Rates of Wage and Hours of Labour.

1. *General.*—The collection of information respecting the current rates of wage payable in different callings and in occupations in various industries was first undertaken by this Bureau in the early part of 1913. The particulars are obtained primarily from awards, determinations and agreements under Commonwealth and State Industrial Acts and are therefore the minimum rates prescribed. They refer generally to the capital city in each State, but in industries which are not carried on in the capital cities, e.g., mining, agriculture, etc., the rates in the more important centres are taken. In those cases where no award, determination or agreement is in force, particulars are taken of the ruling union or predominant rate. During recent years the number of predominant rates of wage included in the tabulations has been reduced considerably, as most of the industries and occupations are now covered by awards, determinations or industrial agreements. The statistics of nominal wages and hours of labour are in course of revision to meet changes in industrial structure. The amounts should not be regarded as actual current averages, but as an index of changes expressed in money and hour terms.

The index numbers for male adult workers are computed with the weighted average wage in 1911 as base (= 1,000). In the case of females, however, it has not been possible to secure information for the years prior to 1914, and the index numbers are therefore computed with the weighted average rate of wage payable to adult female workers in Australia at 30th April, 1914 as base (= 1,000).

An extensive tabular presentation of the minimum rates of wage for adult male and female workers in the main occupations in the capital city of each State is given each year in the Appendix to the *Labour Report*.

2. *Weekly Wage Rates.*—(i) *General.* The average rate of wage for each industrial group is computed by taking the arithmetic average of the rates of wage payable for all classified occupations within that group. These averages are weighted to give the averages for the States and for Australia.

(ii) *Adult Males—States.* The following table gives the weighted average nominal weekly rates of wage payable to adult male workers at the dates specified :—

WEEKLY WAGE RATES : ADULT MALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
No. of Occupations included.(b) ..	870	894	615	562	477	466	3,884

RATES OF WAGE.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1939.. ..	96 7	93 6	97 5	88 11	100 6	89 5	95 3
" " 1952.. ..	284 8	274 5	267 9	274 6	284 7	276 2	278 2
" " 1953.. ..	296 8	282 6	273 10	278 9	292 5	296 11	287 7
" " 1954.. ..	298 4	284 3	278 7	282 2	293 3	299 2	290 0
" " 1955.. ..	310 1	296 7	284 11	284 9	304 9	302 7	300 0
" " 1956.. ..	329 7	310 11	303 10	295 2	316 11	318 6	316 5

INDEX NUMBERS.

(Base : Weighted Average Wage for Australia (51s. 3d.), 1911 = 1,000.)

31st December, 1939.. ..	1,885	1,825	1,900	1,735	1,962	1,745	1,858
" " 1952.. ..	5,555	5,354	5,224	5,356	5,553	5,388	5,428
" " 1953.. ..	5,788	5,513	5,342	5,439	5,705	5,794	5,611
" " 1954.. ..	5,820	5,547	5,435	5,506	5,722	5,837	5,658
" " 1955.. ..	6,051	5,787	5,559	5,555	5,946	5,905	5,853
" " 1956.. ..	6,431	6,066	5,928	5,759	6,184	6,214	6,173

(a) The statistics of nominal wages and hours of labour are in course of revision to meet changes in industrial structure. The amounts shown should not be regarded as actual current averages but as an index of changes expressed in money and hour terms. (b) As at 31st December, 1956.

(iii) *Adult Males—Industrial Groups.* The following table shows for Australia the average weekly rates of wage and index numbers in each industrial group and for all groups at the dates specified.

WEEKLY WAGE RATES : ADULT MALES, INDUSTRIAL GROUPS, AUSTRALIA.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK (EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES IN EACH INDUSTRIAL GROUP.(a)

Industrial Group.	31st Dec., 1939.	31st Dec., 1952.	31st Dec., 1953.	31st Dec., 1954.	31st Dec., 1955.	31st Dec., 1956.
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RATES OF WAGE.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
I. Wood, Furniture, etc.	100 1	270 2	276 11	281 11	295 11	309 4
II. Engineering, etc.	99 3	267 10	274 2	284 1	288 8	303 5
III. Food, Drink, etc.	96 9	271 5	279 5	280 9	290 4	307 3
IV. Clothing, Textiles, etc. ..	93 2	273 6	278 10	278 10	283 4	294 2
V. Books, Printing, etc.	114 3	305 5	313 11	324 11	332 2	348 9
VI. Other Manufacturing	95 8	270 2	276 10	279 7	288 9	304 1
VII. Building	106 5	293 11	301 3	307 6	323 1	340 0
VIII. Mining, etc.	109 1	281 8	288 2	288 0	300 4	313 9
IX. Railways, etc.	96 6	269 4	278 3	289 9	301 11	322 1
X. Air and Other Land Transport	92 10	263 11	270 3	273 3	281 3	298 3
XI. Shipping, etc.(b)	98 6	303 1	308 9	308 9	310 0	324 9
XII. Agricultural, etc.(b)	84 0	300 11	319 8	319 7	326 8	(c)
XIII. Domestic, etc.(b)	89 11	255 8	262 5	263 0	273 6	287 7
XIV. Miscellaneous	92 10	262 10	270 1	270 5	282 10	300 1
All Industrial Groups	95 3	278 2	287 7	290 0	300 0	316 5

For notes see next page.

WEEKLY WAGE RATES : ADULT MALES, INDUSTRIAL GROUPS, AUSTRALIA
—continued.

Industrial Group.	31st Dec., 1939.	31st Dec., 1952.	31st Dec., 1953.	31st Dec., 1954.	31st Dec., 1955.	31st Dec., 1956.
INDEX NUMBERS.						
(Base : Weighted Average Wage for All Groups in 1911 (51s. 3d.) = 1,000.)						
I. Wood, Furniture, etc.	1,953	5,272	5,403	5,501	5,774	6,036
II. Engineering, etc.	1,936	5,226	5,349	5,542	5,632	5,921
III. Food, Drink, etc.	1,888	5,296	5,452	5,478	5,665	5,995
IV. Clothing, Textiles, etc. ..	1,817	5,337	5,441	5,441	5,529	5,740
V. Books, Printing, etc.	2,229	5,959	6,124	6,340	6,481	6,805
VI. Other Manufacturing	1,867	5,272	5,401	5,455	5,635	5,933
VII. Building	2,076	5,735	5,878	6,000	6,305	6,634
VIII. Mining, etc.	2,142	5,495	5,622	5,620	5,861	6,121
IX. Railways, etc.	1,884	5,256	5,429	5,654	5,891	6,284
X. Air and Other Land Transport ..	1,812	5,150	5,274	5,332	5,488	5,820
XI. Shipping, etc.(b)	1,922	5,914	6,025	6,025	6,049	6,337
XII. Agricultural, etc.(b)	1,639	5,871	6,237	6,236	6,374	(c)
XIII. Domestic, etc.(b)	1,755	4,989	5,121	5,132	5,337	5,611
XIV. Miscellaneous	1,811	5,128	5,269	5,276	5,519	5,855
All Industrial Groups	1,858	5,428	5,611	5,658	5,853	6,173

(a) See note (a) to table on page 159. (b) Includes the value of keep, where supplied. (c) Not available.

(iv) *Adult Females—States.* The following table shows, for each State and Australia, the weighted average nominal weekly rates of wage payable to adult female workers for a full week's work at the dates specified.

WEEKLY WAGE RATES : ADULT FEMALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK
(EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
No. of Occupations included(b) ..	84	87	38	47	24	32	312

RATES OF WAGE.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1939 ..	53 3	51 9	55 2	49 7	55 8	50 8	52 8
" " 1952 ..	193 11	196 2	184 4	195 8	186 0	191 2	193 5
" " 1953 ..	198 5	200 10	188 7	199 6	190 5	196 4	197 11
" " 1954 ..	198 9	200 2	190 0	199 5	190 5	196 7	197 11
" " 1955 ..	205 3	206 9	192 10	199 11	193 7	197 11	203 4
" " 1956 ..	216 10	216 2	201 3	207 5	201 8	207 10	213 2

INDEX NUMBERS.

(Base : Weighted Average Wage for Australia (27s. 2d.), 30th April, 1914 = 1,000.)

31st December, 1939 ..	1,960	1,906	2,031	1,826	2,049	1,866	1,938
" " 1952 ..	7,138	7,220	6,784	7,202	6,846	7,037	7,120
" " 1953 ..	7,302	7,392	6,940	7,342	7,007	7,226	7,285
" " 1954 ..	7,314	7,367	6,994	7,339	7,007	7,236	7,285
" " 1955 ..	7,554	7,608	7,098	7,358	7,125	7,284	7,483
" " 1956 ..	7,981	7,955	7,406	7,635	7,423	7,649	7,846

(a) See note (a) to table on page 159.

(b) As at 31st December, 1956.

It should be noted that because there was no tabulation for adult female rates prior to 1914 the base of these index numbers is 1914 and not 1911 as in the foregoing tables for adult males.

(v) *Adult Females—Industrial Groups.* The following table shows the weighted average weekly rates of wage payable in Australia to adult female workers in the industrial groups in which they are mainly employed, and in all groups combined.

WEEKLY WAGE RATES : ADULT FEMALES, INDUSTRIAL GROUPS, AUSTRALIA.
WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK
(EXCLUDING OVERTIME) AND INDEX NUMBERS OF WAGE RATES IN EACH INDUSTRIAL GROUP.(a)

Date.	Industrial Group.					
	III. Food, Drink, etc.	IV. Clothing, Textiles, etc.	I., II., V., and VI. All Other Manufacturing.	XIII. Domestic, etc.(b)	XIV. Miscel- laneous.	All Groups.

RATES OF WAGE.

	<i>s. d.</i>	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1939	48 9	50 9	51 11	54 5	56 8	52 8
" " 1952	186 8	192 5	200 9	183 6	203 10	193 5
" " 1953	191 3	196 6	201 3	188 7	210 2	197 11
" " 1954	191 2	196 6	201 8	188 11	209 11	197 11
" " 1955	198 7	197 6	205 6	195 1	225 1	203 4
" " 1956	210 9	205 2	215 8	205 11	238 8	213 2

INDEX NUMBERS.

(Base : Weighted Average Wage for All Groups (27s. 2d.), 30th April, 1914 = 1,000.)

31st December, 1939	1,795	1,869	1,910	2,003	2,085	1,938
" " 1952	6,869	7,081	7,389	6,755	7,501	7,120
" " 1953	7,039	7,232	7,407	6,941	7,735	7,285
" " 1954	7,036	7,232	7,422	6,951	7,725	7,285
" " 1955	7,308	7,268	7,563	7,180	8,285	7,483
" " 1956	7,757	7,551	7,936	7,580	8,782	7,846

(a) See note (a) to table on page 159.

(b) Includes the value of keep, where supplied.

3. **Hourly Wage Rates.**—(i) *General.* The average rates of wage in the preceding tables are based on the minimum rates prescribed for selected occupations in awards, etc., for a full week's work, excluding overtime. The number of hours constituting a full week's work differs, however, in some instances between various trades and occupations in each State, and between the same trades and occupations in the several States. To secure what may be for some purposes a better comparison, the results in the preceding paragraphs are reduced to a common basis, namely, the rate of wage per hour. The particulars of weighted average nominal hourly rates of wage given in the following tables relate to all industrial groups except Groups XI. (Shipping, etc.) and XII. (Pastoral, Agricultural, etc.). These groups are excluded because for earlier years the hours of labour for some of the occupations included were not regulated either by awards or determinations of industrial tribunals or by legislation. As a result, the necessary particulars for the computation of average working hours and hourly rates of wage are not available.

(ii) *Adult Males—States.* The following table shows the weighted average nominal hourly rates of wage payable to adult male workers in each State at the dates specified.

HOURLY WAGE RATES(a) : ADULT MALES.

WEIGHTED AVERAGE NOMINAL HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES.

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
RATES OF WAGE.							
	<i>s. d.</i>	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1939 ..	2 3½	2 1½	2 3½	1 11½	2 4	2 0	2 2½
" " 1952 ..	6 11½	6 8½	6 4½	6 7½	7 0½	6 8½	6 9½
" " 1953 ..	7 1½	6 11½	6 6½	6 8½	7 3	7 0½	6 11½
" " 1954 ..	7 2½	7 0	6 8½	6 10½	7 3½	7 1½	7 0½
" " 1955 ..	7 6½	7 3½	6 10½	6 11½	7 7½	7 2½	7 3½
" " 1956 ..	8 0	7 8	7 4	7 2½	7 11½	7 7½	7 8½

INDEX NUMBERS.

(Base : Weighted Average Wage for Australia (13.96d.), 30th April, 1914 = 1,000.)

31st December, 1939 ..	1,963	1,834	1,979	1,692	2,001	1,717	1,903
" " 1952 ..	5,985	5,785	5,464	5,697	6,066	5,782	5,833
" " 1953 ..	6,128	5,959	5,599	5,787	6,239	6,042	5,986
" " 1954 ..	6,175	6,015	5,756	5,888	6,262	6,112	6,054
" " 1955 ..	6,463	6,284	5,910	5,961	6,553	6,207	6,294
" " 1956 ..	6,869	6,588	6,303	6,181	6,815	6,532	6,639

(a) Weighted average hourly rates of wage for all industrial groups except Groups XI. (Shipping, etc.) and XII. (Pastoral, Agricultural, etc.). See para. 3 (i) on previous page. See also note (a) to table on page 159.

(iii) *Adult Females—States.* The following table shows the weighted average nominal hourly rates of wage payable to adult female workers in each State at the dates specified.

HOURLY WAGE RATES(a) : ADULT FEMALEES.

WEIGHTED AVERAGE NOMINAL HOURLY RATES PAYABLE AND INDEX NUMBERS OF HOURLY RATES.

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
RATES OF WAGE.							
	<i>s. d.</i>	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1939 ..	1 2½	1 2	1 3	1 1	1 2½	1 1½	1 2½
" " 1952 ..	4 10½	4 10½	4 7½	4 10½	4 7½	4 9½	4 10
" " 1953 ..	4 11½	5 0½	4 8½	4 11½	4 9	4 11	4 11½
" " 1954 ..	4 11½	5 0	4 9	4 11½	4 9	4 11	4 11½
" " 1955 ..	5 1½	5 2	4 9½	5 0	4 10	4 11½	5 1
" " 1956 ..	5 5	5 4½	5 0½	5 2½	5 0½	5 2½	5 4

INDEX NUMBERS.

(Base : Weighted Average Wage for Australia (6.64d.), 30th April, 1914 = 1,000.)

31st December, 1939 ..	2,193	2,107	2,267	1,952	2,217	2,032	2,145
" " 1952 ..	8,762	8,863	8,328	8,840	8,404	8,639	8,739
" " 1953 ..	8,964	9,074	8,520	9,012	8,601	8,870	8,943
" " 1954 ..	8,979	9,044	8,586	9,009	8,601	8,883	8,943
" " 1955 ..	9,273	9,339	8,714	9,033	8,745	8,941	9,187
" " 1956 ..	9,797	9,765	9,090	9,373	9,111	9,390	9,630

(a) See note (a) to table on page 159.

4. *Weekly Hours of Labour.*—(i) *General.* The number of hours constituting a full week's work (excluding overtime) differs in some instances between various trades and occupations in each State and between the same trades and occupations in the several States.

The particulars of weekly hours of labour given in the following tables relate to all industrial groups except Groups XI. (Shipping, etc.) and XII. (Pastoral, Agricultural, etc.). These groups are excluded because for earlier years the hours of labour for some of the occupations included were not regulated either by awards or determinations of industrial tribunals or by legislation. As a result, the necessary particulars for the computation of average working hours for these groups are not available.

(ii) *Adult Males—States.* The following table shows the weighted average nominal hours of labour (excluding overtime) in a full working week for adult male workers in each State and Australia at 31st December, 1939 and 1956, together with the corresponding index numbers.

There has been no change in the weighted average nominal hours of labour for adult males since 1951.

WEEKLY HOURS OF LABOUR (EXCLUDING OVERTIME)(a) : ADULT MALES.
WEIGHTED AVERAGE NOMINAL HOURS OF LABOUR (EXCLUDING OVERTIME) WORKED DURING A FULL WORKING WEEK AND INDEX NUMBERS OF HOURS OF LABOUR.

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
WEEKLY HOURS OF LABOUR.							
31st December, 1939 ..	43.92	44.61	43.46	45.83	44.33	45.33	44.29
„ „ 1956 ..	39.99	39.98	40.00	40.00	39.51	40.00	39.95
INDEX NUMBERS.							
(Base : Weighted Average for Australia (48.93), 30th April, 1914 = 1,000).							
31st December, 1939 ..	898	912	888	937	906	926	905
„ „ 1956 ..	817	817	817	817	807	817	816

(a) Weighted average working hours per week for all industrial groups except Groups XI. (Shipping, etc.) and XII. (Pastoral, Agricultural, etc.). See para. 3 (i) on page 161. See also note (a) to table on page 159.

(iii) *Adult Females—States.* The following table shows the weighted average nominal hours of labour (excluding overtime) in a full working week for adult female workers in each State and Australia at 31st December, 1939 and 1956, together with the corresponding index numbers.

There has been no change in the weighted average nominal hours of labour for adult females since 1948.

WEEKLY HOURS OF LABOUR (EXCLUDING OVERTIME)(a) : ADULT FEMALES.
WEIGHTED AVERAGE NOMINAL HOURS OF LABOUR (EXCLUDING OVERTIME) WORKED DURING A FULL WORKING WEEK AND INDEX NUMBERS OF HOURS OF LABOUR.

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
WEEKLY HOURS OF LABOUR.							
31st December, 1939 ..	43.88	44.42	44.01	45.96	45.38	45.10	44.36
„ „ 1956 ..	40.00	40.00	40.00	40.00	40.00	40.00	40.00
INDEX NUMBERS.							
(Base : Weighted Average for Australia (49.08), 30th April, 1914 = 1,000).							
31st December, 1939 ..	894	905	897	936	925	919	904
„ „ 1956 ..	814	814	814	814	814	814	814

(a) See note (a) to table on page 159

5. *Nominal and Effective Wage Rates.—(i) General.* Index numbers of wage rates are said to be *nominal* when they represent changes in the wage rates themselves but are described as *effective* or *real* when they represent changes in equivalent purchasing power, that is, the purchasing power of the corresponding wages in terms of some definite composite unit or regimen the cost of which can be ascertained at different times.

Prior to 1936 it was the practice of this Bureau to compute effective wage rate index numbers by dividing the nominal wage rate index numbers by the corresponding retail price index numbers for food, groceries and rent of all houses ("A" series). While wage rates were generally varied on the basis of the "A" series index numbers there was a good deal to be said for this procedure. When the Commonwealth Court abandoned the "A" series, the merits of the "C" series for "deflating" nominal wage rates were strengthened and real wages to the end of 1937 were measured in terms of their purchasing power over both regimens. Since 1938, when computation of the "A" series was discontinued, real wages have been measured in terms of their purchasing power over the "C" series only. The "C" series covers food, groceries, rent of four- and five-roomed houses, clothing and miscellaneous household requirements.

A graph showing nominal and real wage rate index numbers for the period 1911 to 1955 appears on page 173.

(ii) *Nominal Weekly Wage Rate Index Numbers.* The following table shows, for the period 1911 to 1956, index numbers of the weighted average nominal weekly rates of wage payable for adult males in each State, the weighted average rate for Australia in 1911 being taken as the base (= 1,000). These results are based generally upon rates of wage prevailing in the capital city of each State, but in certain industries, such as mining, rates are necessarily taken for places other than the capital cities. The index numbers for 1911 are based on rates current at the end of December, 1911, annual averages not being available. For 1914 and subsequent years, however, the index numbers are based on the average of the rates operative at the end of each of the four quarters.

NOMINAL WAGE RATE(a) INDEX NUMBERS : ADULT MALES.

(Base : Weighted Average Nominal Wage Rate(a) for Australia, 1911 = 1,000.)

State.	1911.	1914.	1921.	1929.	1931.	1939.	1941.	1951.	1953.	1954.	1955.	1956.
N.S. Wales ..	1,003	1,093	1,862	2,012	1,851	1,874	2,024	4,588	5,699	5,797	5,942	6,252
Victoria ..	985	1,062	1,803	1,964	1,683	1,808	1,984	4,458	5,451	5,523	5,699	5,991
Queensland ..	997	1,035	1,879	1,976	1,769	1,885	1,981	4,377	5,280	5,419	5,508	5,765
South Australia ..	1,013	1,061	1,697	1,891	1,580	1,725	1,897	4,376	5,384	5,456	5,548	5,708
W. Australia ..	1,152	1,223	1,832	1,960	1,745	1,956	2,106	4,557	5,647	5,711	5,869	6,075
Tasmania ..	799	1,027	1,745	1,840	1,625	1,738	1,895	4,441	5,718	5,805	5,899	6,152
Australia ..	1,000	1,081	1,826	1,972	1,752	1,846	1,997	4,495	5,539	5,632	5,773	6,048

(a) For a full week's work (excluding overtime).

(iii) *Effective or Real Wage Rate Index Numbers.* In obtaining the effective wage rate index numbers in the following table, the nominal wage rate index numbers shown above have been divided by the corresponding retail price index numbers for the capital city and multiplied by 1,000. Since the "C" series index numbers were not compiled for periods prior to November, 1914, it has been assumed that fluctuations between 1911 (the base of the table) and 1914 in the "C" series would have been similar to the fluctuations observed in the "A" series. A table showing effective or real wage rate index numbers from 1901 to 1937 measured in terms of purchasing power over the "A" series regimen appeared in earlier issues of the Official Year Book (see No. 37, page 473).

EFFECTIVE OR REAL WAGE RATE(a) INDEX NUMBERS : ADULT MALES.

Measured in terms of purchasing power over the "C" series regimen.

(Base : Weighted Average Real Wage Rate (a) for Australia, 1911 = 1,000.)

State.	1911.	1914.	1921.	1929.	1931.	1939.	1941.	1951.	1952.	1953.	1954.	1955.
N.S. Wales	925	1,073	1,130	1,210	1,207	1,187	1,430	1,428	1,450	1,467	1,469
Victoria	954	1,084	1,164	1,200	1,180	1,187	1,429	1,432	1,438	1,455	1,453
Queensland	1,022	1,227	1,290	1,336	1,306	1,240	1,498	1,494	1,490	1,506	1,501
South Australia	914	1,034	1,099	1,137	1,147	1,158	1,439	1,430	1,445	1,444	1,421
W. Australia	1,043	1,096	1,152	1,189	1,308	1,279	1,477	1,479	1,483	1,400	1,385
Tasmania	902	984	1,108	1,120	1,153	1,142	1,438	1,432	1,436	1,454	1,447
Australia ..	1,000	948	1,087	1,151	1,210	1,211	1,194	1,439	1,438	1,450	1,459	1,454

(a) For a full week's work (excluding overtime).

In earlier issues of the Official Year Book (see No. 39, page 410) a table was included showing similar index numbers for Australia as a whole under both the "A" and "C" series at intervals from 1901 to 1950.

§ 3. Average Weekly Wage Earnings.

1. Average Weekly Total Wages Paid and Average Earnings, All Industries.—The following figures are derived from employment and wages recorded on Pay-roll Tax returns (which cover approximately 75 per cent. of the total employment for Australia) and from estimates of the unrecorded balance. The figures relate to civilian wages and salaries only, pay and allowances of members of the armed forces being excluded. Corresponding figures for each quarter are published in the *Monthly Review of Business Statistics* and the *Quarterly Summary of Australian Statistics*.

AVERAGE WEEKLY TOTAL WAGES PAID AND AVERAGE EARNINGS.

Year.	N.S.W. (a)	Vic.	Q'land.	S. Aust. (b)	W. Aust.	Tas.	Aust.
AVERAGE WEEKLY TOTAL WAGES PAID. (£'000.)							
1951-52	14,364	9,816	4,319	3,018	2,108	1,059	34,684
1952-53	15,090	10,490	4,750	3,311	2,344	1,178	37,163
1953-54	16,043	11,305	5,065	3,561	2,586	1,280	39,840
1954-55	17,357	12,221	5,398	3,839	2,731	1,365	42,911
1955-56	18,955	13,358	5,809	4,195	2,897	1,476	46,690
AVERAGE WEEKLY EARNINGS PER EMPLOYED MALE UNIT.(c) (£.)							
1951-52	14.24	14.20	11.93	13.13	12.80	12.59	13.65
1952-53	15.50	15.46	13.32	14.58	14.13	13.97	14.95
1953-54	16.15	16.27	14.05	15.30	15.04	14.92	15.69
1954-55	16.96	17.06	14.51	16.09	15.55	15.60	16.42
1955-56	18.16	18.22	15.34	17.10	16.37	16.66	17.51

(a) Includes the Australian Capital Territory. (b) Includes the Northern Territory. (c) Male units represent total male employment plus a proportion of female employment based on the approximate ratio of female to male earnings. The same ratio has been used in each State, and because the average ratio of female to male earnings may vary between States, precise comparisons between average earnings in different States cannot be made on the basis of the figures above.

2. Average Weekly Wage Earnings Index Numbers.—The following table shows, for "All Industries" and for "Manufacturing", the movement in average weekly wage earnings from 1945-46 to the December Quarter, 1956. The "All Industries" index is based on Pay-roll Tax returns and other data. The index for manufacturing industries for the years 1945-46 to 1955-56 is based on the average earnings of male wage and salary earners employed in factories as disclosed by annual factory returns (*see* Chapter VII.—Manufacturing Industry, § 8, para. 2 (iii)); figures subsequent to June, 1956 are preliminary estimates based on Pay-roll Tax returns.

The index numbers show for "All Industries" and "Manufacturing" the movement in average earnings over a period of time. However, they do not give, at any point of time, a comparison of actual earnings in the two groups. The base of each series is the year 1945-46 = 1,000 and both series have been seasonally adjusted.

AVERAGE WEEKLY WAGE EARNINGS(a) INDEX NUMBERS : AUSTRALIA.

SEASONALLY ADJUSTED.

(Base of each Series : Year 1945-46 = 1,000.)

Year.	All Industries.(b)	Manufacturing.(c)	Quarter.	All Industries.(b)	Manufacturing.(c)
1945-46	1,000	1,000	1954—March Qtr.	2,491	2,552
1946-47	1,037	1,056	June	2,477	2,534
1947-48	1,164	1,206	Sept.	2,522	2,635
1948-49	1,322	1,365	Dec.	2,524	2,614
1949-50	1,451	1,505	1955—March	2,589	2,732
			June	2,652	2,758
1950-51	1,742	1,810	Sept.	2,689	2,806
1951-52	2,145	2,213	Dec.	2,731	2,849
1952-53	2,350	2,394	1956—March	2,749	2,859
1953-54	2,462	2,511	June	2,801	2,897
1954-55	2,572	2,685	Sept.	2,863	2,968
1955-56	2,743	2,853	Dec.	2,903	2,996

(a) Including salaries. (b) Average earnings per male unit employed. Male units represent total male employment plus a proportion of female employment based on the approximate ratio of female to male earnings. (c) Average earnings of male wage and salary earners in factories.

§ 4. Basic Wages in Australia.

1. **General.**—The concept of a “basic” or “living” wage is common to rates of wage determined by industrial authorities in Australia. Initially the concept was interpreted as the “minimum” or “basic” wage necessary to maintain an average employee and his family in a reasonable state of comfort. However, it is now generally accepted “that the dominant factor in fixing the basic wage is the economic or productivity factor and that the basic wage must be the highest that industry as a whole can pay”.*

Under the Commonwealth Conciliation and Arbitration Act, as amended in June, 1956 (see page 156), the Commonwealth Conciliation and Arbitration Commission (previously the Commonwealth Court of Conciliation and Arbitration) may, for the purpose of preventing or settling an industrial dispute extending beyond the limits of any State, make an order or award “altering the basic wage (that is to say, that wage or that part of the wage, which is just and reasonable for an adult male [female], without regard to any circumstance pertaining to the work upon which, or the industry in which he [she] is employed) or the principles upon which it is computed”.

In the past, the Commonwealth Court of Conciliation and Arbitration held general basic wage inquiries from time to time and its findings applied to industrial awards within its jurisdiction. Prior to the decision of the Commonwealth Court of Conciliation and Arbitration, announced on 12th September, 1953, discontinuing the automatic adjustment of basic wages in Commonwealth awards in accordance with variations occurring in retail price index numbers, the relevant basic wage of the Commonwealth Court of Conciliation and Arbitration was adopted to a considerable extent by State Industrial Tribunals. In New South Wales and South Australia, the State industrial authorities adopted the relevant Commonwealth basic wage. In Victoria and Tasmania, where the Wages Boards systems operate, no provision was included in the industrial Acts for the declaration of a basic wage, although, in the past, Wages Boards generally adopted basic wages based on those of the Commonwealth Court. In Queensland and Western Australia, the determination of a basic wage is a function of the respective State Industrial or Arbitration Courts and (subject to State law) they have regard to rates determined by the Commonwealth Court. Following the decision of the Commonwealth Court of Conciliation and Arbitration to discontinue automatic quarterly adjustments to the basic wage, the various State industrial authorities determined State basic wages in accordance with the provisions of their respective State industrial legislation. Details of the action taken in each State and subsequent variations in State basic wages are set out in para. 5 (see page 177).

In addition to the basic wage, “secondary” wage payments, including margins for skill, loadings and other special considerations peculiar to the occupations or industry, are determined by these authorities. The basic wage, and the “secondary” wage, where prescribed, make up the “minimum” wage for a particular occupation. The term “minimum wage” as distinct from the basic wage is used currently to express the lowest rate payable for a particular occupation or industry.

2. **The Commonwealth Basic Wage.**—(i) *Early Judgments.* The principle of a living or basic wage was propounded as far back as 1890 but it was not until 1907 that a wage, as such, was declared by a Court in Australia. The declaration was made by way of an order in terms of section 2 (d) of the Excise Tariff 1906 in the matter of an application by H. V. McKay that the remuneration of labour employed by him at the Sunshine Harvester Works, Victoria, was “fair and reasonable”. Mr. Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration, defined the standard of “a fair and reasonable” minimum wage for unskilled labourers as that standard appropriate to “the normal needs of the average employee, regarded as a human being living in a civilized community”.† The rate declared was 7s. per day or £2 2s. per week for Melbourne, the amount considered reasonable for “a family of about five”.

The “Harvester” standard was adopted by the Commonwealth Court of Conciliation and Arbitration for incorporation in its awards, and practically the same rates continued until 1913, when the Court took cognizance of retail price index numbers, covering food and groceries and rent of all houses (“A” series) for the 30 more important towns of Australia, which had been published by the Commonwealth Statistician for the first time in the preceding year. The basic wage rates for towns were thereafter varied in accordance with the respective retail price index numbers. Court practice was to equate the retail price index number 875 for Melbourne for the year 1907 to the “Harvester” rate of 42s. per week (or the base of the index (1,000) to 48s. per week). At intervals thereafter as awards came before it for review, the Court usually revised the basic wage rate of the award in proportion to variations in the retail price index. In some country towns certain “loadings” were added by the Court to wage rates so derived to

* Commonwealth Arbitration Reports, Vol. 44, p. 57.

† 2 C.A.R., p. 3.

offset the effect of lower housing standards, and consequently of house rents, on the index numbers for these towns.

Over the period of its operation, the adequacy or otherwise of the "Harvester" standard was the subject of much discussion, the author of the judgment himself urging on several occasions the need for its review. During the period of rapidly rising prices towards the end of the 1914-18 War strong criticism developed that this system did not adequately maintain the "Harvester" equivalent. A Royal Commission was appointed in 1919 to inquire as to what it would actually cost a man, wife and three children under fourteen years of age to live in a reasonable standard of comfort, and as to how the basic wage might be automatically adjusted to maintain purchasing power. The Commission's Report was presented in 1920. An application by the unions to have the amounts arrived at by the inquiry declared as the basic wage was not accepted by the Court because they were considerably in advance of existing rates and grave doubts were expressed by members of the Court as to the ability of industry to pay such rates. Further details of the recommendations of the Commission were given in *Labour Report* No. 40, p. 106.

The system of making automatic quarterly adjustments of the basic wage in direct ratio to variations in the retail price index ("A" series) was first introduced in 1921. The practice then adopted was to calculate the adjustments to the basic wage quarterly on the index number for the preceding quarter. Previously, adjustments had been made sporadically in relation to retail price indexes for the previous calendar year or the year ended with the preceding quarter. The practice adopted by the Commonwealth Court in 1921 of making automatic quarterly adjustments on a sliding scale continued until the Court's judgment of 12th September, 1953 (*see* page 169).

In 1922 an amount known as the "Powers' 3s." was added by the Court as a general "loading" to the weekly basic wage for the purpose of maintaining during a period of rising prices the full equivalent of the "Harvester" standard. This loading continued until 1934.

(ii) *Basic Wage Inquiries, 1930-31, 1932, 1933.* No change was made in the method of fixation and adjustment of the basic wage until the onset of depression, which began to be felt severely during 1930. Applications were then made to the Court for some greater measure of reduction of wages than that which resulted from the automatic adjustments due to falling retail prices. The Court held a general inquiry, and, while declining to make any change in the existing method of calculating the basic wage, reduced all wage rates under its jurisdiction by 10 per cent. from 1st February, 1931. In June, 1932 the Court refused applications by employee organizations for the cancellation of the 10 per cent. reduction of wage rates. In May, 1933 the Court again refused to cancel the 10 per cent. reduction in wage rates, but decided that the existing method of adjustment of the basic wage in accordance with the "A" series retail price index number had resulted in some instances in a reduction of more than 10 per cent. In order to rectify this the Court adopted the "D" series of retail price index numbers for future quarterly adjustments of the basic wage.

Particulars of the 1930-31 and the 1932 Inquiries may be found in *Labour Report* No. 22, pp. 45-48 and of the 1933 Inquiry in *Labour Report* No. 23, pp. 45-46.

(iii) *Basic Wage Inquiry, 1934.* A summary of the judgment delivered on 17th April, 1934, was given in Official Year Book No. 29, page 545. Until this judgment the "Harvester" standard, adjusted by variations in retail price index numbers, continued to be the theoretical basis of the wage of the Commonwealth Court. The new rate for the six capital cities was in effect the same as that previously paid under the "A" series, without the "Powers' 3s." and without the 10 per cent. reduction which then ceased to operate.

Automatic quarterly adjustment of the basic wage was transferred from the "A" and the "D" series to the "C" Series Retail Price Index. The base of the index (1,000) was taken by the Court as equal to 81s. per week. This gave rates as declared on this occasion for the capital cities on the basis of their respective index numbers ranging from 61s. for Brisbane to 67s. for Sydney and Hobart, the average wage for the six capital cities being 65s.

(iv) *Basic Wage Inquiry, 1937.* In May, 1937, the Commonwealth Court heard an application by the combined unions for an increase in the basic wage. The unions asked that the equivalent of the base (1,000) of the "C" Series Index be increased from 81s. to 93s., which on index numbers then current would have represented an average increase of about 10s. per week. The chief features of the judgment delivered on 23rd June were:—

(a) Amounts were added to the basic wage not as an integral, and therefore adjustable, part of that wage, but as "loadings" additional to the rates payable under the 1934 judgment, which were referred to in the judgment as the "needs" portion of the total resultant basic wages. These loadings, commonly referred to as "Prosperity" loadings, ranged, for capital cities, from 4s. to 6s., that for the "six capitals" being 5s.

(b) The basis of the adjustment of the "needs" portion of the wage in accordance with the variations shown by retail price index numbers was transferred from the "C" series to a special "Court" series based upon the "C" series (*see* page 144).

(c) Female and junior rates were left for adjustment by individual Judges when dealing with specific awards.

The main parts of the judgment were reprinted in Official Year Book No. 30, pp. 564-75 and in *Labour Report* No. 28, pp. 77-87.

(v) *Basic Wage Inquiry*, 1940. On 5th August, 1940 the Full Court commenced the hearing of an application by the combined unions for an increase in the existing basic wage by raising the value of 1,000 (the base of the "C" Series Index upon which the "Court" series was based) from 81s. to 100s. per week, and the incorporation of the existing "Prosperity" loadings in the new rate mentioned. In its judgment of 7th February, 1941, the Court unanimously refused to grant any increase, owing mainly to the uncertainty of the economic outlook under existing war conditions. The application was stood over for further consideration. (*See* (vi) following.)

The Chief Judge stated: "The Court has always conceded that the 'needs' of an average family should be kept in mind in fixing a basic wage. But it has never, as the result of its own inquiry, specifically declared what is an average family, or what is the cost of a regimen of food, clothing, shelter and miscellaneous items necessary to maintain it in frugal comfort, or that a basic wage should give effect to any such finding. In the end economic possibilities have always been the determining factor . . . what should be sought is the independent ascertainment and prescription of the highest basic wage that can be sustained by the total of industry in all its primary, secondary and ancillary forms".*

The Chief Judge also suggested that the more logical system would be to grade the basic wage according to family responsibilities by means of a comprehensive system of child endowment, and that if a scheme of this nature were established, future fixations of the basic wage would be greatly simplified.†

(vi) "*Interim Basic Wage Inquiry*, 1946. As the result of (a) an application made by the Commonwealth Attorney-General for the restoration to the Full Court List of certain adjourned 1940 basic wage applications (*see* (v) above), (b) a number of fresh cases which had come to the Court since 1941, and (c) an application by the combined unions for an "interim" basic wage declaration, the Court commenced the hearing of this case on 25th November, 1946. Judgment was delivered on 13th December, 1946 whereby an increase of 7s. per week was granted in the "needs" portion of the basic wage then current, the rate for the six capital cities as a whole being increased from 93s. to 100s. per week. For automatic quarterly adjustments a new "Court" Index (Second Series) (Base 1923-27 = 87.0) was adopted. All "loadings" on the basic wage were retained. Further particulars of this judgment may be obtained from *Labour Report* No. 38, page 79.

(vii) *Basic Wage Inquiry*, 1949-50. This finalized the case begun in 1940 and continued in 1946 (*see* above). Evidence was completed on 22nd August, 1950, and the three judges (Kelly C.J., Foster and Dunphy J.J.) delivered separate judgments on 12th October, 1950. In these judgments, which were in the nature of general declarations, a majority of the Court (Foster and Dunphy J.J.) was of the opinion that the basic wage for adult males should be increased by £1 per week, and that for adult females should be 75 per cent. of the adult male rate. Kelly C.J., dissenting, considered that no increase in either the male or the female wage was justified.

On 24th October, 1950 and 23rd November, 1950 the Court made further declarations regarding the "Prosperity" loading of 1937 (*see* page 167) which was being paid at rates between 3s. and 6s. per week according to localities, etc., and the future basis of quarterly adjustments. The "Prosperity" loading was standardized at a uniform rate of 5s. per week for all localities and was declared to be an adjustable part of the basic wage. The Court also declared that the "war" loadings were not part of the basic wage.

With regard to other "loadings" the Court on 17th November, 1950 proceeded to examine the individual awards in the claims before it, for the purpose of determining to what extent such "loadings" formed part of the basic wage. Any "loading" declared to be part of the basic wage ceased to be paid as a separate entity, but apart from the special case of the Australian Capital Territory there were very few "loadings" which fell within this category.

* 44 C.A.R., pp. 47-8. † Legislation covering a scheme to become operative on 1st July, 1941 was passed by the Commonwealth Parliament on 3rd April, 1941. For details *see* Chapter XV.—Welfare Services.

The new rates operated from the beginning of the first pay-period in December, 1950, in all cases being the "needs" rate (Second Series) on the indexes of September quarter 1950, plus a flat-rate addition of £1, together with the standardized "Prosperity" loading of 5s. (*see above*).

The basic wage rate for the six capital cities (weighted average) arrived at by the Court after applying the foregoing declarations was £8 2s., comprising £6 17s. "needs" (Second Series) plus 5s. uniform "Prosperity" loading plus the £1 addition. The declaration provided that the whole of this basic wage would be subject to automatic quarterly adjustments as from the beginning of the first pay-period commencing in February, 1951, on the basis of the index numbers for the December quarter, 1950. For this purpose the new rate of £8 2s. was equated to the "C" series retail price index number 1572 for the six capital cities (weighted average) for the September quarter, 1950. From this equation was derived a new "Court" Index (Third Series) with 103.0 equated to 1,000 in the "C" Series Index.

The basic wage rates operative in November, 1950, are shown below in comparison with those operative from the beginning of the first pay-period commencing in December, 1950:—

Date of Operation.	Sydney.	Mel- bourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Six Capitals.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
November, 1950 ..	146 0	143 0	135 0	137 0	139 0	139 0	142 0
December, 1950 ..	165 0	162 0	154 0	158 0	160 0	160 0	162 0

Further details of this judgment were given in *Labour Report* No. 40, page 81.

(viii) *Basic Wage and Standard Hours Inquiry, 1952-53.* On 5th August, 1952, the Commonwealth Court of Conciliation and Arbitration began hearing claims by—

- (1) The Metal Trades Employers Association and other employers' organizations—
 - (a) that the basic wage for adult males be reduced ;
 - (b) that the basic wage for adult females be reduced ;
 - (c) that the standard hours of work be increased ;
 - (d) that the system of adjusting the basic wages in accordance with variations occurring in retail price index numbers be abandoned.
- (2) The Metal Trades Federation, an association of employees' organizations, that the basic wage for adult males be increased, which would also have resulted in increasing the amount, though not the proportion it bore to the basic wage for adult males, of the basic wage for adult females.

A number of Governments, organizations and other bodies obtained leave to intervene and in this role the Australian Council of Trade Unions supported the claims of the Metal Trades Federation.

The Court consisted of Kelly *C.J.*, Foster, Kirby, Dunphy, Wright, McIntyre and Morgan, *J.J.*, but before the hearing of evidence commenced Wright *J.* withdrew and during the hearing of the case Foster *J.* withdrew from the bench. The Court gave its decision on 12th September, 1953 and stated that reasons for its decision would be delivered later. McIntyre *J.* died before the reasons for the judgment could be delivered.

In the early stages of the case the employers applied for an immediate and separate hearing of the question of suspension of the basic wage adjustment provisions in awards. The Court however, after hearing argument, indicated that it was not satisfied that a sufficient case had been made out for such a separate hearing.

Evidence in the employers' case began on 16th September, 1952. On completion of the employers' case the counsel for employee organizations submitted that there was "no case to answer" and asked for the dismissal of the case. The Court rejected this claim and the hearing of evidence for the employee organizations was concluded on 11th September, 1953.

The decision of the Court, announced on 12th September, 1953, was expressed in the following terms:—

- "1. The employers' applications for reduction of the current basic wages for adult males and for reduction of the current basic wages for adult females are refused.

2. The employers' applications for an increase of the standard hours of work in the industries covered thereby are refused.

3. The employers' applications for omission or deletion of clauses or sub-clauses providing for the adjustment of basic wages are granted.

4. The Unions' applications for increases of basic wages are refused.

The Court makes orders accordingly, to operate as from to-day. The reasons for the above decisions will be delivered at a later date. The form of the appropriate orders will be settled by the Industrial Registrar." *

The reasons for the above decisions were delivered on 27th October, 1953.

The Court in the course of its judgment said that in the present case nothing had been put before the Court in support of a departure from its now well established principle that the basic wage should be the highest that the capacity of the community as a whole could sustain. If the Court is at any time asked to fix a basic wage on a true needs basis, the question of whether such a method is correct in principle and all questions as to the size of the family unit remain open.

No evidence was submitted in the inquiry to suggest that the basic wage in its character of a "foundational wage" of providing, or helping to provide, a just and reasonable standard of living to employees whose income is based or dependent upon it, was inadequate, and the arguments of both the employers and employees were directed towards a basic wage based on the capacity of industry to pay.

The Court, in reviewing the claims of the respondents, in the light of the existing economic situation, indicated that although aware of the difficulties besetting industry and of the dependence of Australia's prosperity upon that large part of her productive effort whose rewards are conditioned by good seasons and whose prices are largely beyond her control, the Court was not satisfied that the employers had discharged the onus of proving that the existing situation called for a reduction of general standards either in the matter of the basic wage or in the ordinary working week. The Court was satisfied that there could be, in the existing situation, no increase in the basic wage, as was claimed by the Metal Trades Federation.

The Court decided to discontinue the principle of automatically adjusting the basic wage in accordance with variations in retail price index numbers while the basic wage was assessed on the capacity of industry. It was considered that "the further the Court has withdrawn from relating the basic wage to the fulfilment of any particular standard of needs, the less has become the justification for keeping the nominal wage 'automatically adjusted' during the currency of an award".† Moreover, there was no ground for assuming that the capacity of industry to pay will be maintained at the same level or that it will rise or fall coincidentally with the purchasing power of money. The Court found that the system of automatic adjustments had undoubtedly been an accelerating factor in the rapid increase in prices in Australia, particularly in the years 1951 and 1952, and this factor supported the Court's decision to abolish the system.

In regard to the basic wage for female employees the Court decided that no basis for a review of the existing ratio which the female basic wage bears to the male basic wage existed on the material presented to it, the Court being satisfied that industry had the capacity to maintain the existing female basic wage rates.

In rejecting the claim for an increase in the standard hours of work, the Court considered that the industry of the country was healthy and prosperous enough at present to sustain the existing standard.

The Court intimated that time would be saved in future inquiries if the parties to the disputes, in discussing the principle of the "capacity to pay", directed their attention to the broader aspects of the economy, such as indicated by a study of—Employment; Investment; Production and Productivity; Overseas Trade; Overseas Balances; Competitive position of secondary industry; Retail Trade.

In order to remove certain misconceptions about the function of the Court it was stated during the course of the judgment that "the Arbitration Court is neither a social nor an economic legislature. Its function under section 25 of the Act is to prevent or settle specific industrial disputes".‡ However, this function "must be exercised in the social and economic setting of the time at which it makes its decision. It must settle industrial disputes upon terms which seem to it to be just, having regard to conditions which exist at the time of its decision." In addition, the Court stressed that "the primary rule that a claimant is required to substantiate his claim should always be observed".

* 77 C.A.R., p. 486.

† *Ibid.*, p. 497.

‡ *Ibid.*, p. 506.

In accordance with its decision to abolish the automatic adjustment clause from its awards, the Court began, on 21st October, 1953, to deal with awards which were not actually affected by the original order. During this process the Court announced that it had no other method in mind in substitution of the automatic adjustment clauses. In fact the only issue before the Court was the abolition or retention of the adjustment principle and that issue had been determined. The basic wage as fixed by the Court in the new or amended clauses in awards was that which had become operative in August, 1953, and no provision was made for its automatic quarterly adjustment. The last such adjustment had been made on the "Court" Series Index for the June quarter, 1953.

After the Court had amended all the awards listed before it as a result of applications by one of the parties to the awards, the Court, on its own motion under section 49 of the Commonwealth Conciliation and Arbitration Act, listed those awards not the subject of an application by one of the parties and then proceeded to delete the clauses providing for the automatic adjustment of the basic wage.

The power of the Commonwealth Court of Conciliation and Arbitration to vary awards not the subject of an application by one of the parties was unsuccessfully challenged in the High Court of Australia.

(ix) *Basic Wage Inquiry*, 1956. On 14th February, 1956 the Commonwealth Court of Conciliation and Arbitration, consisting of Kirby, Dunphy, Wright and Morgan *JJ.*, commenced hearing an application by the Amalgamated Engineering Union and others made by summons for alteration of the basic wage prescribed in the Metal Trades Award in the following respects :—namely, for an increase in the basic wage to the amount it would have reached if automatic quarterly adjustments deleted by the Court in September, 1953 had remained in force ; an increase of a further £1 in the basic wage ; the re-introduction of automatic quarterly adjustments ; and the abolition of what is known as the 3s. country differential. This application was regarded as a general application for variation of the basic wage in all awards of the Commonwealth Court of Conciliation and Arbitration.

All the claims made by the unions were opposed by the respondent employers. The Attorney-General of the Commonwealth intervened in the public interest under section 26 (1) of the Commonwealth Conciliation and Arbitration Act, and in the course of proceedings all six States were represented by counsel or a State official.

Counsel for the Commonwealth stressed that the Commonwealth appeared not as a party but in the public interest and supplied much factual and statistical material in a review of the economy from 1953. He submitted that the Australian economy " is to all appearances a prosperous economy ", with two inherent weaknesses " in the state of our overseas trade and reserves " and " the rising tendency of costs and prices ". The Commonwealth made no submission as to the amount of the basic wage ; however, it submitted that the Court had been correct in its decision of 1953 to abolish the system of automatic quarterly adjustments and that its grounds for doing so were valid.

The States of New South Wales, Queensland, Western Australia and Tasmania supported the union claims for the re-establishment of the system of automatic adjustments and the raising of the basic wage to the levels indicated by current " C " Series index numbers ; but made no submission at all regarding the union claims for a further increase of £1 a week for adult males. The State of South Australia opposed the re-introduction of automatic adjustments, but conceded that " in making a review of the basic wage a substantial factor to be taken into account is the changed cost of living ". However, as regards the union claim for an increase in the basic wage to the amount it would have reached if automatic quarterly adjustments deleted by the Court in September, 1953 had remained in force, together with a £1 increase in the basic wage, amounting in total to 35s. a week at that time, the State submitted without elaboration " that there are grave doubts as to whether the increased basic wage to the extent asked by the applicant could be granted without serious damage to the economy ". The State of Victoria neither supported nor opposed the union claims, either as an employer or as " representing all interests in the community ", but supplied to the Court comprehensive statements relating to activities of the State Departments and instrumentalities and estimates of the amount and effects of the claims before the Court.

In delivering its judgment on 26th May, 1956, the Court rejected each claim made by the unions but decided to increase the adult male basic wage by 10s. per week payable from the beginning of the first pay-period in June. As a result of this decision, the basic wage for adult females was increased by 7s. 6d. per week with proportionate increases for juniors of both sexes and for apprentices.

The Court took the view that its decision in 1953 to abandon the system of quarterly adjustments was clearly right and " that so long as the assessment of the basic wage is made as the highest which the capacity of the economy can sustain, the automatic adjustment of that basic wage upon price index numbers cannot be justified, since movements in the index

have no relation to the movements in the capacity of the economy". The Court was satisfied "that a basic wage assessed at the highest amount which the economy can afford to pay cannot in any way be arrived at on the current price of listed commodities. There is simply no relationship between the two methods of assessment".

"The Court's examination of the economy and of its indicators—employment, investment, production and productivity, overseas trade, overseas balances, the competitive position of secondary industry and retail trade and its consideration of inflation and its possible disastrous extension has led to the Court's conclusion that the nation now has not the capacity to pay a basic wage of the amount to which automatic quarterly adjustments would have brought it."

As far as the application for the abolition of the 3s. country differential was concerned, the Court stated, "The onus lies on a party seeking a change of present prescription to establish its case. The Court holds that the present claim for abolition of the country differential of 3s. has not been made out of the evidence and submissions presented to the Court and the claim is rejected."

In the course of setting out the reasons for its decision the Court considered the period over which the capacity of the economy should be assessed, and concluded: "A year has been found almost universally to be a sensible and practicable period for such a purpose in the case of trading institutions the world over. The Court considers—fortified by the Judges' experience of considering from time to time Australia's capacity—that a yearly assessment of the capacity of Australia for the purpose of fixing a basic wage would be most appropriate. We would encourage any steps to have the Court fulfil such a task each year."

(x) *Rates Operative, Principal Towns.* The basic wage rates of the Commonwealth Court of Conciliation and Arbitration for adult males and females, operative as from the beginning of the first pay-period commencing in June, 1956, were as shown in the following table:—

COMMONWEALTH BASIC WAGE : WEEKLY RATES.(a)

City or Town.	Rate of Wage.		City or Town.	Rate of Wage.	
	Males.	Females.		Males.	Females.
	<i>s.</i>	<i>d.</i>		<i>s.</i>	<i>d.</i>
New South Wales—			South Australia—		
Sydney	253	0 189	Adelaide	241	0 180
Newcastle	253	0 189	Whyalla and Iron		
Port Kembla—			Knob (d)	246	0 184
Wollongong	253	0 189	Five Towns (b)	240	0 180
Broken Hill	257	0 192	Western Australia—		
Five Towns (b)	252	0 189	Perth	246	0 184
Victoria—			Kalgoorlie	253	0 189
Melbourne	245	0 183	Geraldton	250	0 195
Geelong	245	0 183	Five Towns (b)	247	0 185
Warrnambool	245	0 183	Tasmania—		
Mildura	245	0 183	Hobart	252	0 189
Yallourn (c)	251	6 188	Launceston	248	0 186
Five Towns (b)	245	0 183	Queenstown	243	0 182
Queensland—			Five Towns (b)	250	0 187
Brisbane	228	0 171	Thirty Towns (b)	246	0 184
Five Towns (b)	229	0 171	Six Capital Cities (b)	246	0 184

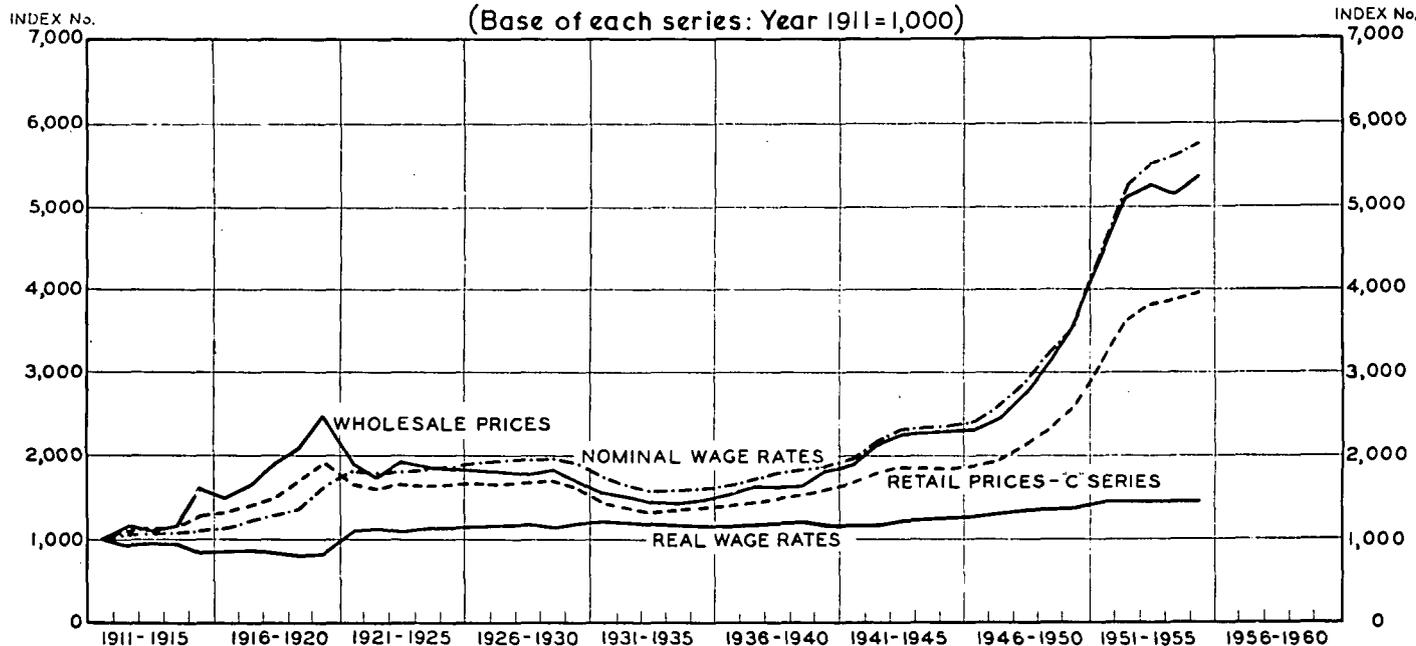
(a) Operative from the beginning of the first pay-period commencing in June, 1956. By decision of the Commonwealth Court of Conciliation and Arbitration, announced on 12th September, 1953, automatic adjustment of basic wages in accordance with variations occurring in retail price index numbers was discontinued in Commonwealth awards. (See page 169). (b) Weighted average. (c) Melbourne rate plus 6s. 6d. loading for males; 75 per cent. of male rate for females. (d) Adelaide rate plus 5s. for males; 75 per cent. of male rate for females.

The rate for provincial towns, other than those mentioned above, is 3s. less than that for their respective capital cities.

The following table shows the movements of this wage in all State capital cities and the six capital cities as a whole during the years 1939 to 1956.

WHOLESALE AND RETAIL PRICES; NOMINAL AND REAL WAGE RATES INDEX NUMBERS, AUSTRALIA, 1911 TO 1955

(Base of each series: Year 1911=1,000)

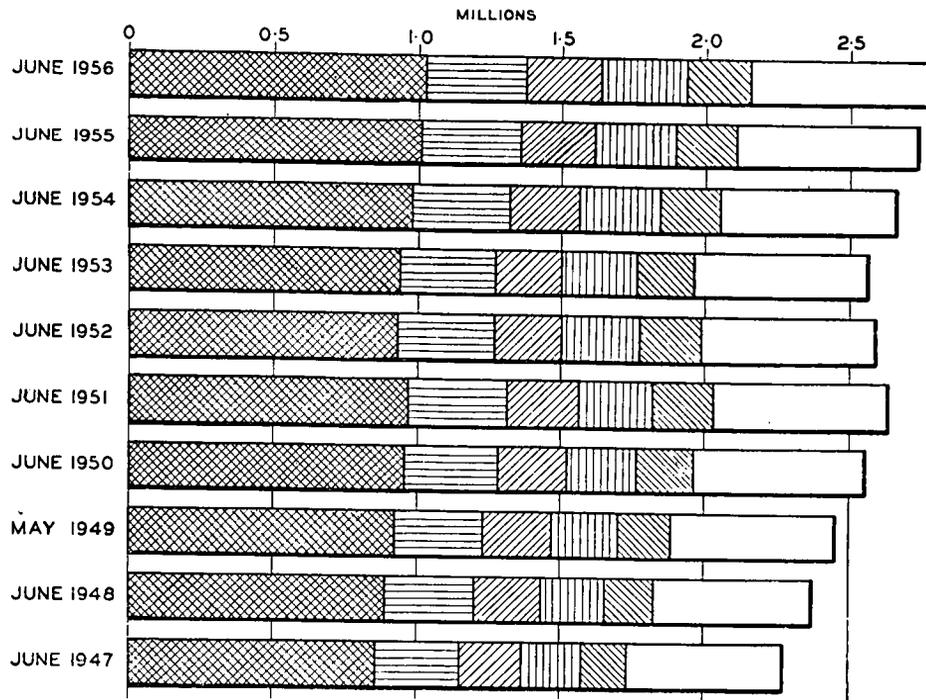


173

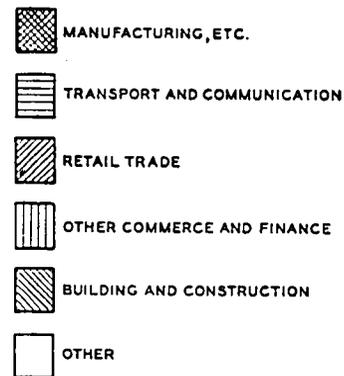
EXPLANATION.—The index numbers in the graph above are for the Six Capital Cities as a whole, with the exception of those for Wholesale Prices up to the fourth quarter of 1927, which are for Melbourne. The wholesale prices graph shows the trend of prices according to the "old" Melbourne Index up to the fourth quarter of 1927, but thereafter this index having been "spliced" with the Basic Materials and Foodstuffs Index, the curve line moves in accordance with the variations of the latter. The price quotations for this index are, in the main, obtained from Melbourne sources, but their movements may be taken as representative of fluctuations in most Australian markets. For the period 1911-1914 the "C" Series index numbers are taken back from the true base (November, 1914 = 1,000) by means of the "A" Series Index (Food and Rent of All Houses). Real wages are computed on the basis of the "C" Series Retail Price Index.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT

AUSTRALIA, 1947 TO 1956

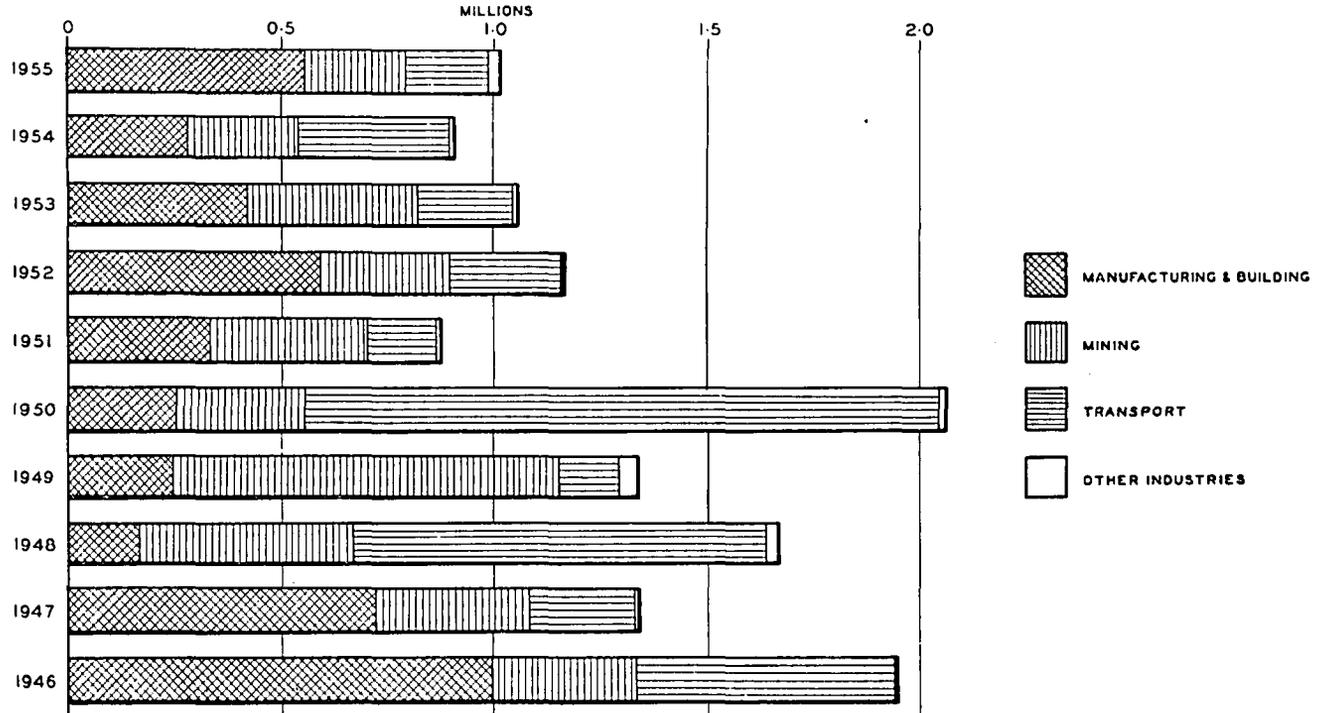


NOTE.—See page 186 for wage and salary earners excluded.



INDUSTRIAL DISPUTES, AUSTRALIA, 1946 TO 1955

WORKING DAYS LOST-INDUSTRIAL GROUPS



BASIC WAGE : WEEKLY RATES(a), CAPITAL CITIES, PRESCRIBED BY COMMONWEALTH COURT OF CONCILIATION AND ARBITRATION FOR ADULT MALES.

Date Operative.(b)	Sydney.	Mel-bourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Six Capitals.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
September, 1939 ..	81 0	81 0	76 0	78 0	77 0	77 0	79 0
„ 1941 ..	89 0	88 0	84 0	84 0	85 0	85 0	87 0
„ 1942 ..	97 0	97 0	91 0	93 0	91 0	92 0	95 0
„ 1943 ..	99 0	98 0	93 0	94 0	94 0	95 0	97 0
„ 1944 ..	99 0	98 0	93 0	93 0	94 0	94 0	96 0
„ 1945 ..	99 0	98 0	93 0	93 0	94 0	94 0	96 0
„ 1946 ..	101 0	99 0	94 0	95 0	95 0	97 0	98 0
December, 1946 ..	108 0	106 0	101 0	102 0	102 0	103 0	105 0
November, 1947 ..	112 0	109 0	105 0	106 0	106 0	107 0	109 0
„ 1948 ..	122 0	120 0	115 0	116 0	116 0	118 0	119 0
„ 1949 ..	132 0	130 0	125 0	126 0	129 0	128 0	129 0
„ 1950 ..	146 0	143 0	135 0	137 0	139 0	139 0	142 0
December, 1950 ..	165 0	162 0	154 0	158 0	160 0	160 0	162 0
November, 1951 ..	207 0	199 0	185 0	195 0	197 0	199 0	200 0
November, 1952 ..	237 0	228 0	216 0	229 0	228 0	230 0	231 0
February, 1953 ..	238 0	229 0	215 0	225 0	229 0	232 0	231 0
May, 1953 ..	241 0	232 0	217 0	228 0	231 0	239 0	234 0
August, 1953 (c) ..	243 0	235 0	218 0	231 0	236 0	242 0	236 0
June, 1956 ..	253 0	245 0	228 0	241 0	246 0	252 0	246 0

(a) Rates include "prosperity" loadings where applicable. (b) Rates operative from beginning of the first pay-period commencing in the month indicated. (c) By decision of the Commonwealth Court of Conciliation and Arbitration, announced on 12th September, 1953, automatic adjustment of basic wages in accordance with variations occurring in retail price index numbers was discontinued in Commonwealth awards. (See page 169.)

3. **Australian Territories.**—In the Australian Capital Territory the rates payable as from the beginning of the first pay-period commencing in June, 1956, were £12 8s. for adult males and £9 6s. for adult females.

In the Northern Territory there are two basic wages operating, one in respect of areas north of the 20th parallel of South Latitude, generally referred to as the "Darwin" rate and the other in respect of areas south of that parallel and extending down to the 26th parallel (the "Port Augusta" rate).

The basic wage rates payable as from the beginning of the first pay-period commencing in June, 1956, were:—"Darwin" rate, adult males, £13 5s., adult females, £9 18s. 6d.; "Port Augusta" rate, adult males, £12 12s., adult females, £9 9s.

In addition to the above rates special loadings were prescribed in Northern Territory awards following the fixation of the new basic wage rates operative from November, 1951.

4. **Basic Wage Rates for Females.**—Reference should be made to *Labour Report No. 43*, (pp. 63-69) for an account of the fixation of minimum rates and basic wages for adult females by the Commonwealth Court of Conciliation and Arbitration. At the end of the 1949-50 Basic Wage Inquiry the Commonwealth Court of Conciliation and Arbitration by a majority decision fixed a new basic weekly wage for adult females at 75 per cent. of the corresponding male rate from the beginning of the first pay-period commencing in December, 1950.

5. **State Basic Wages.**—(i) *New South Wales.* The first determination under the New South Wales Industrial Arbitration Act of a standard "living" wage for adult male employees was made on 16th February, 1914, by the Court of Industrial Arbitration. A Board of Trade established in 1918 with power to determine the "living" wage for adult male and female employees in the State made numerous declarations from 1918 to 1925, but ceased to function after the Industrial Arbitration (Amendment) Act 1926 transferred its powers to the Industrial Commission of New South Wales as from 15th April, 1926.

The adult male rate was determined on the family unit of a man, wife and two children from 1914 to 1925 ; a man and wife only in 1927, with family allowances for dependent children ; and a man, wife and one child in 1929, with family allowances for other dependent children. With the adoption in 1937 of the Commonwealth basic wage, however, the identification of a specified family unit with the basic wage disappeared.

A table showing the variations in the living wages determined by the industrial tribunals of New South Wales up to 27th April, 1937 was published in earlier issues of the Official Year Book (*see* No. 37, page 481). From that date until November, 1955 the rates adopted followed the Commonwealth basic wage (*see* below).

Shortly after the Commonwealth Court of Conciliation and Arbitration announced its judgment in the 1937 Basic Wage Inquiry the Government of New South Wales amended the Industrial Arbitration Act to make the State basic wage agree with the Commonwealth rate ruling in New South Wales, and to adopt, as far as practicable, the general principles of operation laid down by the Commonwealth Court.

The principle of supplementing wages by a payment in respect of dependent children under fourteen years of age was operative in New South Wales from July, 1927 until superseded by the Commonwealth Government Scheme operative from 1st July, 1941. A brief account of the main features of the system was given in Official Year Book No. 37, pp. 485-6.

Further amendments to the Industrial Arbitration Act were made in 1950 to give effect to the new rates declared by the Commonwealth Court of Conciliation and Arbitration in the 1949-50 Basic Wage Inquiry.

Differential basic wage rates for country areas (except Broken Hill) and for employees under Crown awards were eliminated by an amendment of the Industrial Arbitration Act in 1951.

The decision of the Commonwealth Court of Conciliation and Arbitration in September, 1953, to discontinue the system of automatic adjustment of the basic wage consequent on changes in the "Court" series retail price index numbers was considered by the New South Wales Industrial Commission. On 23rd October, 1953, it certified that there had been an alteration in the principles of fixation of the basic wage, and instructed that the automatic adjustment clause be deleted from awards, etc., within its jurisdiction.

As a result, the basic wages applicable for the State (excluding Broken Hill) and operative from the beginning of the first pay-period commencing in August, 1953, remained unchanged at £12 3s. per week for adult males and £9 2s. for adult females until November, 1955.

In October, 1955, the Industrial Arbitration Act 1940-1955 was amended to provide for the automatic adjustment of the existing basic wage each quarter, in accordance with the movements in the Commonwealth Statistician's retail price index numbers. The first adjustment, based on the index number for the September quarter, 1955, represented the amount which would have been added to the basic wage if quarterly adjustments had not been suspended, and was made payable from the beginning of the first pay-period in November, 1955. The rates then payable were £12 13s. for adult males and £9 9s. 6d. for adult females.

Automatic quarterly adjustments were made for each subsequent quarter and the State basic wage payable in New South Wales (except Broken Hill) from the first pay-period in November, 1956 was £13 14s. for adult males and £10 5s. 6d. for adult females.

(ii) *Victoria*. There is no provision in Victorian industrial legislation for the declaration of a State basic wage. Wages Boards constituted from representatives of employers, employees and an independent chairman, for each industry group or calling, determine the minimum rate of wage to be paid in that industry or calling. In general, these Boards have adopted a basic wage in determining the rate of wage to be paid.

By an amendment to the Factories and Shops Act in 1934, Wages Boards were given discretionary power to include in their determinations appropriate provisions of relevant Commonwealth Awards. A further amendment to this Act in 1937 made it compulsory for Wages Boards to adopt such provisions of Commonwealth Awards. The 1937 Act, as amended, also gave Wages Boards power to adjust wage rates, "with the variation from time to time of the cost of living as indicated by such retail price index numbers published by the Commonwealth Statistician as the Wages Board considers appropriate". The Wages Boards thus adopted the basic wages declared by the Commonwealth Court of Conciliation and Arbitration and followed that Court's system of adjusting the basic wage in accordance with variations in retail price index numbers.

After the Commonwealth Court of Conciliation and Arbitration discontinued the system of automatic adjustment of the Commonwealth basic wage in September, 1953, a number of Wages Boards met in November, 1953, and deleted references to these adjustments.

However, an amendment to the Factories and Shops Act in November, 1953 required Wages Boards to provide for the automatic adjustment of wage rates in accordance with variations in retail price index numbers. From 1st July, 1954 the Factories and Shops Acts 1928-1953 were replaced by the Labour and Industry Act 1953, which was, in general, a consolidation of the previous Acts and retained the requirement providing for the automatic adjustment of wages in accordance with variations in retail price index numbers.

An amendment to the Labour and Industry Act proclaimed on 17th October, 1956 deleted the automatic adjustment provision and directed Wages Boards in determining wage rates to take into consideration relevant awards of, or agreements certified by, the Commonwealth Conciliation and Arbitration Commission. As a result of this legislation the last automatic quarterly adjustment of the basic wage made was based on the variation in retail price index numbers for the June quarter, 1956, when rates of £13 3s. for adult males and £9 17s. for adult females became payable from the beginning of the first pay-period in August, 1956.

(iii) *Queensland.* The first formal declaration of a basic wage (£4 5s. for adult males) by the Queensland Court of Industrial Arbitration was gazetted on 24th February, 1921. Prior to this declaration the rate of £3 17s. per week for adult males had been generally recognized by the Court in its awards as the basic or living wage. The Queensland Industrial Conciliation and Arbitration Act provides that any basic wage declared must at least maintain an employee, his wife and family of three children in a fair and average standard of comfort.

The rates declared by the Queensland Court at various dates were shown in the table on page 79 of *Labour Report* No. 43, 1954.

From 21st April, 1942, the Queensland Industrial Court adopted the practice of making quarterly declarations of the basic wage on the basis of variations in the "C" series retail price index number for Brisbane.

The Queensland Industrial Court granted increases of 7s. and 5s. to the basic wages for adult males and adult females respectively, payable from 23rd December, 1946, following the "interim" basic wage judgment of the Commonwealth Court of Conciliation and Arbitration announced earlier in December, 1946.

Following the decision of the Commonwealth Court of Conciliation and Arbitration to increase the male and female basic wages from December, 1950, the Queensland Industrial Court conducted an inquiry as to what change, if any, should be made to the State basic wage for Queensland. The Industrial Court granted an increase of 15s. weekly to both adult males and adult females, operative from 7th December, 1950. The new male rate was identical with the Commonwealth basic wage for the Brisbane metropolitan area. The basic wage payable to adult females was approximately 66 per cent. of the male rate.

In January, 1953, the Queensland Industrial Court departed from the practice (established in 1942) of varying the basic wage in accordance with quarterly variations in the "C" series of retail price index numbers. If the practice had been continued, a reduction of one shilling in the basic wage for adult males from January, 1953, would have been made. The Court was not satisfied, however, that the movement in the "C" series index for Brisbane for the December quarter, 1952 was a true representation or reflex of the economic position for Queensland as a whole and so declined to make any alteration to the then existing basic wage. Quarterly adjustments were made for the next four quarters and the basic wage became £11 5s. for adult males from 1st February, 1954.

Commencing in March, 1954 a Basic Wage Inquiry was conducted by the Court and in its judgment of 11th June, 1954 the Court stated that there would be no change in the basic wage rates declared for February, 1954.

At subsequent hearings consequent on the movement in the "C" series of retail price index numbers for Brisbane in respect of the quarters ended 30th June, 30th September and 31st December, 1954 and 31st March, 1955 the Court again decided not to vary the existing basic wage rates. However, after considering the "C" series index number for the quarter ended 30th June, 1955 and its relation to the index number for the March quarter, 1955, the Court announced that as these figures showed a continued upward trend of cost of living in 1955 the basic wage for adult males should be increased from £11 5s. to £11 7s. from 1st August, 1955. In this judgment the Court emphasized that it holds itself free whether or not to adjust the basic wage upwards or downwards in accordance with movement in the "C" series of retail price index numbers.

The Court examined the movement in the "C" series of retail price index numbers for each subsequent quarter and announced increases in the basic wage. The rates payable from 29th October, 1956, were £12 1s. for adult males and £8 2s. 6d. for adult females in the Southern Division (Eastern District).

The rates shown above are applicable throughout the Southern Division (Eastern District), which includes the metropolitan area ; allowances are added for the following divisions—Northern (Eastern District) 10s., Northern (Western District) 17s. 4d., Mackay 5s. 6d., and Southern (Western District) 7s. 4d. Half of these allowances are granted to females.

(iv) *South Australia.* The Industrial Code, 1920–1955 provides that the Board of Industry shall after public inquiry declare the living wages to be paid to adult male and female employees. The Board has power also to fix different rates to be paid in defined areas.

The family unit was not specifically defined in the Code, but the South Australian Industrial Court in 1920 decided that the average employee in respect of whom the living wage is to be declared is a man with a wife and three children.

The first declaration by the Board of Industry was made on 15th July, 1921, when the living wage for adult male employees in the metropolitan area was determined at £3 19s. 6d. per week. A table showing the living wages declared from time to time was published on page 81 of *Labour Report* No. 43.

Following the “interim” increase in the “needs” basic wage of the Commonwealth Court of Conciliation and Arbitration announced on 13th December, 1946, the South Australian Government made a provision in the Economic Stability Act, 1946 for the declaration by the Governor of a “living wage” based on the Commonwealth basic wage for Adelaide. This action was taken because the Board of Industry had made a determination on 5th September, 1946 and under the Industrial Code was not able to make a further determination for six months.

The Industrial Code Amendment Act, 1949 made provision for the quarterly adjustment of the “living wage” in accordance with the variations in the Commonwealth basic wage for Adelaide. In effect this made the State “living wage” and the Commonwealth basic wage equal from the beginning of the first pay-period commencing in February, 1950. The prescribed adjustment to the female “living wage” was seventwelfths of that made to the Commonwealth male basic wage. The Board of Industry retained power to amend the “living wage” but any new “living wage” was to be adjusted quarterly as above.

Following the decision of the Commonwealth Court of Conciliation and Arbitration in the 1949–50 Basic Wage Inquiry, the South Australian Industrial Code was amended to provide for declarations of the “living wage” by proclamation to prevent unjustifiable differences between the State and Commonwealth rates of wage. By proclamation dated 30th November, 1950, the South Australian living wage in the metropolitan area was made identical with the December, 1950, rates fixed by the Commonwealth Court of Conciliation and Arbitration for the metropolitan area of South Australia. The female basic wage, which had been approximately 54 per cent. of the male basic wage, was increased to 75 per cent. of the corresponding male rate.

The basic wages of the Commonwealth Court of Conciliation and Arbitration for Adelaide, consequent on the discontinuance of quarterly adjustments, remained unchanged from the beginning of the first pay-period commencing in August, 1953 until June, 1956. The rates payable in accordance with the quarterly notifications, by the President of the Board of Industry, of the South Australian living wage for the metropolitan area also remained unchanged over the same period at £11 11s. for adult males and £8 13s. for adult females.

Following the decision of the Commonwealth Court of Conciliation and Arbitration to increase the basic wage for adult males by 10s. per week from the first pay-period in June, 1956, the South Australian living wage was by proclamation of the Governor dated 31st May, 1956, increased by 10s. for adult males and 7s. 6d. for adult females from 4th June, 1956. The rate then payable was £12 1s. for adult males and £9 0s. 6d. for adult females.

(v) *Western Australia.* The Industrial Arbitration Act 1912–1952 provides that the Court of Arbitration may determine and declare a basic wage at any time on its own motion and must do so when requested by a majority of industrial unions or by the Western Australian Employers’ Federation, with the limitation that no new determination shall be made within twelve months of the last preceding inquiry.

The term “basic wage” is defined in the Act as “a wage which the Court considers to be just and reasonable for the average worker to whom it applies”. In determining what is just and reasonable the Court must take into account not only the “needs of an average worker” but also the “economic capacity of industry” and any other matters the Court deems relevant.

The Act provides that the Court of Arbitration may make adjustments of the "basic wage" each quarter if the official statement supplied to the Court by the State Government Statistician relating to the cost of living shows that a variation of 1s. or more per week has occurred, compared with the preceding quarter. These adjustments apply from the dates of declaration by the Court.

The first declaration of the basic wage by the Court of Arbitration, since the authority to fix one was vested in the Court in 1925, was made on 11th June, 1926. The family unit is not specifically defined in the Act, but it has been the practice of the Court to take as a basis for its calculations a man, his wife and two dependent children. Since that date the principal inquiries have been those of 1938, 1947, 1950 and 1951. A table showing annual and special declarations of the basic wage by the Court of Arbitration will be found in *Labour Report* No. 43, page 83.

Following the judgment of the Commonwealth Court of Conciliation and Arbitration in the 1949-50 Basic Wage Inquiry, the Western Australian Court of Arbitration resumed an inquiry which had been adjourned, to ascertain what change should be made in the State basic wage rates. In its judgment of 7th December, 1950 the Court decided that the basic wage should be increased by £1 per week for adult males and by 15s. per week for adult females. As the result of a subsequent inquiry the basic wage for adult females was increased from 1st December, 1951 to 65 per cent. of the corresponding male rate. This was subject to the condition that the increase in the basic wage should be offset by the reduction in or deletion of existing margins between the basic wage and the total wage as specified by the appropriate award or determination.

The Commonwealth Court of Conciliation and Arbitration announced on 12th September, 1953 the discontinuance of quarterly adjustments. Following this decision the Western Australian Court of Arbitration exercised its discretionary power, and after reviewing the cost of living statements prepared by the Government Statistician for each quarter from the September quarter, 1953 to the March quarter, 1955, declined to make, where applicable, any adjustment to the basic wage.

However, after reviewing the cost of living statement for the June quarter, 1955 the Court decided, from 9th August, 1955, to increase the basic wage for Perth by 5s. 11d. a week for adult males and to make corresponding increases for the other areas. No change was announced in the basic wage for Perth following a review of the cost of living statement for the September quarter, 1955 but, after an examination of the cost of living statements, the Court announced increases in the basic wage for Perth for each subsequent quarter including the September quarter, 1956.

The rates payable in the metropolitan area in November, 1956 were £13 5s. 2d. for adult males and £8 12s. 4d. for adult females.

(vi) *Tasmania*. A State basic wage is not declared in Tasmania. Wages Boards are constituted for a number of industries, from representatives of employers and employees and an independent chairman, and determine the minimum rate of wage payable in each industry. In general these Boards have adopted the basic wages of the Commonwealth Court of Conciliation and Arbitration in determining the rate of wage to be paid.

The Wages Board Act gives Wages Boards power to adjust their wage rates with variations in cost of living as indicated by retail price index numbers published by the Commonwealth Statistician. When the Commonwealth Court discontinued the system of automatic adjustments of the basic wage in September, 1953, the Chairman of the Wages Boards stated he was of the opinion that automatic adjustment clauses should be deleted from all Wages Boards determinations. Before Wages Boards met to consider this matter, the wage rates for all determinations were automatically adjusted upwards from the beginning of the first pay-period commencing in November. By early December, 1953, all Wages Boards had met and deleted the automatic adjustment clause from determinations and cancelled the adjustment increases payable from November.

Automatic quarterly adjustments in accordance with movements in retail price index numbers were reintroduced by Wages Boards in February, 1956 and the rate payable from the first pay-period in February restored the basic wage to the level it would have reached if quarterly adjustments had not been discontinued in 1953. Following a rise in the retail price index number for the March quarter, 1956 a further basic wage increase was payable from the first pay-period in May, 1956.

However, on 22nd June, 1956, arising out of an application by the Employers' Federation of Tasmania for a conference under section 77 of the Wages Boards Act 1920, to consider an application for the adoption of the new basic wage promulgated by the Commonwealth Court of Conciliation and Arbitration on 25th May, 1956, and for the deletion of

the automatic quarterly adjustments of the basic wage from the determinations of Wages Boards, and a subsequent application by the same Federation for a meeting of several Wages Boards for a similar purpose, a conference of representatives of organized bodies of employers and employees was convened by the Chief Secretary, to enable a discussion to take place on the advisability or otherwise of adopting the request of the Employers' Federation so that the Chairman's mind could be fully informed at a representative gathering prior to a meeting of the individual boards.

At the conclusion of the conference the Chairman of the Wages Boards stated he was of the opinion that the adjustments should be suspended for a period in an endeavour to achieve some measure of stability. He also indicated that any Wages Board was competent by agreement between the representatives of employers and employees or majority decision to adopt the Commonwealth Court's basic wage or any other method of fixing the basic wage.

Of the 70 "operating" Wages Boards, all but four decided to suspend automatic quarterly adjustments after adopting the increase based on the retail price index numbers for the June quarter and payable from the first pay-period in August. The Carriers and Jam Makers Wages Boards decided to adopt the prevailing Commonwealth basic wage, the Threshers Wages Board to continue automatic adjustments, while the Motor Garage Wages Board suspended automatic quarterly adjustments at the wage payable in May, after the adjustment based on retail price index numbers for the March quarter.

The basic wage prescribed for Hobart by the majority of Wages Boards from the first pay-period in August, 1956 was £13 12s. per week for adult males and £10 4s. for adult females.

(vii) *State Basic Wage Rates.* The "basic" wage rates of State industrial tribunals operative in November, 1955 and November, 1956 are summarized in the following table:—

STATE BASIC WAGES—WEEKLY RATES.

State.	November, 1955.			November, 1956.		
	Date of Operation.	Males.	Females.	Date of Operation.	Males.	Females.
	(a)	s. d.	s. d.	(a)	s. d.	s. d.
New South Wales(b)—						
Metropolitan and Country, excluding Broken Hill	Nov., 1955	253 0	189 6	Nov., 1956	274 0	205 6
Broken Hill	Nov., 1955	254 0	190 6	Nov., 1956	272 0	204 0
Victoria(c)	Nov., 1955	246 0	184 6	Aug., 1956	263 0	197 0
Queensland(d)—						
Southern Division (Eastern District), including Brisbane	24.10.55	229 0	154 0	29.10.56	241 0	162 6
Southern Division (Western District)	24.10.55	236 4	157 8	29.10.56	248 4	166 2
Mackay Division	24.10.55	234 6	156 9	29.10.56	246 6	165 3
Northern Division (Eastern District)	24.10.55	239 0	159 0	29.10.56	251 0	167 6
Northern Division (Western District)	24.10.55	246 4	162 8	29.10.56	258 4	171 2
South Australia(e)	Aug., 1953	231 0	173 0	4.6.56	241 0	180 6
Western Australia(f)—						
Metropolitan Area	9.8.55	252 6	164 1	29.10.56	265 2	172 4
South-West Land Division	9.8.55	251 8	163 7	29.10.56	262 11	170 11
Goldfields and other areas	9.8.55	254 1	165 2	29.10.56	262 8	170 9
Tasmania(g)	Aug., 1953	242 0	181 6	Aug., 1956	272 0	204 0

(a) Where dates are not quoted wage rates operate from beginning of first pay-period commencing in month shown. (b) Automatic adjustment discontinued from August, 1953 until November, 1955 (see page 178). (c) No basic wage declared but rates shown (Melbourne) are those commonly adopted by Wages Boards. Automatic quarterly adjustments were discontinued following the basic wage adjustment payable in August, 1956. (d) Between November, 1955 and November, 1956 the Queensland Industrial Court, after examining the movement in the "C" Series retail price index numbers for each quarter, granted increases in the basic wage except for the March quarter, 1956 when no declaration was made. (e) The "living wage" declared for the metropolitan area is also adopted in country areas, except at Whyalla where a loading of 5s. is generally payable. Following the decision of the Commonwealth Court of Conciliation and Arbitration on 12th September, 1953, automatic adjustments have not been made to the living wage since August, 1953. A 10s. increase in the living wage for adult males payable from 4th June, 1956 was proclaimed by the Governor, following the 10s. increase for adult males in the Commonwealth basic wage payable from the first pay-period in June, 1956. (f) The Western Australian Court of Arbitration adjusted the basic wage each quarter from November, 1955 on the basis of cost of living statements prepared by the Government Statistician. (g) None declared but rates shown (Hobart) are those commonly adopted by Wages Boards. Quarterly automatic adjustments were re-introduced from February, 1956 and operated for May and August, 1956, but were suspended again by the majority of Wages Boards after the August, 1956 adjustment.

§ 5. Wage Margins.

On 5th November, 1954 the Commonwealth Court of Conciliation and Arbitration delivered a judgment* which in effect became a general determination of the basis upon which all relevant wage and salary margins should be assessed. This became known as the Metal Trades Case, 1954.

General principles of marginal rate fixation had previously been enunciated by the Court in the Engineers' Case of 1924, the Merchant Service Guild Case of 1942 and the Printing Trades Case of 1947, and the Court adopted these insofar as they were applicable to current circumstances.

"Margins" were defined as—

- "minimum amounts awarded above the basic wage to particular classifications of employees for the features attaching to their work which justify payments above the basic wage, whether those features are the skill or experience required for the performance of that work, its particularly laborious nature, or the disabilities attached to its performance."

A brief account of the Metal Trades Case is as follows:—

The Amalgamated Engineering Union, the Electrical Trades Union and other employee organizations parties to the Metal Trades Award, 1952 filed applications during 1953 for increased margins for all workers covered by this award.

The applications came on for hearing before Mr. Conciliation Commissioner Galvin who decided that they raised matters of such importance that, in the public interest, they should be dealt with by the Commonwealth Court of Conciliation and Arbitration. On 16th September and 6th October, 1953, the Conciliation Commissioner, pursuant to section 14A of the Conciliation and Arbitration Act, referred these applications to the Court.

The actual claims of the trade unions were that the marginal rate of 52s. per week payable to a fitter in the metal trades should be increased to 80s. per week (86s. for certain electrical trades) with proportionate increases for other award occupations. The margins then current, with a few exceptions, had been in existence since 1947. The employees' claims were in the nature of a test case to determine the attitude of the Court to applications for increased margins.

The Metal Trades Employers' Association and other respondents to the Metal Trades Award had counter-claimed that existing margins for skilled tradesmen should remain unaltered, while those paid to partly skilled or unskilled workers should be reduced.

The Court decided to take the Commissioner's two references together and the matter came on for hearing before the Full Arbitration Court (Kelly C.J., Kirby, Dunphy and Morgan J.J.) in Melbourne on 13th October, 1953.

In a judgment delivered on 25th February, 1954 the Court held that a prima facie case had been made for a re-assessment of margins but that the economic situation at that time, particularly in regard to the level of costs, did not permit of such a comprehensive review. The Court decided that to avoid the creation of new disputes, to save expense and to obviate procedural difficulties, it would not reject the claims but adjourn them until 9th November, 1954.

On 25th and 26th August, 1954, summonses were filed by the employees' organizations for orders that proceedings in this case be brought forward and the hearing was resumed on 5th October, 1954.

In a judgment delivered on 5th November, 1954 the Court made an order re-assessing the marginal structure in the Metal Trades Award by, in general, raising the current amount of margin to two and a half times the amount of the margin that had been current in 1937. However, in cases in which the result of that calculation produced an amount less than the existing margin, the existing margin was to remain unaltered. In effect, this decision increased the margin of a fitter from 52s. per week to 75s. per week, increased similarly margins of other skilled occupations, and made no increase in margins of what may generally be described as the unskilled or only slightly skilled employees under the Metal Trades Award.

At the end of its judgment the Court stated that, while its decision in this case related immediately to one particular industry, it was expected to afford general guidance to all authorities operating under the Conciliation and Arbitration Act or under other legislation which provided for tribunals having power to make reference, or being subject to appeal, to the Court, where the wage or salary may properly be regarded as containing a margin. The Court added observations for the guidance of these and of other tribunals "which may regard decisions of this Court as of persuasive authority".

Extracts from the judgment were set out in some detail in *Labour Report* No. 43, 1954.

* 80 C.A.R., p. 3.

§ 6. Child Endowment in Australia.

The principle of supplementing wages by a payment in respect of dependent children under sixteen years of age became prominent in Australia following the recommendations of the Royal Commission on the Basic Wage, 1920. The system has been in force in varying forms for very long periods in England and other European countries, the first instance occurring in England in 1795.

A Royal Commission was appointed in 1927 to consider a national scheme of child endowment. A brief summary of its findings and of consequent Government decisions was given in Official Year Book No. 39, page 425.

In 1941 the Commonwealth Government introduced a scheme of child endowment throughout Australia. The main features of the scheme and a summary of operations will be found in Chapter XV.—Welfare Services. Subsequently, steps were taken for the termination of the schemes operating in the Commonwealth Public Service and in New South Wales. The former, which came into operation on 1st November, 1920, was the first system instituted in Australia. That in New South Wales operated from 23rd July, 1927. For further details of these schemes reference may be made to Official Year Book No. 37 pp. 485-6.

E. EMPLOYMENT AND UNEMPLOYMENT.

§ 1. Employment.

1. Total Occupied Persons.—(i) *General.* In previous issues of the Official Year Book estimates of total occupied persons were shown for the years 1939, 1941, 1943 and 1945. These were based on data recorded at the 1939 National Register and subsequent Occupation Surveys. They are omitted from this issue and comparisons are shown for the Censuses of 1933, 1947 and 1954. Minor revisions have been made to the figures for the years 1933 and 1947 since the previous issue.

(ii) *Australia.* The figures in the table below are divided into three categories :— (a) defence forces ; (b) all persons fully occupied as employers, or as self-employed in businesses or on farms ; and (c) wage and salary earners employed, or occupied as casual, part-time, intermittent or seasonal workers. Unemployed wage earners are excluded.

All unpaid "helpers" in non-rural industry have been included with wage and salary earners. Male unpaid "helpers" in rural industry have been included with employers and self-employed persons, as it is considered that the majority of these are sons or other close relatives of farmers working in *de facto* partnership, or as learners with the farm owner. Unpaid female "helpers" on farms are fairly numerous. Generally they are occupied mainly in home duties, and, with all other women occupied in unpaid home duties, have been excluded from the category of occupied persons.

TOTAL OCCUPIED PERSONS : AUSTRALIA, CENSUSES, 1933, 1947 AND 1954.
(*000.)

30th June.	Defence Forces. (a)	Employers and Self-employed.			Wage and Salary Earners.			Total Occupied Civilians.	Total Occupied Persons, including Defence Forces. (a)
		Rural Industry.	Other Industries.	Total.	Rural Industry.	Other Industries.	Total.		
MALES.									
1933	5.8	293.5	249.0	542.5	200.1	989.8	1,189.9	1,732.4	1,738.2
1947	53.2	278.9	286.8	565.7	148.2	1,659.4	1,807.6	2,373.3	2,426.5
1954	(b) 50.9	279.3	316.8	596.1	154.2	2,020.3	2,174.5	2,770.6	2,821.5
FEMALES.									
1933	..	15.2	56.3	71.5	3.2	(c) 446.6	449.8	521.3	521.3
1947	0.8	13.8	55.8	69.6	8.1	(d) 659.9	668.0	737.6	738.4
1954	2.0	19.6	62.1	81.7	7.6	735.4	743.0	824.7	826.7
PERSONS.									
1933	5.8	308.7	305.3	614.0	203.3	1,436.4	1,639.7	2,253.7	2,259.5
1947	54.0	292.7	342.6	635.3	156.3	2,319.3	2,475.6	3,110.9	3,164.9
1954	52.9	298.9	378.9	677.8	161.8	2,755.7	2,917.5	3,595.3	3,648.2

(a) Includes those serving outside Australia. (b) Excludes approximately 10,300 men undergoing full-time National Service Training at the time of the Census. With the exception of full-time students these persons have been included in the figures of occupied civilians. (c) Includes females in private domestic service:—106,700 in 1933, 40,200 in 1947 and 29,600 in 1954. (d) Includes an estimate of 40,000 part-time workers considered to be under-enumerated at the Census.

The numbers of males in the defence forces shown in the foregoing table include personnel serving outside Australia, namely, 13,843 in 1947 and 5,903 in 1954, who were not recorded in the Censuses taken in those years.

During the fourteen years from 1933 to 1947 the number of persons actually occupied at work increased by 905,400, or by an average of 64,700 persons per annum, whilst during the seven years from 1947 to 1954 the increase amounted to 483,300 or 69,000 per annum. Practically all of the increase in the number of occupied persons during the years 1947 to 1954 was due to the growth of the total available work force. During the previous intercensal period (1933 to 1947) the increase in the number of persons occupied comprised approximately 400,000 persons who had been unemployed in 1933 and approximately 500,000 growth in the total available work force.

The total numbers of employers, self-employed and wage and salary earners of both sexes classified at the Census as engaged in agricultural, pastoral and dairying industries declined from 512,000 in 1933 to 460,700 in 1954. There was very little movement in the figures between 1947 and 1954.

The proportion of male employers and self-employed in industries other than rural declined from 20.1 per cent. of occupied civilian males in these industries in 1933 to 14.7 per cent. in 1947, and to 13.6 per cent. in 1954. The corresponding proportion of female employers and self-employed declined from 11.2 per cent. of all occupied females in non-rural industries in 1933 to 7.8 per cent. in 1947, and remained constant at 7.8 per cent. in 1954. The increase in the number of male employers and self-employed in non-rural industries during the years 1947-1954 averaged only 4,300 per annum. The average increase during the same period in the number of male wage and salary earners in these industries was 51,600 per annum.

(iii) *States.* The following table shows the total numbers of occupied males and females in each State and Territory at the Censuses of 1947 and 1954, classified as defence forces, employers and self-employed persons, and wage and salary earners.

TOTAL OCCUPIED PERSONS : STATES AND TERRITORIES, CENSUSES, 1947 AND 1954.
(‘000.)

State or Territory.	Defence Forces. (a)		Employers and Self-employed.		Wage and Salary Earners.		Total Occupied Persons including Forces.	
	June, 1947.	June, 1954.(c)	June, 1947.	June, 1954.	June, 1947.	June, 1954.	June, 1947.	June, 1954.
MALES.								
New South Wales ..	23.1	21.6	197.5	207.3	728.1	833.8	948.7	1,062.7
Victoria ..	15.9	15.2	158.1	167.1	490.5	596.9	664.5	779.2
Queensland ..	5.9	6.4	96.9	99.7	252.0	307.4	354.8	413.5
South Australia ..	2.6	2.1	51.8	55.5	153.3	194.1	207.7	251.7
Western Australia ..	3.4	2.9	39.8	44.3	116.6	156.1	159.8	203.3
Tasmania ..	0.8	0.9	20.1	20.2	57.8	71.9	78.7	93.0
Northern Territory ..	0.8	0.7	1.0	1.1	4.0	5.7	5.8	7.5
Australian Capital Territory ..	0.7	1.1	0.5	0.9	5.3	8.6	6.5	10.6
Australia ..	53.2	50.9	565.7	596.1	1,807.6	2,174.5	2,426.5	2,821.5
FEMALES.								
New South Wales ..	0.3	0.5	25.4	29.0	268.6	290.6	294.3	320.1
Victoria ..	0.4	0.8	22.5	25.3	202.0	227.0	224.9	253.1
Queensland ..	0.1	0.2	10.2	12.4	83.9	93.2	94.2	105.8
South Australia ..	..	0.1	5.2	7.0	52.9	59.9	58.1	67.0
Western Australia ..	..	0.2	4.3	5.6	39.2	46.5	43.5	52.3
Tasmania ..	..	0.1	1.8	2.1	18.9	21.7	20.7	23.9
Northern Territory ..	..	..	0.1	0.2	0.7	1.3	0.8	1.5
Australian Capital Territory ..	..	0.1	0.1	0.1	1.8	2.8	1.9	3.0
Australia ..	0.8	2.0	69.6	81.7	668.0	743.0	738.4	826.7
PERSONS.								
New South Wales ..	23.4	22.1	222.9	236.3	996.7	1,124.4	1,243.0	1,382.8
Victoria ..	16.3	16.0	180.6	192.4	692.5	823.9	889.4	1,032.3
Queensland ..	6.0	6.6	107.1	112.1	335.9	400.6	449.0	519.3
South Australia ..	2.6	2.2	57.0	62.5	206.2	254.0	265.8	318.7
Western Australia ..	3.4	3.1	44.1	49.9	155.8	202.6	203.3	255.6
Tasmania ..	0.8	1.0	21.9	22.3	76.7	93.6	99.4	116.9
Northern Territory ..	0.8	0.7	1.1	1.3	4.7	7.0	6.6	9.0
Australian Capital Territory ..	0.7	1.2	0.6	1.0	7.1	11.4	8.4	13.6
Australia ..	54.0	52.9	635.3	677.8	2,475.6	2,917.5	3,164.9	3,649.2

(a) Includes those serving outside Australia. (b) Excludes approximately 10,300 men undergoing full-time National Service Training at the time of the Census. See also footnotes to previous table.

The occupied population of Australia (including defence forces but excluding un-employed, pensioners, retired, persons of independent means and dependants) increased from 1947 to 1954 by 15.3 per cent. The percentage increase in each State and Territory was as follows:—New South Wales, 11.3; Victoria, 16.1; Queensland, 15.7; South Australia, 19.9; Western Australia, 25.7; Tasmania, 17.6; Northern Territory, 36.4; and Australian Capital Territory, 61.9.

2. **Wage and Salary Earners in Civilian Employment.**—(i) *Australia and States.* Estimates are made monthly of wage and salary earners in employment (excluding employees in rural industry and female domestics in private homes), based on Pay-roll Tax returns and supplementary returns of government employment. Pay-roll Tax returns cover only a small proportion of wage earners on rural holdings, and practically no private domestic servants. It is not possible to obtain actual numbers of farm employees and private domestic servants except when a Census or quasi-Census, such as the Occupation Survey (1st June, 1945), is taken, but estimates have been made from time to time using available data. The next table shows for each State and for Australia as a whole the trend in that section of wage and salary earning employment which it is possible to estimate monthly. Figures are shown as at June, 1933 (Census) and July, 1939 (based on National Register). From July, 1941 (commencement of Pay-roll Tax returns) the estimates are available for each month, and the table shows the level in June in each of the years 1951 to 1956.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT.

(Excluding Rural Wage Earners, Female Domestics in Private Homes, Persons on Paid Strength of Defence Forces and National Service Trainees in Camp.)

(’000.)

Year and Month.	New South Wales.	Vic-toria.	Queens-land.	South Aus-tralia.	Western Aus-tralia.	Tas-mania.	Aus-tralia. (a)
MALES.							
1933—June ..	379.8	288.1	139.3	80.3	70.0	28.9	989.8
1939—July ..	529.9	357.5	172.8	106.7	82.9	37.4	1,293.1
1951—June(b) ..	758.2	525.8	259.3	170.0	125.3	60.2	1,911.5
1952—June(b) ..	754.4	524.4	258.1	171.5	126.0	61.0	1,908.1
1953—June(b) ..	734.3	521.6	255.2	170.6	130.2	61.8	1,886.8
1954—June(b) ..	758.1	539.7	263.7	176.0	135.0	62.8	1,948.4
1955—June(b) ..	779.2	556.7	272.0	178.7	136.4	64.0	2,000.5
1956—June(b) ..	787.8	564.2	276.0	184.5	135.5	64.4	2,025.9
FEMALES.							
1933—June ..	125.5	118.0	40.3	25.9	20.5	9.1	339.9
1939—July ..	168.0	142.9	53.2	34.0	26.2	11.6	437.1
1951—June(b) ..	290.9	219.6	86.1	57.0	41.6	20.3	718.8
1952—June(b) ..	270.5	206.6	83.8	54.9	40.5	19.8	679.4
1953—June(b) ..	266.2	205.9	83.7	53.4	41.0	20.1	673.7
1954—June(b) ..	279.5	217.7	86.1	56.9	42.8	21.0	707.5
1955—June(b) ..	292.5	227.0	89.3	60.2	43.9	21.7	738.5
1956—June(b) ..	300.2	233.0	91.2	62.9	44.6	22.8	758.9
PERSONS.							
1933—June ..	505.3	406.1	179.6	106.2	90.5	38.0	1,329.7
1939—July ..	697.9	500.4	226.0	140.7	109.1	49.0	1,730.2
1951—June(b) ..	1,049.1	745.4	345.4	227.0	166.9	80.5	2,630.3
1952—June(b) ..	1,024.9	731.0	341.9	226.4	166.5	80.8	2,587.5
1953—June(b) ..	1,000.5	727.5	338.9	224.0	171.2	81.9	2,560.5
1954—June(b) ..	1,037.6	757.4	349.8	232.9	177.8	83.8	2,655.9
1955—June(b) ..	1,071.7	783.7	361.3	238.9	180.3	85.7	2,739.0
1956—June(b) ..	1,088.0	797.2	367.2	247.4	180.1	87.2	2,784.8

(a) Includes the Australian Capital Territory and the Northern Territory.

(b) Subject to revision.

Estimates for recent months for Australia, corresponding to the foregoing, together with details for certain industrial groups, are published regularly in the *Monthly Review of Business Statistics* and the *Monthly Bulletin of Employment Statistics*.

(ii) *Industrial Groups.* The following table shows the total male and female wage and salary earners in civilian employment (excluding employees in rural industry, female private domestics, persons on the paid strength of the defence forces and National Service trainees in camp) subdivided to show the extent of employment provided by government authorities and by private employers respectively. Some principal industrial groups included in the total are shown separately and include both government and private employees, except in the case of retail trade, where there are no government employees.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT: INDUSTRIAL GROUPS, AUSTRALIA.

(Excluding Rural Wage Earners, Female Domestics in Private Homes, Persons on Paid Strength of Defence Forces and National Service Trainees in Camp.)

('000.)

Industrial Group.	July, 1939.	June, 1952. (a)	June, 1953. (a)	June, 1954. (a)	June, 1955. (a)	June, 1956. (a)
MALES.						
Mining and Quarrying	52.2	58.8	58.0	58.7	58.3	57.3
Manufacturing, etc.(b)	456.1	721.4	726.4	756.8	777.2	786.3
Building and Construction	149.7	214.0	193.2	205.7	211.8	214.6
Rail and Air Transport	73.0	106.9	104.9	106.3	108.5	109.1
Other Transport and Communication	112.9	193.0	190.2	193.8	200.2	201.3
Retail Trade	259.7	124.8	125.0	128.4	129.2	129.9
Other Commerce and Finance	17.8	191.2	191.0	198.3	207.1	212.7
Health	22.1	25.3	25.5	25.9	26.0	26.8
Education	17.4	33.2	35.4	36.7	38.7	40.8
Entertainment, Sport and Recreation	37.0	18.1	18.2	18.3	18.5	18.4
Personal Services	95.2	53.2	51.6	52.1	54.3	54.4
Other	95.2	168.2	167.4	167.4	170.7	174.3
Total	1,293.1	1,908.1	1,886.8	1,948.4	2,000.5	2,025.9
Governmental(c)	349.8	577.4	567.8	581.4	599.1	604.9
Private Employers	943.3	1,330.7	1,319.0	1,367.0	1,401.4	1,421.0
Total	1,293.1	1,908.1	1,886.8	1,948.4	2,000.5	2,025.9
FEMALES.						
Mining and Quarrying	0.3	0.9	0.9	1.0	1.1	1.2
Manufacturing, etc.(b)	169.0	206.3	209.8	226.8	232.5	235.7
Building and Construction	1.2	4.2	4.3	4.7	4.9	5.1
Rail and Air Transport	2.5	8.6	7.7	8.0	8.4	8.6
Other Transport and Communication	10.1	30.9	28.5	28.5	30.0	31.5
Retail Trade	114.9	112.6	109.9	115.3	121.6	122.9
Other Commerce and Finance	34.0	72.9	71.5	77.0	83.1	88.1
Health	32.0	68.7	68.8	70.8	73.5	77.6
Education	4.0	41.8	43.3	44.9	47.9	50.5
Entertainment, Sport and Recreation	43.0	8.6	8.7	8.6	8.8	9.1
Personal Services	26.1	68.9	65.8	67.0	69.6	70.2
Other	26.1	55.0	54.5	54.9	57.1	58.4
Total	437.1	679.4	673.7	707.5	738.5	758.9
Governmental(c)	55.2	115.2	112.0	114.5	122.8	129.8
Private Employers	381.9	564.2	561.7	593.0	615.7	629.1
Total	437.1	679.4	673.7	707.5	738.5	758.9

NOTE.—See footnotes on page 188.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT : INDUSTRIAL GROUPS, AUSTRALIA—*continued.*
('000)

Industrial Group.	July, 1939.	June, 1952. (a)	June, 1953. (a)	June, 1954. (a)	June, 1955. (a)	June, 1956. (a)
PERSONS.						
Mining and Quarrying	52.5	59.7	58.9	59.7	59.4	58.5
Manufacturing, etc.(b)	625.1	927.7	936.2	983.6	1,009.7	1,022.0
Building and Construction	150.9	218.2	197.5	210.4	216.7	219.7
Rail and Air Transport	75.5	115.5	112.6	114.3	116.9	117.7
Other Transport and Communication	123.0	223.9	218.7	222.3	230.2	232.8
Retail Trade	374.6	237.4	234.9	243.7	250.8	252.8
Other Commerce and Finance						
Health	51.8	94.0	94.3	96.7	99.5	104.4
Education	54.1	75.0	78.7	81.6	86.6	91.3
Entertainment, Sport and Recreation	21.4	26.7	26.9	26.9	27.3	27.5
Personal Services	80.0	122.1	117.4	119.1	123.9	124.6
Other	121.3	223.2	221.9	222.3	227.8	232.7
Total	1,730.2	2,587.5	2,560.5	2,655.9	2,739.0	2,784.8
Governmental(c)	405.0	692.6	679.8	695.9	721.9	734.7
Private Employers	1,325.2	1,894.9	1,880.7	1,960.0	2,017.1	2,050.1
Total	1,730.2	2,587.5	2,560.5	2,655.9	2,739.0	2,784.8

(a) Subject to revision. * (b) Estimates (subject to revision) based on Pay-roll Tax returns, etc., of employees engaged predominantly in secondary production. The figures include a considerable number of employees outside the scope of the factory employment figures as defined and published in Chapter VII.—Manufacturing Industry. (c) Includes employees of Commonwealth, State and Semi-Government and Local Government Authorities. See para. 3 (i) below.

A graph showing wage and salary earners in civilian employment by main industrial groups appears on page 174.

(iii) *Factories.* Actual mid-monthly factory employment derived from the results of annual factory censuses is published in the Bulletin *Secondary Industries*, issued by this Bureau.

Additional tables regarding employment in factories may be found in Chapter VII.—Manufacturing Industry.

An index of factory employment in Australia, published in the *Monthly Review of Business Statistics*, shows that employment in factories reached a new post-war peak in February, 1956. For the year 1955–56, the index showed the level of employment in factories to be 80 per cent. higher than the average factory employment for the three years ended June, 1939.

3. **Government Employees.**—(i) *Australia.* The following table shows at June in each of the years 1952 to 1956, in comparison with 1939, the number of civilian employees of Commonwealth, State and Semi-Government and Local Government authorities. These include all employees of government authorities on services such as railways, tramways, banks, post office, air transport, education, broadcasting, police, public works, factories and munitions establishments, migrant hostels, etc., as well as administrative employees, within Australia.

CIVILIAN EMPLOYEES OF GOVERNMENT AUTHORITIES(a) : AUSTRALIA.

June—	Commonwealth.			State and Semi-Government.			Local Government.			Total.		
	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.
1939(b) ..	56,099	11,764	67,863	235,066	40,586	275,652	58,637	2,887	61,524	349,802	55,237	405,039
1952 ..	157,880	45,177	202,997	359,340	65,061	424,401	61,167	5,111	66,278	578,387	115,289	693,676
1953 ..	159,002	41,571	200,573	349,096	65,129	414,225	59,641	5,315	64,956	567,739	112,015	679,754
1954 ..	156,604	41,579	198,183	363,095	67,466	430,561	61,643	5,493	67,136	581,342	114,538	695,880
1955 ..	160,840	44,291	205,131	373,250	72,728	445,978	65,026	5,771	70,797	599,116	122,790	721,906
1956 ..	162,314	46,114	208,428	377,077	77,587	454,664	65,558	6,138	71,696	604,949	129,839	734,788

(a) See explanation above.

(b) July.

(ii) *States and Territories.* The numbers of civilian employees of Commonwealth Government, State and Semi-Government and Local Government authorities in each State and Territory at June, 1956 are shown in the following table :—

CIVILIAN EMPLOYEES OF GOVERNMENT AUTHORITIES(a) : JUNE, 1956.

State or Territory.	Commonwealth.			State and Semi-Government.			Local Government.			Total.		
	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.	Males.	Fe-males.	Persons.
N.S.W. ..	55,277	15,243	70,520	134,716	26,147	160,863	26,687	2,861	29,548	216,680	44,251	260,931
Vic. ..	50,745	16,192	66,937	96,178	23,965	120,143	13,088	1,550	14,638	160,011	41,707	201,718
Qld. ..	17,784	4,709	22,493	56,324	7,725	64,049	17,084	933	18,017	91,192	13,367	104,559
S.A. ..	15,732	3,613	19,345	38,395	9,459	47,854	3,002	305	3,307	57,129	13,377	70,506
W.A. ..	8,994	2,197	11,191	37,804	6,519	44,323	3,499	323	3,822	50,297	9,039	59,336
Tas. ..	4,371	1,259	5,630	13,660	3,772	17,432	2,198	166	2,364	20,229	5,197	25,426
N.T. ..	2,441	613	3,054	..	..	..	..	..	..	2,441	613	3,054
A.C.T. ..	6,970	2,288	9,258	..	..	..	..	..	..	6,970	2,288	9,258
Total	162,314	46,114	208,428	377,077	77,587	454,664	65,558	6,138	71,696	604,949	129,839	734,788

(a) See explanation in para. 3 (i), page 188.

§ 2. Unemployment.

The total number of persons unemployed has been recorded only at the dates of the various Censuses. The following table sets out the number of unemployed at each Census from 1933 to 1954. The percentage of unemployed at each date to all wage and salary earners, comprising those estimated to be in employment and those unemployed, is also shown.

UNEMPLOYMENT (ALL CAUSES) : AUSTRALIA, CENSUSES, 1933, 1947 AND 1954.

Date.	Wage and Salary Earners Unemployed. ('000.)			Proportion of Wage and Salary Earners Unemployed. (Per Cent.)		
	Males.	Females.	Persons.	Males.	Females.	Persons.
June, 1933(a) ..	405.4	75.8	481.2	25.4	14.5	22.7
June, 1947(b) ..	66.6	16.9	83.5	3.5	2.5	3.2
June, 1954(b) ..	41.0	14.0	55.0	1.8	1.9	1.8

(a) As recorded at the Census. In addition there was a considerable number of youths and young women of working ages who had never been employed. (b) Persons in the work force who were not at work at the time of the Census.

In the following table males and females not at work are classified according to cause for the Census years 1933, 1947 and 1954. In 1947 there was a change in the form of the questionnaire which has probably resulted in some variation in response. Prior to 1947 persons who were "unemployed" were requested to furnish particulars of the cause and duration of unemployment, but from 1947 onwards the enquiry was broadened to include all persons (usually engaged in industry, business, trade, profession or service) who were out of a job and "not at work" at the time of the Census for whatever reason, including any not normally associated with unemployment.

CAUSES OF UNEMPLOYMENT : AUSTRALIA, CENSUSES, 1933, 1947 AND 1954.

Year.	Unable to Secure Employment.	Temporarily Laid Off.	Illness.	Accident.	Industrial Dispute.	Other and Not Stated.	Total.
MALES.							
1933 ..	374,569	(a)	18,083	4,702	1,595	6,483	405,432
1947 ..	17,314	12,458	14,639	2,985	475	(b)18,743	66,614
1954 ..	9,089	4,056	10,894	2,571	316	(b)14,088	41,014
FEMALES.							
1933 ..	62,630	(a)	9,193	434	95	3,465	75,817
1947 ..	2,254	2,449	4,396	280	24	(b) 7,512	16,915
1954 ..	3,369	1,267	3,939	291	15	(b) 5,119	14,000

(a) Not available.

(b) The majority of these persons were resting between jobs or changing jobs.

Details of the number of persons receiving unemployment and sickness benefits and the payments made may be found in Chapter XV.—Welfare Services.

§ 3. Commonwealth Employment Service.

The Commonwealth Employment Service was established under section 47 of the Re-establishment and Employment Act 1945. The principal functions of the Service, as set out in section 48 of this Act, are to provide services and facilities for the benefit of persons seeking employment or to change employment, or to engage labour, and to provide facilities to assist in bringing about and maintaining a high and stable level of employment throughout the Commonwealth.

The Commonwealth Employment Service operates within the Employment Division of the Department of Labour and National Service, and is under the control of the permanent head of that Department. The Central Office is in Melbourne, and there is a Regional Office in the capital city of each State, with 120 District Employment Offices in suburban and the larger provincial centres and 340 agents in the smaller country centres. The District Employment Offices are distributed as follows :—New South Wales, 45 ; Victoria, 30 ; Queensland, 19 ; South Australia, 8 ; Western Australia, 12 ; Tasmania, 4 ; Northern Territory, 1 ; Australian Capital Territory, 1.

The Commonwealth Employment Service provides special assistance for persons with physical and mental handicaps, older workers, rural workers, youths and persons with professional and technical qualifications, to obtain employment.

It assists in the administration of the unemployment and sickness benefit provisions of the Social Services Act 1947–1956, and of the re-employment allowance provisions of the Re-establishment and Employment Act 1945–1956 for certain classes of discharged members of the forces. All persons who wish to claim unemployment benefits or re-employment allowances are required to register at a District Employment Office, which is responsible for certifying whether or not suitable employment can be offered to them.

Vocational guidance is provided free of charge in each State, other than New South Wales, by a staff of qualified psychologists. (In New South Wales a similar service is provided by officers of the New South Wales Department of Labour and Industry.) Vocational guidance is available to any person, but is provided particularly for young people, ex-service-men and the physically handicapped.

The Service is responsible for placing in employment all Commonwealth nominated migrant workers coming to Australia under the assisted passage schemes from the United Kingdom and other countries, and, as required, it provides assistance to other migrants wishing to obtain employment. When migrants coming under Commonwealth nomination arrive in Australia, the Service arranges for them to move to their initial employment and for their admission, if necessary, to Commonwealth-controlled hostels. From the inception of the various free and assisted schemes, including the Displaced Persons Scheme, to the end of July, 1956 more than 150,000 British and European migrant workers had been placed in employment by the Commonwealth Employment Service.

Since 1951, the Service has been responsible for recruiting experts for the Colombo Plan and the United Nations Expanded Programme of Technical Assistance. The principal spheres in which experts have been supplied are agriculture, education, engineering, geology, health and economic and scientific research and development.

In association with its placement activities, the Service carries out regular surveys of the labour market in all areas and industries and supplies detailed information to interested Commonwealth and State Government Departments and instrumentalities and to the public. It also advises employers, employees and others on labour availability and employment opportunities in various occupations and areas and on other matters concerning employment.

The Commonwealth Employment Service is responsible for the medical examination and interview of young men for training in the armed forces under the National Service Act 1951-1953, which is administered by the Department of Labour and National Service. The Department also administers the provisions of the Act relating to the protection of the rights of National Service trainees in relation to their civil employment.

The Service completed its tenth year of operation in May, 1956. During the year ended June, 1956 there were 576,958 new registrations of applicants for employment, of whom 445,253 were referred to employers and 312,105 placed in employment, and 434,347 new vacancies were notified. Vacancies unfilled at the end of June, 1956 numbered 32,473.

With the setting up of the Commonwealth Employment Service, most of the State Labour Exchange Organizations existing previously were superseded. Details of the organization and administration of these exchanges in the several States were given in *Labour Report* No. 30, page 133.

§ 4. Industrial Disputes.

1. **General.**—Information with regard to the collection of particulars and the methods of tabulation of industrial disputes involving stoppage of work is given in the annual *Labour Report*.

Particulars of all disputes in progress during the year are included in the annual figures whether the dispute commenced in that year or was in progress at the beginning of the year. Consequently details of "the number of disputes" and "workers involved" in disputes which commenced in the previous year and were still in progress during the current year will be duplicated in the figures for both years. The number affected is given in a footnote so that allowance can be made in comparing annual figures.

2. **Industrial Groups.**—The following table gives for Australia as a whole particulars of industrial disputes which were in progress during 1955, classified according to industrial groups.

INDUSTRIAL DISPUTES IN INDUSTRIAL GROUPS: AUSTRALIA, 1955.(a)

Class.	Industrial Group.	Num-ber.	Workers Involved.			Working Days Lost.	Esti-mated Loss in Wages. (£.)
			Directly.	In-directly. (b)	Total.		
I.	Wood, Furniture, etc.	1	36	..	36	36	110
II.	Engineering, Metal Works, etc. . .	124	23,628	8,664	32,292	224,947	675,519
III.	Food, Drink, etc.	60	19,321	5,651	25,172	113,320	332,526
IV.	Clothing, Textiles, etc.	3	185	180	365	664	1,775
V.	Books, Printing, etc.	6	4,120	346	4,466	25,177	94,833
VI.	Other Manufacturing	83	21,948	3,016	24,964	128,731	429,117
VII.	Building	72	21,085	1,212	22,297	69,443	234,596
VIII.	(i) Coal-mining	777	135,346	197	135,543	225,336	789,322
	(ii) Other Mining, Quarries, etc. . .	8	1,958	47	1,105	9,106	31,661
IX.	Railway and Tramway Services . .	38	28,343	211	28,554	10,677	32,191
X.	Other Air and Land Transport . . .	23	9,323	640	10,163	22,237	70,514
XI.	(i) Stevedoring	308	152,245	..	152,245	152,521	529,381
	(ii) Shipping, etc.	8	539	94	633	3,097	9,518
XII.	Pastoral, Agricultural, etc. . . . .	..	..	..	..	..	..
XIII.	Domestic, Hotels, etc.	1	1,500	..	1,500	3,000	10,000
XIV.	Miscellaneous	20	5,263	49	5,312	22,392	69,258
	Total	1,532	424,340	20,307	444,647	1,010,884	3,310,321

(a) Two disputes in New South Wales and one in Victoria involving respectively 485 and 62 workers commenced in 1954 and were still in progress at the beginning of 1955. Particulars of these disputes have been included in statistics of disputes for both 1954 and 1955. (b) Persons thrown out of work at the establishments where the stoppages occurred but not themselves parties to the dispute.

A graph showing, for the years 1946 to 1955, the working days lost as a result of industrial disputes in the main industrial groups will be found on page 175.

3. States and Territories.—The following table gives particulars of the number of industrial disputes in each State and Territory, together with the number of workers involved, and the losses in working days and wages caused by disputes which were current during each of the years 1939 and 1953 to 1955.

INDUSTRIAL DISPUTES : STATES AND TERRITORIES.

State or Territory.	Year.	Number.	Workers Involved.			Working Days Lost.	Estimated Loss in Wages. (£.)
			Directly.	Indirectly. (a)	Total.		
New South Wales ..	1939	386	139,301	9,230	148,531	410,183	419,330
	1953	1,080	302,007	6,375	308,382	759,391	2,403,242
	1954	1,063	217,081	5,205	222,286	501,573	1,654,814
	1955	1,072	260,353	13,678	274,031	673,325	2,230,935
Victoria ..	1939	10	1,989	180	2,169	27,313	19,946
	1953	53	65,962	2,164	68,126	57,160	176,330
	1954	76	42,476	2,337	44,813	135,611	460,213
	1955	66	33,255	2,287	35,542	138,507	435,356
Queensland ..	1939	5	373	2	375	1,870	1,753
	1953	265	87,986	3,511	91,497	153,448	465,830
	1954	278	77,006	6,675	83,681	183,855	611,331
	1955	274	83,026	3,626	86,652	99,318	328,046
South Australia ..	1939	2	170	5	175	1,880	1,416
	1953	24	18,502	190	18,692	55,476	200,610
	1954	23	7,291	45	7,336	31,207	108,100
	1955	43	23,969	129	24,098	66,881	203,182
Western Australia ..	1939	7	1,108	145	1,253	14,100	9,578
	1953	11	3,665	..	3,665	4,977	15,663
	1954	15	5,398	96	5,494	21,651	75,387
	1955	16	9,504	345	9,849	9,582	32,704
Tasmania ..	1939	4	53	..	53	166	93
	1953	18	5,069	6	5,075	18,441	68,259
	1954	31	5,951	136	6,087	25,915	105,042
	1955	48	13,204	240	13,444	20,387	70,927
Northern Territory ..	1939	2	234	40	274	3,642	3,600
	1953	5	535	..	535	1,807	7,161
	1954	2	239	..	239	1,452	5,082
	1955	12	1,013	2	1,015	2,740	8,551
Australian Capital Territory	1939	..	..	..	..	..	..
	1953	3	74	..	74	130	342
	1954	2	138	..	138	375	1,242
	1955	1	16	..	16	144	620
Australia ..	1939	416	143,228	9,602	152,830	459,154	455,716
	1953	1,459	483,800	12,246	496,046	1,050,830	3,337,437
	1954	1,490	355,580	14,494	370,074	901,639	3,021,211
	1955	1,532	424,340	20,307	444,647	1,010,884	3,310,321

(a) Persons thrown out of work at the establishments where the stoppages occurred but not themselves parties to the dispute.

Detailed information in regard to the disputes during the above-mentioned and previous years is given in the *Labour Report*.

4. Duration.—The following table gives particulars of industrial disputes during 1955 in the three groups "Coal-mining", "Stevedoring" and "Other Industries", classified according to duration.

DURATION OF INDUSTRIAL DISPUTES : AUSTRALIA, 1955.

Limits of Duration.	Coal-mining.	Stevedoring.	Other Industries.	All Industries.
NUMBER OF DISPUTES.				
1 day and less	518	217	161	896
2 days and more than 1 day	138	66	58	262
3 days and more than 2 days	65	15	48	128
Over 3 days and less than 1 week	26	5	41	72
1 week and less than 2 weeks	24	5	76	105
2 weeks and less than 4 weeks	5	..	37	42
4 weeks and less than 8 weeks .. ..	..	..	17	17
8 weeks and over	1	..	9	10
Total	777	308	447	1,532

DURATION OF INDUSTRIAL DISPUTES : AUSTRALIA, 1955—*continued.*

Limits of Duration.	Coal-mining.	Stevedoring.	Other Industries.	All Industries.
WORKERS INVOLVED.				
1 day and less	85,802	111,973	72,693	270,468
2 days and more than 1 day	29,267	35,148	22,994	87,409
3 days and more than 2 days	10,051	2,802	16,008	28,861
Over 3 days and less than 1 week	3,093	960	11,578	15,631
1 week and less than 2 weeks	4,966	1,362	14,094	20,422
2 weeks and less than 4 weeks	1,231	..	12,518	13,749
4 weeks and less than 8 weeks .. .. .	..	..	3,542	3,542
8 weeks and over	1,133	..	3,432	4,565
Total	135,543	152,245	156,859	444,647

WORKING DAYS LOST.

1 day and less	85,470	81,595	50,636	217,701
2 days and more than 1 day	46,266	50,687	42,368	139,321
3 days and more than 2 days	25,765	7,673	45,163	78,601
Over 3 days and less than 1 week	12,146	2,988	44,265	59,399
1 week and less than 2 weeks	33,279	9,578	81,574	124,431
2 weeks and less than 4 weeks	11,570	..	128,082	139,652
4 weeks and less than 8 weeks .. .. .	..	..	93,852	93,852
8 weeks and over	10,840	..	147,087	157,927
Total	225,336	152,521	633,027	1,010,884

5. Causes.—(i) *General.* In issues of the Official Year Book prior to No. 40 the causes of industrial disputes were classified in some detail for all industries combined. As from 1950 a new classification was introduced and stoppages are now analysed in three separate groups, "Coal-mining", "Stevedoring" and "Other Industries". This dissection has been made because the pattern of the disputes in coal-mining and stevedoring differs significantly from that in other industries.

Under this classification, causes are grouped under four main headings:—(1) Wages, Hours and Leave; (2) Physical Working Conditions and Managerial Policy; (3) Trade Unionism; (4) Other Causes. The first group is restricted to disputes involving general principles relating to wages, hours and leave; minor questions regarding the claims to pay or leave by individual employees are included under managerial policy. The second group comprises disputes regarding physical working conditions and general questions of managerial policy, which term covers those arising from disciplinary action, the promotion of employees, the employment of particular individuals, personal disagreements between employees and supervisory staff and disputes arising from the computation of wages, leave, etc., in individual cases. The third group includes stoppages over employment of non-unionists, inter-union and intra-union disputes, disputes over recognition of union activities, and sympathy stoppages in support of employees in another industry. The last group comprises disputes by way of protest against situations not arising from the usual relationship of employer and employee, e.g., political matters, and cases (mainly occurring in the coal-mining industry) where the cause of the stoppage is not officially made known to the management.

As the items included under these headings differ somewhat from those included under the similar headings used for classifying causes of disputes in years prior to 1950, figures for the years 1950 to 1955 are not strictly comparable with those for earlier years.

(ii) *Years 1939 and 1951 to 1955.* The following table gives particulars of industrial disputes according to causes for the years 1939 and 1951 to 1955.

CAUSES OF INDUSTRIAL DISPUTES : AUSTRALIA.

Cause of Dispute.	1939.	1951.(a)	1952.(a)	1953.(a)	1954.(a)	1955.(a)
NUMBER OF DISPUTES.						
Wages, Hours and Leave	96	186	161	105	100	201
Physical Working Conditions and Managerial Policy	197	803	967	896	975	887
Trade Unionism	50	159	204	187	160	172
Other	73	196	295	271	255	272
Total	416	1,344	1,627	1,459	1,490	1,532

WORKERS INVOLVED.						
Wages, Hours and Leave	29,290	117,409	201,274	89,443	42,923	139,522
Physical Working Conditions and Managerial Policy	56,783	151,655	183,123	218,809	214,060	184,449
Trade Unionism	18,651	27,684	51,819	26,176	45,437	37,998
Other	48,106	111,844	69,518	161,618	67,654	82,678
Total	152,830	408,592	505,734	496,046	370,074	444,647

WORKING DAYS LOST.						
Wages, Hours and Leave	128,525	338,026	545,017	208,776	136,738	467,591
Physical Working Conditions and Managerial Policy	189,510	359,383	444,286	657,835	413,118	398,147
Trade Unionism	54,749	67,280	93,133	58,038	278,332	62,103
Other	86,370	108,285	81,068	126,181	73,451	83,043
Total	459,154	872,974	1,163,504	1,050,830	901,639	1,010,884

(a) Owing to the use of a new classification, figures for 1951 to 1955 are not strictly comparable with those for years prior to 1950.

(iii) Year 1955. The following table shows particulars of industrial disputes for 1955 classified according to cause in three industry groups :—

CAUSES OF INDUSTRIAL DISPUTES : AUSTRALIA, 1955.

Cause of Dispute.	Coal-mining.	Stevedoring.	Other Industries.	All Industries.
NUMBER OF DISPUTES.				
Wages, Hours and Leave	6	31	164	201
Physical Working Conditions and Managerial Policy	445	210	232	887
Trade Unionism	119	19	34	172
Other	207	48	17	272
Total	777	308	447	1,532

WORKERS INVOLVED.				
Wages, Hours and Leave	7,443	49,210	82,869	139,522
Physical Working Conditions and Managerial Policy	66,934	66,498	51,017	184,449
Trade Unionism	20,488	4,910	12,600	37,998
Other	40,678	31,627	10,373	82,678
Total	135,543	152,245	156,859	444,647

WORKING DAYS LOST.				
Wages, Hours and Leave	7,680	46,336	413,575	467,591
Physical Working Conditions and Managerial Policy	122,111	81,714	194,322	398,147
Trade Unionism	44,405	3,515	14,183	62,103
Other	51,140	20,956	10,947	83,043
Total	225,336	152,521	633,027	1,010,884

6. Results.—In issues of the Official Year Book prior to No. 40, tables were included showing analyses of the results of industrial disputes over a period of years. This tabulation was discontinued because of the difficulty of obtaining the details necessary to make a classification in precise terms of the results of industrial disputes.

7. **Methods of Settlement.**—The following table shows particulars of industrial disputes for 1955 classified according to method of settlement, in three industry groups:—

INDUSTRIAL DISPUTES : METHODS OF SETTLEMENT, AUSTRALIA, 1955.(a)

Method of Settlement.	Coal-mining.	Stevedoring.	Other Industries.	All Industries.
NUMBER OF DISPUTES.				
1. By private negotiation	126	20	134	280
2. By mediation not based on legislation	2	..	4	6
3. State legislation—				
(a) Under State Conciliation, etc., legislation .. .. .	..	..	86	86
(b) By reference to State Government officials	1	..	..	1
4. Commonwealth and Commonwealth-State legislation—				
(a) Industrial Tribunals under—				
(i) Conciliation and Arbitration Act .. .. .	..	..	33	33
(ii) Coal Industry Acts	51	..	..	51
(iii) Stevedoring Industry Act .. .. .	..	12	..	12
(iv) Other Acts .. .. .	..	..	..	..
(b) By reference to Commonwealth Government officials	4	46	5	55
5. By filling places of workers on strike or locked out .. .. .	..	..	..	..
6. By closing down establishment permanently .. .. .	..	..	..	..
7. By resumption without negotiation	592	228	183	1,003
8. By other methods .. .. .	..	2	..	2
Total	776	308	445	1,529

WORKERS INVOLVED.

1. By private negotiation	15,187	6,601	40,784	62,572
2. By mediation not based on legislation	152	..	2,581	2,733
3. State legislation—				
(a) Under State Conciliation, etc., legislation .. .. .	..	..	31,048	31,048
(b) By reference to State Government officials	100	..	..	100
4. Commonwealth and Commonwealth-State legislation—				
(a) Industrial Tribunals under—				
(i) Conciliation and Arbitration Act .. .. .	..	..	4,211	4,211
(ii) Coal Industry Acts	8,437	..	..	8,437
(iii) Stevedoring Industry Act .. .. .	..	770	..	770
(iv) Other Acts .. .. .	..	..	..	..
(b) By reference to Commonwealth Government officials	1,387	7,309	306	9,002
5. By filling places of workers on strike or locked out .. .. .	..	..	..	..
6. By closing down establishment permanently .. .. .	..	..	..	..
7. By resumption without negotiation	109,147	137,391	77,888	324,426
8. By other methods .. .. .	..	174	..	174
Total	134,410	152,245	156,818	443,473

WORKING DAYS LOST.

1. By private negotiation	32,805	8,925	243,286	285,016
2. By mediation not based on legislation	351	..	10,167	10,518
3. State legislation—				
(a) Under State Conciliation, etc., legislation .. .. .	..	..	163,567	163,567
(b) By reference to State Government officials	100	..	..	100
4. Commonwealth and Commonwealth-State legislation—				
(a) Industrial Tribunals under—				
(i) Conciliation and Arbitration Act .. .. .	..	..	20,728	20,728
(ii) Coal Industry Acts	32,585	..	..	32,585
(iii) Stevedoring Industry Act .. .. .	..	939	..	939
(iv) Other Acts .. .. .	..	..	..	..
(b) By reference to Commonwealth Government officials	6,650	10,641	768	18,059
5. By filling places of workers on strike or locked out .. .. .	..	..	..	..
6. By closing down establishment permanently .. .. .	..	..	..	..
7. By resumption without negotiation	142,005	131,717	194,169	467,891
8. By other methods .. .. .	..	299	..	299
Total	214,496	152,521	632,685	999,702

(a) As there are usually disputes in progress at the end of each year, totals in the above table will not necessarily agree with those shown in preceding tables.

F. WORKERS' COMPENSATION LEGISLATION.

A conspectus of the principal provisions of Workers' Compensation Acts in force in Australia at 30th June, 1955 will be found in *Labour Report* No. 43, pp. 125-133.

G. LABOUR ORGANIZATIONS.

§ 1. Labour Organizations in Australia.

1. **Registration.**—(i) *Under Trade Union Acts.* In earlier issues of the Official Year Book (see No. 39, page 448) reference was made to the registration of trade unions under the Trade Union Acts. In general the available information is inadequate for statistical purposes.

(ii) *Under State Industrial Legislation.* Information with regard to registrations of employers' associations and trade unions under the various State Industrial Arbitration Acts will be found in earlier issues of the Official Year Book (see No. 39, page 448).

(iii) *Under the (Commonwealth) Conciliation and Arbitration Act.* Under Part VIII. of the Conciliation and Arbitration Act 1904–1956 any association of employers in any industry who have, or any employer who has, employed, on an average taken per month, not less than 100 employees during the six months preceding application for registration, or any association of not less than 100 employees in any industry may be registered.* Registered unions include both interstate associations and associations operating within one State only. Registration under Commonwealth legislation began in 1906. At the end of 1955 the number of employers' organizations registered under the provisions of the Commonwealth Conciliation and Arbitration Act was 56. The number of unions of employees registered at the end of 1955 was 152, with a membership of 1,469,045 representing 82 per cent. of the total membership of all trade unions in Australia.

2. **Particulars regarding Trade Unions.**—(i) *Types.* The trade unions in Australia are very diverse in character, and range from the small independent association to the large interstate organization, which, in its turn, may be a branch of an international body. Broadly speaking, there are four distinct classes of labour organizations :—(i) the local independent ; (ii) the State ; (iii) the interstate ; and (iv) the Australasian or international ; but a number of variations occur from each of these classes. The schemes of organization of interstate or federated unions vary greatly in character. In some unions the State organizations are bound together under a system of unification with centralized control, while in others the State units are practically independent and self-governing, the federal bond being loose and existing only for one or two specified purposes.

(ii) *Number and Membership.* Returns showing membership by States as at 31st December each year are obtained for all trade unions and employee organizations. The affairs of single organizations are not disclosed in the published results and this has assisted in securing complete information. The Bureau is indebted to the secretaries of trade unions for their co-operation in supplying information. The substantial increase in the number of members of trade unions in 1954 was partly the result of an amendment to the New South Wales Industrial Arbitration Act 1940–1953, which gave absolute preference of employment to members of appropriate trade unions, and also made it compulsory for persons over 18 years of age, working under State awards or agreements (except students, those holding managerial positions, conscientious objectors and ex-servicemen), to join an appropriate trade union. The following table shows the position at the end of 1939, 1954 and 1955.

TRADE UNIONS : NUMBER AND MEMBERSHIP.

State or Territory.	Number of Separate Unions.			Number of Members.			Percentage Increase in Membership.(a)		
	1939.	1954.	1955.	1939.	1954.	1955.	1939.	1954.	1955.
New South Wales	200	228	235	358,391	732,737	731,960	3.4	10.1	-0.1
Victoria ..	149	158	160	216,803	433,891	446,372	0.8	2.2	2.9
Queensland ..	114	129	130	180,653	305,304	305,509	6.5	6.9	0.1
South Australia	117	138	138	67,282	147,555	146,422	8.7	5.3	-0.8
Western Australia	141	154	154	67,833	109,589	111,959	0.1	1.8	2.2
Tasmania ..	79	98	101	22,062	50,290	51,401	4.8	4.1	2.2
Northern Territory	4	18	20	761	2,168	2,440	5.6	-14.5	12.5
Australian Capital Territory ..	15	29	32	1,685	5,970	5,799	9.6	13.7	-2.9
Australia ..	(b) 380	(b) 371	(b) 372	915,470	1,787,504	1,801,862	3.4	6.4	0.8

(a) On preceding year. (b) Without interstate duplication. See letterpress below.

NOTE.—Minus sign (—) denotes decrease.

* Under the Public Service Arbitration Act an association of less than 100 employees may be registered as an organization, provided that its members comprise at least three-fifths of all persons engaged in that industry in the Service. Such organizations are included in the figures shown below.

In the preceding table, under the heading "Number of Separate Unions", a union reporting members in a State is counted as one union within that State. The figures by States do not add to the Australian total (shown in the last line) because a union represented in more than one State is included in the figure for each State in which it is represented, but is counted only once in the Australian total.

Because of the difficulties involved, the collection of statistics relating to the "Number of Branches" of trade unions appearing in issues of the Official Year Book prior to No. 39 was discontinued.

(iii) *Classification in Industrial Groups.* The following table shows the number of unions and members thereof in Australia at the end of each of the years 1939, 1954 and 1955. Compared with that in 1939, membership in 1955 had increased by 97 per cent.

TRADE UNIONS : INDUSTRIAL GROUPS, AUSTRALIA.

Industrial Group.	1939.		1954.		1955.	
	No. of Unions. (a)	No. of Members.	No. of Unions. (a)	No. of Members.	No. of Unions. (a)	No. of Members.
Manufacturing—						
I. Wood, Furniture, etc. . .	4	27,990	6	43,572	6	47,678
II. Engineering, Metal Works, etc. . .	22	99,731	15	258,838	15	266,897
III. Food, Drink, Tobacco, etc. . .	35	80,328	39	104,335	37	106,865
IV. Clothing, Textiles, etc. . .	12	68,847	6	117,292	7	107,618
V. Books, Printing, etc. . .	8	22,303	6	38,912	6	41,514
VI. Other Manufacturing . . .	37	52,074	36	84,456	36	85,023
VII. Building . . .	28	45,651	28	143,071	29	134,224
VIII. Mining, Quarrying, etc. . .	13	48,812	13	49,833	13	46,641
IX. Railway and Tramway Services	29	105,938	26	143,680	25	146,401
X. Air and Other Land Transport	6	19,488	9	62,025	9	66,627
XI. Shipping, etc. . .	21	28,760	13	40,372	14	41,612
XII. Pastoral, Agricultural, etc. . .	5	40,276	3	63,831	3	66,224
XIII. Domestic, Hotels, etc. . .	18	13,177	12	36,611	12	37,722
XIV. Miscellaneous—						
(i) Banking, Insurance and Clerical . . .	20	39,013	18	112,946	19	114,218
(ii) Public Service . . .	50	89,848	61	202,797	62	203,437
(iii) Retail and Wholesale . .	8	36,290	13	72,664	12	71,583
(iv) Municipal, Sewerage and Labouring . . .	11	46,552	10	81,115	10	83,572
(v) Other Miscellaneous . . .	53	50,392	57	131,154	57	134,006
Total	380	915,470	371	1,787,504	372	1,801,862

(a) Without interstate duplication. See letterpress above.

(iv) *Number of Members and Proportion of Wage and Salary Earners.* The following table shows the estimated percentages of wage and salary earners in employment who are members of trade unions. As current estimates of wage and salary earners in employment do not include employees engaged in rural industry or females in private domestic service the percentages have been calculated on figures obtained by adding to the end of year estimates (see page 186) the number of employees in rural industry and females in private domestic service recorded at the 1947 and 1954 Censuses. For this reason, and also because the membership of trade unions includes some persons not in employment, the percentages shown in the table must be regarded as approximations.

TRADE UNIONS : NUMBER OF MEMBERS AND PROPORTION OF TOTAL WAGE AND SALARY EARNERS, AUSTRALIA.

Year.	Number of Members.			Proportion of Total Wage and Salary Earners. (Per cent.)		
	Males.	Females.	Persons.	Males.	Females.	Persons.
1939	778,336	137,134	915,470	52	24	44
1951	1,368,694	321,577	1,690,271	66	42	60
1952	1,354,248	283,294	1,637,542	67	40	60
1953	1,381,103	298,655	1,679,758	67	40	60
1954	1,448,223	339,281	1,787,504	68	44	62
1955	1,464,016	337,846	1,801,862	68	43	61

(v) *Interstate or Federated Trade Unions.* The following table gives particulars of the number and membership of interstate or federated unions in 1955 :—

INTERSTATE OR FEDERATED TRADE UNIONS(a) : AUSTRALIA, 1955.

Particulars.	Unions Operating in—					Total.
	2 States.	3 States.	4 States.	5 States.	6 States.	
Number of Unions	14	9	21	32	65	141
„ „ Members	34,536	59,752	144,282	420,769	925,723	1,585,062

(a) Certain unions in this group have, in addition to branches in the States, branches in the Northern Territory and in the Australian Capital Territory.

The number of organizations operating in two or more States increased from 72 in 1912 to 141 in 1955, and the ratio of the membership of such organizations to the total membership of all organizations rose from 65 to 88 per cent. during the same period.

3. **Central Labour Organizations.**—In each of the capital cities and in a number of industrial centres elsewhere, delegate organizations, consisting of representatives from a group of trade unions, have been established. Their revenue is raised by means of a *per capita* tax on the members of each affiliated union. In most of the towns where such central organizations exist, the majority of the local unions are affiliated with the central organization, which is usually known as the Labour or the Trades Hall Council. In Western Australia a unified system of organization extends over the industrial centres throughout the State. In this State there is a provincial branch of the Australian Labour Party, having a central council and executive, and metropolitan and branch district councils, with which the local bodies are affiliated. The central council, on which all district councils are represented, meets periodically. In the other five States, however, the organization is not so close, and, while provision usually exists in the rules of the central council at the capital city of each State for the organization of district councils or for the representation of the central council on the local councils in the smaller industrial centres of the State, the councils in each State are generally independent bodies.

The table below shows the number of metropolitan and district or local labour councils, together with the number of unions and branches of unions affiliated therewith in each State at the end of the year 1955 :—

CENTRAL LABOUR ORGANIZATIONS : NUMBER, AND UNIONS AND BRANCH UNIONS AFFILIATED, 1955.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	N.T.	A.C.T.	Total.
Number of Councils	11	9	13	6	10	5	..	1	55
Number of Unions and Branch Unions affiliated	287	263	152	132	397	103	..	22	1,356

The figures given in the preceding table concerning the number of unions do not necessarily represent separate unions, since the branches of a large union may be affiliated with the local trades councils in the several towns in which they are represented.

A Central Labour Organization, now called the Australian Council of Trade Unions, came into being during 1927. The Council was created to function on behalf of the trade unions of Australia, and was founded at an All-Australian Trade Union Congress held in Melbourne in May, 1927. The Australian Council of Trade Unions consists of affiliated unions and affiliated Metropolitan and/or State Labour Councils and Provincial Councils. The Metropolitan or State Labour Council in each State is the State Branch of the Australian Council of Trade Unions and has the right to appoint two representatives to act on the executive of the Council. In addition to the representatives from the Metropolitan

or State Labour Councils, the executive consists of four officers—the president, two vice-presidents and a secretary—who are elected by and from the Australian Congress of Trade Unions.

The objectives of the Australian Council of Trade Unions are the socialization of industry, i.e., production, distribution and exchange, and the utilization of the resources of Australia for the benefit of the people—ensuring full employment, with rising standards of living, real security and full cultural opportunities for all.

The methods to be adopted are:—the closer organization of the workers by the transformation of the Australian trade union movement from the craft to an industrial basis, by grouping of unions in their respective industries and by the amalgamation of unions with a view to the establishment of one union in each industry; the consolidation of the Australian Labour Movement, with the object of unified control, administration and action; the centralized control of industrial disputes; educational propaganda among unions; political action to secure satisfactory working-class legislation.

The Australian Council of Trade Unions is the first interstate body in Australia with authority to deal with industrial matters of an interstate character affecting the trade union movement generally. It is also the body responsible for submitting to the Commonwealth Government the names of persons suitable for selection as the Australian workers' delegate to the annual International Labour Conference.

Between the trade union and the central organization of unions may be classed certain State or district councils organized on trade lines, and composed of delegates from separate unions whose members' interests are closely connected because of their occupations. Delegate councils of bakers, bread carters and mill employees, or of unions connected directly or indirectly with the iron, steel, or brass trades, or with the building trades, may be so classed.

§ 2. International Labour Organization.

The International Labour Organization (I.L.O.) was established on 11th April, 1919 as an autonomous institution associated with the League of Nations. Its original constitution was adopted as Part XIII. of the Treaty of Versailles and formed part of other treaties of peace. During the years between its establishment and the outbreak of the 1939–45 War, the I.L.O., with headquarters at Geneva, played a leading role in promoting the improvement of labour conditions throughout the world.

In 1940, in order to ensure that the I.L.O. should be able to function freely, a working centre was established at Montreal, Canada. In 1946 the Organization became the first of the specialized agencies of the United Nations. Under the terms of agreement, the United Nations recognizes the I.L.O. as a specialized agency having responsibility in the field defined by its constitution, which embraces labour conditions, industrial relations, employment organization, social security and other aspects of social policy. The Organization has three basic parts. These are the International Labour Conference, its highest authority, which, as a rule, meets annually; the Governing Body, its executive council, which usually meets four times each year; and the International Labour Office, which provides the secretariat of the Organization. The Conference is composed of delegations from the Member States of the Organization. In August, 1956, there were 76 Member States, each of which is entitled to be represented by four delegates—two Government, one representing employers and one representing workers, together with their advisers. In accordance with amendments adopted at the 36th Session of the International Labour Conference, the Governing Body, as from the elections held in Geneva in 1954, has consisted of the representatives of twenty governments, and ten employers' and ten workers' representatives. Particulars are given in the *Labour Report* of the proceedings of International Labour Conferences up to the 39th Session, held in Geneva in June, 1956.

H. COMPARATIVE INDEX NUMBERS.

In order to show the relative movements of certain price and related data, the following table of annual and quarterly index numbers for the six capital cities combined has been compiled with a common base 1911 = 1,000.

COMPARATIVE INDEX NUMBERS FOR THE SIX CAPITAL CITIES COMBINED.

(Base of each Group: Weighted Average of Six Capital Cities, 1911 = 1,000 (a).)

Period.	Retail Price Index Numbers.					Nominal Wages, Adult Males.	Real Wages. (c)
	Food and Groceries.	Rent (4 and 5 Roomed Houses). (b)	Clothing.	Miscellaneous.	Total "C" Series Index.		
Year—							
1911	1,000	1,000	(d)1,000	(d)1,000	(d)1,000	1,000	1,000
1914	1,144	1,082	1,140	1,140	1,140	1,081	948
1921	1,902	1,410	1,883	1,537	1,680	1,826	1,087
1928	1,761	1,743	1,507	1,537	1,675	1,963	1,172
1932	1,425	1,336	1,215	1,458	1,377	1,639	1,190
1938	1,584	1,540	1,253	1,463	1,488	1,799	1,209
1939	1,657	1,577	1,271	1,465	1,526	1,846	1,210
1947	1,967	1,597	2,367	1,825	1,971	2,598	1,318
1948	2,245	1,601	2,637	1,913	2,148	2,914	1,357
1949	2,492	1,605	3,019	2,037	2,349	3,210	1,367
1950	2,800	1,613	3,455	2,184	2,589	3,596	1,389
1951	3,649	1,649	4,156	2,555	3,124	4,495	1,439
1952	4,516	1,728	4,657	2,980	3,645	5,241	1,438
1953	4,723	1,861	4,872	3,126	3,820	5,539	1,450
1954	4,776	1,949	4,865	3,139	3,860	5,632	1,459
1955	5,027	2,005	4,894	3,168	3,970	5,773	1,454
Quarter—							
1955—							
March	4,882	1,983	4,865	3,115	3,898	5,720	1,467
June	4,952	1,997	4,898	3,151	3,941	5,746	1,458
September ..	5,103	2,014	4,903	3,168	4,001	5,774	1,443
December ..	5,169	2,025	4,910	3,239	4,041	5,853	1,448

(a) The index numbers given in the separate columns of the table cannot be compared with each other in order to show, for example, the relative cost of food and groceries and rent, since the cost in 1911 in each group or combination of groups is made equal to 1,000. (b) See footnote (b) on page 149.

(c) Index of nominal weekly wage rates for adult males divided by the "C" Series retail price index number. (d) Taken back from true base (November, 1914 = 1,000) by means of the Food and Rent (All Houses) Index.

CHAPTER VII.

MANUFACTURING INDUSTRY.

§ 1. General.

1. **Introduction.**—A complete statistical account of the growth of the manufacturing industry in Australia cannot be given owing to the fact that prior to 1906 the necessary statistics were not collected by the several States on a definite and uniform basis. A standard classification of manufacturing industries was formulated at a conference of Australian Statisticians in 1902 and adopted by all States in 1906. Figures on this basis were prepared for 1907 and subsequent years.

Prior to the federation of the Australian States in 1901, the manufacturing industry in Australia was primarily engaged in the production of goods for local use, mainly of *food commodities, furniture, bricks, clothing made from imported materials, printing, the repair rather than the manufacture of machinery, and the preliminary treatment of primary products, such as wool-scouring and sawmilling.*

After federation, steady expansion of the manufacturing industry resulted from the removal of interstate trade barriers and the operation of a uniform protective tariff. This expansion was quickened as a result of the demands created by the 1914-18 War, the curtailment of imports, and the rapid growth of spending power within the community. New and more advanced development took place, iron and steel works and many related and subsidiary industries were established, extensive manufacture of machinery was begun, and a wide range of high-grade products—textiles, metal manufactures, electrical goods, etc.—was added to the list of commodities made in Australia.

A check was made in this expansion by the world-wide economic depression of 1929-33, but in 1933 returning general prosperity and the opportunities opened to local manufacturers by import restrictions, together with depreciation of Australian currency, gave renewed stimulus to manufacturing enterprise. As economic conditions improved, the tariff, revenue duties and primage were reduced, but without materially prejudicing the progress of local manufactures.

When war broke out in September, 1939, Australia became a major source of supply for British countries east of Suez and in meeting these demands, as well as those arising locally because of interruption of oversea importations, existing manufacturing industries expanded, and new enterprises were developed rapidly for the production of all classes of munitions, aircraft, ships, many new kinds of machinery and metal manufactures, scientific equipment, textiles, chemicals, etc. The outbreak of war with Japan, the basing of Allied armed forces in Australia, and Australian responsibilities for supplies in the South-west Pacific Area, gave added impetus to these developments, and manufacturing in Australia outstripped all previous levels.

The cessation of war production and the transition of industry to a peace-time basis temporarily retarded progress, but from 1945-46 onward there was renewed expansion of the manufacturing industries to which an inflow of capital from overseas contributed.

2. **Decentralization of Manufacturing Industries.**—Following upon a report by the Secondary Industries Commission, the Commonwealth Government called a conference of *Commonwealth and State Ministers in August, 1945 to formulate a national policy for the decentralization of secondary industries.* It was agreed that the State Governments should seek to promote decentralization along the lines appropriate to each, providing necessary services, assistance and concessions to the full extent of State resources. The Commonwealth undertook to collaborate in all matters of Commonwealth industrial policy

affecting the development and location of industry, to investigate in association with the States the prospects of developing secondary industries in selected areas, to advise the States of developments desirable for defence purposes, and to provide financial assistance for projects of national importance where the cost would be great relative to the State's resources.

The Commonwealth has assisted decentralization by allocating to private industry munitions and other defence buildings in decentralized areas and accommodating migrants in provincial centres with prospects of development. Oversea firms contemplating establishment in Australia are encouraged to select locations in rural areas or the less industrialized States.

3. Commonwealth Division of Industrial Development.—The functions of the Division of Industrial Development include the encouragement of industrial development, the exercising of Commonwealth responsibilities for the decentralization of industry, the promotion of industrial efficiency (especially the study of technical, production and managerial problems and the dissemination and application of new knowledge and methods), the encouragement of the development of technological institutes and the publication of studies of the structure and operation of Australian manufacturing industries. The Division was attached to the Ministry of National Development when formed in March, 1950 to plan the development of national resources and to promote decentralization and regional development in conjunction with the States, but was transferred to the Department of Trade in January, 1956.

4. Customs and Excise Tariffs and Bounties on Manufactures.—Particulars of Australian customs and excise tariffs, and the constitution and functions of the Australian Tariff Board in relation to matters affecting the industrial development of Australia, are given in Chapter X.—Trade.

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards.

5. Scientific Research and Standardization—(i) *The Commonwealth Scientific and Industrial Research Organization.* The function of this Organization, reference to which also appears in Chapter XXX., is to initiate and conduct research in connexion with industries in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardization of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.

(ii) *The Standards Association of Australia.* This Association, which is referred to also in Chapter XXX., acts as the national standardizing organization of Australia and issues standard specifications for materials and codes of practice. Specifications and codes are prepared and revised periodically in accordance with the needs of industry, and standards are evolved and accepted by general consent.

(iii) *The National Association of Testing Authorities.* The National Association of Testing Authorities organizes national testing facilities throughout Australia to serve private and governmental needs. Laboratories may register voluntarily in respect of tests within their competence and the Association ensures the maintenance of their standards of testing. It is expected that there will be general acceptance of certificates of tests issued in the name of the Association by the registered laboratories.

6. Definitions in Factory Statistics.—The statistics relating to factories have been compiled from tabulations made by the several State Statisticians from returns supplied to them annually by manufacturers in accordance with the Statistical Acts of the States. A return must be supplied in respect of every factory, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries) but does not cover smallgoods makers, laundries, farriers, photography studios, florists and seedsmen, or most abattoirs. It should be noted that details relating to small establishments not classified for statistical purposes as factories are not included in the figures contained in this chapter.

If a manufacturing business is conducted in conjunction with any other activity, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry if practicable.

Manufacturers are requested to state in their returns particulars as to the number, age, wages, etc., of their employees, the value of premises and equipment, the horse-power of machinery, the value, and in most cases the quantities, of raw materials and fuel used, and quantities and values of principal materials and articles produced. The returns obtained from manufacturers are not intended to show a complete record of the income or expenditure of factories nor to show the profits or losses of factories collectively or individually.

The *average number of persons* employed is quoted on two different bases: the average during the period of operation and the average over the whole year. Of these the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). This average is used only in respect of details relating to classification according to the number of persons employed. The latter, which is used in all other instances, is calculated by reducing the average number working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

Working proprietors are included in all employment figures other than those relating to monthly employment and age dissections, but salaries and wages paid in all cases exclude drawings by working proprietors.

The *value of factory output* is the value of the goods manufactured or their value after passing through the particular process of manufacture and includes the amount received for repair work, work done on commission and receipts for other factory work. The basis of valuation of the output is the selling value of the goods at the factory, exclusive of all delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer of the finished article.

The *value of production* is the value added to raw materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the materials used, containers and packing, power, fuel and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges).

In the process of manufacture, many goods are treated in several industries, the output of one becoming the raw materials of another, so that such commodities are counted more than once in the aggregate value of output and of raw materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become raw materials in establishments concerned in the production of metal goods, and timber from the saw-mills used in furniture factories and in joinery. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason, the value of production, and not the value of the output, is used as a measure of activity in the manufacturing industries as a whole.

In the special case of Government factories and workshops, the value of output is, in most cases, estimated by adding 10 per cent. to the value of materials and fuel used and other factory costs, including salaries and wages paid.

7. **Classification of Factories.**—In the compilation of statistical data relating to factories in Australia, a standard classification of manufacturing industries, formulated at a conference of Australian Statisticians in 1902 and revised from time to time, was used until the year 1929–30. A new classification was introduced in 1930–31, and this in turn was revised and extended (principally in regard to the placement and composition of sub-classes) in accordance with decisions of the Statisticians' Conference, 1945.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or total factory activity. Particulars of certain of the sub-classes shown below are published in the latter portion of this chapter and full details for all sub-classes may be found in the Bulletin *Secondary Industries*, published annually.

The principal classes and sub-classes in the current classification of factories are as follows:—

CLASSIFICATION OF FACTORIES.

CLASS I.—TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS.

Coke Works.
Briquetting and Pulverized Coal.
Carbide.
Lime, Plaster of Paris, Asphalt.
Fibrous Plaster and Products.
Marble, Slate, etc.
Cement.
Asbestos Cement Sheets, etc.
Other Cement Goods.
Other.

CLASS II.—BRICKS, POTTERY, GLASS, ETC.

Bricks and Tiles, Fire Bricks and Fire-clay Goods.
Earthenware, China, Porcelain, Terra-cotta.
Glass (other than Bottles).
Glass Bottles.
Other.

CLASS III.—CHEMICALS, DYES, EXPLOSIVES, PAINTS, OILS, GREASE.

Industrial and Heavy Chemicals and Acids.
Pharmaceutical and Toilet Preparations.
Explosives.
White Lead, Paints, Varnish.
Oils, Vegetable.
Oils, Mineral.
Oils, Animal.
Boiling Down, Tallow Refining.
Soap and Candles.
Chemical Fertilizers.
Inks, Polishes, etc.
Matches.
Other.

CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES.

Smelting, Converting, Refining and Rolling of Iron and Steel.
Foundries—Ferrous.
Plant, Equipment and Machinery.
Other Engineering
Extracting and Refining of other Metals, Alloys.
Electrical Machinery, Cables and Apparatus.
Construction and Repair of Vehicles (10 groups).
Ship and Boat Building and Repairing, Marine Engineering.
Cutlery and Small Hand Tools.
Agricultural Machines and Implements.
Non-Ferrous Metals—
Rolling and Extrusion.
Founding, Casting, etc.
Iron and Steel Sheets.
Sheet Metal Working, Pressing, and Stamping.
Pipes, Tubes and Fittings—Ferrous.
Wire and Wire Netting (including Nails).
Stoves, Ovens and Ranges.
Gas Fittings and Meters.
Lead Mills.

CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES—*continued*.

Sewing Machines.
Arms, Ammunition (excluding Explosives).
Wireless and Amplifying Apparatus.
Other Metal Works.

CLASS V.—PRECIOUS METALS, JEWELLERY, PLATE.

Jewellery.
Watches and Clocks (including Repairs).
Electroplating (Gold, Silver, Chromium).

CLASS VI.—TEXTILES AND TEXTILE GOODS (NOT DRESS).

Cotton Ginning.
Cotton Spinning and Weaving.
Wool—Carding, Spinning, Weaving.
Hosiery and other Knitted Goods.
Silk, Natural.
Rayon, Nylon and other Synthetic Fibres.
Flax Mills.
Rope and Cordage.
Canvas Goods, Tents, Tarpaulins, etc.
Bags and Sacks.
Other.

CLASS VII.—SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR).

Furriers and Fur Dressing.
Woolscouring and Fellmongery.
Tanning, Currying, and Leather Dressing.
Saddlery, Harness, Whips.
Machine Belting.
Bags, Trunks, etc.

CLASS VIII.—CLOTHING (EXCEPT KNITTED).

Tailoring and Ready-made Clothing
Waterproof and Oilskin Clothing.
Dressmaking.
Millinery.
Shirts, Collars, Underclothing.
Foundation Garments.
Handkerchiefs, Ties, Scarves.
Hats and Caps.
Gloves.
Boots and Shoes (not rubber).
Boot and Shoe Repairing.
Boot and Shoe Accessories.
Umbrellas and Walking Sticks.
Dyeworks and Cleaning.
Other.

CLASS IX.—FOOD, DRINK AND TOBACCO.

Flour Milling.
Cereal Foods and Starch.
Animal and Bird Foods.
Chaffcutting and Corn Crushing.
Bakeries (including Cakes and Pastry).
Biscuits.
Sugar Mills.

CLASS IX.—FOOD, DRINK AND TOBACCO—
continued.

Sugar Refining.
Sugar Confectionery (including Chocolate).
Jam, Fruit and Vegetable Canning.
Pickles, Sauces, Vinegar.
Bacon Curing.
Butter Factories.
Cheese Factories.
Condensed and Dried Milk Factories.
Margarine.
Meat and Fish Preserving.
Condiments, Coffee, Spices, etc.
Ice and Refrigerating.
Salt Refining.
Aerated Waters, Cordials, etc.
Breweries.
Distilleries.
Wine Making.
Cider and Perry Making.
Malting.
Bottling.
Tobacco, Cigars, Cigarettes, Snuff.
Dehydrated Fruit and Vegetables.
Ice-cream.
Sausage Casings.
Arrowroot.
Other.

CLASS X.—SAWMILLS, JOINERY, BOXES, ETC.,
WOOD TURNING AND CARVING.

Sawmills.
Plywood and Veneer Mills.
Bark Mills.
Joinery.
Cooperage.
Boxes and Cases.
Basketware and Wickerware (including Sea-grass and Bamboo Furniture).
Perambulators.
Wall and Ceiling Boards (not Plaster or Cement).
Other.

CLASS XI.—FURNITURE OF WOOD, BEDDING, ETC.
Billiard Tables, Cabinet and Furniture Making and Upholstery.
Bedding and Mattresses (not Wire).
Furnishing Drapery, etc.

CLASS XI.—FURNITURE OF WOOD, BEDDING, ETC.—
continued.

Picture Frames.
Blinds.

CLASS XII.—PAPER, STATIONERY, PRINTING,
BOOKBINDING, ETC.

Newspapers and Periodicals.
Printing—
Government.
General, including Bookbinding.
Manufactured Stationery.
Stereotyping and Electrotyping.
Process and Photo Engraving.
Cardboard Boxes, Cartons and Containers.
Paper Bags
Paper Making.
Pencils, Penholders, Chalks, Crayons.

CLASS XIII.—RUBBER.

Rubber Goods and Tyres Made.
Tyre Retreading and Repairing.

CLASS XIV.—MUSICAL INSTRUMENTS.

Gramophones and Gramophone Records.
Pianos, Piano-Players, Organs.
Other.

CLASS XV.—MISCELLANEOUS PRODUCTS.

Linoleum, Leather Cloth, Oil Cloth, etc.
Bone, Horn, Ivory and Shell.
Plastic Moulding and Products.
Brooms and Brushes.
Optical Instruments and Appliances.
Surgical and other Scientific Instruments and Appliances.
Photographic Materials, including Developing and Printing.
Toys, Games and Sports Requisites.
Artificial Flowers.
Other.

CLASS XVI.—HEAT, LIGHT, AND POWER.

Electric Light and Power.
Gas Works.

8. Factory Development since 1901—Australia.—The development of the manufacturing industries in Australia at intervals since 1901 is summarized in the following table:—

FACTORIES: AUSTRALIA.

Year.	Factories.	Employment.(a)	Salaries and Wages Paid.(b)	Value of—				
				Materials and Fuel Used.	Output.	Production. (c)	Land and Buildings.	Plant and Machinery.
	No.	'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1901	11,143	198	(d)	(d)	(d)	(d)	(d)	(d)
1911	14,455	312	27,528	81,763	133,022	51,259	32,701	31,516
1920-21 ..	17,113	367	62,932	213,559	323,993	110,434	60,831	68,655
1930-31 ..	21,751	339	62,455	172,489	290,799	118,310	112,211	124,498
1938-39 ..	26,941	565	106,743	297,003	500,420	203,417	130,920	143,662
1940-41 ..	27,300	650	137,919	386,881	644,795	257,914	144,094	161,356
1949-50 ..	41,596	917	385,797	983,924	1,645,456	661,532	259,549	285,602
1950-51 ..	43,147	969	491,718	1,306,963	2,150,835	843,872	302,785	336,615
1951-52 ..	45,844	978	611,789	1,609,839	2,634,706	1,024,867	359,490	410,144
1952-53 ..	47,740	933	635,245	1,637,142	2,720,004	1,082,862	414,446	493,534
1953-54 ..	49,576	990	705,137	1,868,431	3,095,476	1,227,045	483,431	580,715
1954-55 ..	51,056	1,031	781,640	2,069,080	3,434,589	1,365,509	555,996	698,292

(a) 1901 and 1911—average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (b) Excludes drawings by working proprietors. (c) Value of output less value of materials and fuel, etc., used. (d) Not available.

§ 2. Number of Factories.

1. Number of Factories in each State.—The following table shows the number of factories operating in each State in the years 1938-39 and 1949-50 to 1954-55:—

FACTORIES: NUMBER.

Year.	N.S.W	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39	9,464	9,250	3,087	2,067	2,129	944	26,941
1949-50	16,346	13,231	4,494	3,046	3,023	1,456	41,596
1950-51	17,129	13,504	4,776	3,141	3,111	1,486	43,147
1951-52	18,144	14,758	4,918	3,245	3,267	1,512	45,844
1952-53	19,251	15,154	5,068	3,339	3,424	1,504	47,740
1953-54	20,199	15,533	5,199	3,577	3,523	1,545	49,576
1954-55	20,837	15,861	5,284	3,750	3,727	1,597	51,056

2. Number of Factories in Industrial Classes.—(i) *Australia*. The next table shows the number of factories in Australia during 1938-39 and 1950-51 to 1954-55 classified in the industrial classes agreed upon by the Conference of Statisticians in 1930. This classification, which was introduced during 1930-31, superseded the grouping which had been in use since 1902. Details of some of the principal industries included in the table will be found in § 11, page 237.

FACTORIES: NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
I. Treatment of Non-metalliferous Mine and Quarry Products	564	1,235	1,316	1,276	1,280	1,303
II. Bricks, Pottery, Glass, etc.	471	583	601	623	639	662
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	666	1,020	1,049	1,090	1,099	1,124
IV. Industrial Metals, Machines, Conveyances	7,255	13,106	14,513	15,672	16,868	17,842
V. Precious Metals, Jewellery, Plate	290	629	662	681	720	746
VI. Textiles and Textile Goods (not Dress)	611	1,190	1,246	1,270	1,336	1,356
VII. Skins and Leather (not Clothing or Footwear)	533	761	785	778	783	810
VIII. Clothing (except Knitted)	4,314	6,684	6,989	7,036	7,260	7,370
IX. Food, Drink and Tobacco	5,202	6,865	7,033	7,248	7,379	7,433
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	2,822	5,165	5,546	5,790	5,769	5,845
XI. Furniture of Wood, Bedding, etc.	1,149	1,936	2,052	2,157	2,180	2,200
XII. Paper, Stationery, Printing, Book-binding, etc.	1,816	2,010	2,084	2,121	2,179	2,224
XIII. Rubber	299	411	430	446	465	495
XIV. Musical Instruments	34	66	68	69	75	79
XV. Miscellaneous Products	413	1,032	1,039	1,035	1,095	1,119
<i>Total, Classes I. to XV.</i>	<i>26,439</i>	<i>42,693</i>	<i>45,413</i>	<i>47,292</i>	<i>49,127</i>	<i>50,608</i>
XVI. Heat, Light and Power	502	454	431	448	449	448
Grand Total	26,941	43,147	45,844	47,740	49,576	51,056

Although not the best index of manufacturing activity, the number of factories affords some indication of the development of secondary industries. Except for the two war years 1941-42 and 1942-43, when there were decreases, the number of factories increased each year from 1931-32 to 1954-55; in the latter year the number of factories in Australia reached the record total of 51,056 or nearly 90 per cent. more than in 1938-39.

(ii) *States, 1954-55.* The following table shows the number of factories in each State classified according to the nature of the industry:—

FACTORIES: NUMBER IN INDUSTRIAL CLASSES, 1954-55.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	434	438	93	164	119	55	1,303
II. Bricks, Pottery, Glass, etc. ..	328	150	54	61	51	18	662
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	554	343	68	76	59	24	1,124
IV. Industrial Metals, Machines, Conveyances ..	7,384	5,365	1,827	1,439	1,381	446	17,842
V. Precious Metals, Jewellery, Plate ..	334	245	40	54	67	6	746
VI. Textiles and Textile Goods (not Dress) ..	482	741	30	47	43	13	1,356
VII. Skins and Leather (not Clothing or Footwear) ..	368	303	57	41	33	8	810
VIII. Clothing (except Knitted) ..	3,396	2,586	534	372	410	72	7,370
IX. Food, Drink and Tobacco ..	2,700	2,053	1,045	723	604	308	7,433
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	2,280	1,428	837	326	487	487	5,845
XI. Furniture of Wood, Bedding, etc. ..	780	697	309	159	171	84	2,200
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	937	809	190	139	116	33	2,224
XIII. Rubber ..	183	143	68	52	31	18	495
XIV. Musical Instruments ..	35	27	5	6	6	..	79
XV. Miscellaneous Products ..	518	438	52	46	51	14	1,119
Total Classes I. to XV. ..	20,713	15,766	5,209	3,705	3,629	1,586	50,608
XVI. Heat, Light and Power ..	124	95	75	45	98	11	448
Grand Total ..	20,837	15,861	5,284	3,750	3,727	1,597	51,056

§ 3. Classification of Factories according to Number of Persons Employed.

1. *General.*—The size classification of factories is based on the average weekly number of persons employed during the period of operation (including working proprietors). Prior to 1945-46 there was no dissection of the "over 100 employees" group, but for that and subsequent years this group was subdivided into the seven size groups shown in the table below.

2. *States, 1954-55.*—The following table shows, for each State, the number of factories classified according to the average number of persons employed:—

FACTORIES: CLASSIFICATION ACCORDING TO SIZE OF FACTORY, 1954-55.

Size of Factory (Persons employed).	N.S.W.	Victoria.	Q'land	S. Aust.	W. Aust.	Tasmania.	Aust.
NUMBER OF FACTORIES.							
Under 4	8,170	5,672	1,785	1,235	1,715	665	19,242
4	1,770	1,250	496	371	173	154	4,214
5 to 10	5,017	3,826	1,491	973	917	420	12,644
11 to 20	2,714	2,206	671	540	431	173	6,735
21 to 50	1,865	1,717	497	368	314	115	4,876
51 to 100	670	600	169	138	110	40	1,727
101 to 200	347	322	91	63	41	14	878
201 to 300	92	107	48	22	17	4	290
301 to 400	59	50	13	15	2	5	144
401 to 500	22	34	8	6	3	1	74
501 to 750	47	44	4	7	3	2	107
751 to 1,000	25	14	7	4	..	1	51
Over 1,000	39	19	4	8	1	3	74
Total	20,837	15,861	5,284	3,750	3,727	1,597	51,056

The relative importance of large and small factories is illustrated by a classification of the average number of persons employed according to the size of factory in which they work:—

FACTORIES : CLASSIFICATION OF PERSONS EMPLOYED ACCORDING TO SIZE OF FACTORY, 1954-55.

Size of Factory (Persons employed).	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
AVERAGE NUMBER EMPLOYED DURING PERIOD WORKED.							
Under 4	15,560	11,070	3,713	2,590	3,593	1,353	37,879
4	7,080	5 000	1,984	1,484	692	616	16,856
5 to 10	34,938	26,885	10,370	6,820	6,143	2,884	88,040
11 to 20	39,906	32,151	9,889	7,801	6,119	2,592	98,458
21 to 50	58,753	53,410	15,174	11,866	9,956	3,624	152,783
51 to 100	46,917	41,620	11,808	9,646	7,664	2,819	120,474
101 to 200	48,296	44,825	13,123	8,736	5,525	1,943	122,448
201 to 300	22,133	25,807	11,671	5,380	4,191	977	70,159
301 to 400	20,860	17,166	4,486	5,146	665	1,678	50,001
401 to 500	9,828	15,129	3,591	2,678	1,214	425	32,865
501 to 750	28,440	26,575	2,387	4,073	1,930	1,328	64,733
751 to 1,000	21,675	12,156	6,006	3,603	..	939	44,379
Over 1,000	68,740	36,474	6,763	20,139	2,745	4,861	139,722
Total	423,126	348,268	100,965	89,962	50,437	26,039	1,038,797
Average per Factory ..	20.31	21.96	19.11	23.99	13.53	16.30	20.35

3. Australia, 1938-39 and 1949-50 to 1954-55.—In the following table, factories in Australia are classified according to the number of persons employed in conformity with the practice prior to 1945-46.

FACTORIES : CLASSIFICATION ACCORDING TO NUMBER OF PERSONS EMPLOYED, AUSTRALIA.

Year.	Establishments Employing on the Average—							
	20 and under.		21 to 100.		101 and upwards.		Total.	
	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.
1938-39—								
Number	21,982	129,505	4,013	170,971	946	272,022	26,941	572,498
Average per establishment .. ..	..	5.89	..	42.60	..	287.55	..	21.25
1949-50—								
Number	33,673	207,600	6,442	266,027	1,481	455,187	41,596	928,814
Average per establishment .. ..	..	6.17	..	41.37	..	307.16	..	22.33
1950-51—								
Number	34,885	214,044	6,665	274,621	1,597	488,245	43,147	976,910
Average per establishment .. ..	..	6.14	..	41.20	..	305.84	..	22.65
1951-52—								
Number	37,634	224,763	6,635	271,611	1,575	489,579	45,844	985,953
Average per establishment .. ..	..	5.97	..	40.94	..	310.84	..	21.51
1952-53—								
Number	40,066	230,549	6,234	257,099	1,440	453,657	47,740	941,305
Average per establishment .. ..	..	5.75	..	41.24	..	315.04	..	19.72
1953-54—								
Number	41,631.	236,727	6,403	265,830	1,542	494,564	49,576	997,121
Average per establishment .. ..	..	5.69	..	41.52	..	320.73	..	20.11
1954-55—								
Number	42,835	241,233	6,603	273,257	1,618	524,307	51,056	1,038,797
Average per establishment .. ..	..	5.63	..	41.38	..	324.00	..	20.35

§ 4. Power Equipment in Factories.

1. **General.**—Since 1936-37, statistics of power equipment in factories relate to the "rated horse-power" of engines ordinarily in use and engines in reserve or idle, omitting obsolete engines. In addition, particulars of the power equipment of Central Electric Stations are collected in greater detail. To avoid duplication, it is essential that some distinction should be made between Central Electric Stations and other classes of industries. In the following tables, Central Electric Stations have been treated separately from other factories.

In para. 2 below, 431 factories are shown in 1954-55 as using no power other than manual, the distribution of these factories among the various industries being as follows:—Fibrous Plaster and Products, 23; Galvanized Ironworking, Tinsmithing, 18; Tailoring and Ready-made Clothing, 112; Dressmaking, 14; Millinery, 7; Bakeries, 38; Cabinet and Furniture Making, 7; all other industries, 212.

2. **Rated Horse-power of Engines in Factories other than Central Electric Stations.**—The following table shows the number of factories using power-driven machinery, those using manual labour only, and the total rated horse-power of engines and electric motors ordinarily in use and in reserve or idle during 1954-55:—

FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1954-55.

State.	Number of Establishments.(a)			Rated Horse-power of Engines and Motors.(a)	
	Using Power.	Others.	Total.	Ordinarily in Use.(b)	In Reserve or Idle (omitting obsolete).
New South Wales ..	20,732	20	20,752	1,696,646	302,043
Victoria ..	15,752	47	15,799	1,165,011	164,280
Queensland ..	5,071	154	5,225	443,365	59,398
South Australia ..	3,639	69	3,708	311,534	41,237
Western Australia ..	3,518	115	3,633	204,848	32,138
Tasmania ..	1,562	26	1,588	210,606	32,538
Australia ..	50,274	431	50,705	4,032,010	631,634

(a) Includes Gas Works but excludes Central Electric Stations. (b) Excludes motors driven by electricity generated in factories not classified as Central Electric Stations.

3. **Rated Horse-power of Engines and Electric Motors Ordinarily in Use.**—(i) *According to Type, States.* Particulars of the types and the total rated horse-power of engines, etc., ordinarily in use in each State are given below:—

FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, 1954-55.

State.	Steam.		Internal Combustion.			Water.	Motors driven by Electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
N.S.W. ..	87,630	93,745	476	41,512	34,621	202	1,438,460	68,589	1,696,646
Victoria ..	23,983	49,397	2,084	24,849	17,985	1,241	1,045,472	46,739	1,165,011
Queensland ..	92,795	38,340	3,061	12,021	16,516	..	280,632	80,695	443,365
S. Australia ..	7,910	10,056	286	5,587	11,466	10	276,219	24,124	311,534
W. Australia ..	11,010	10,613	1,499	10,712	12,068	..	158,946	6,470	204,848
Tasmania ..	1,864	11	1	9,273	809	242	198,406	8	210,606
Australia ..	225,192	202,162	7,407	103,954	93,465	1,695	3,398,135	226,625	4,032,010

(a) Includes Gas Works but excludes Central Electric Stations. (b) Excludes particulars in column (c).

(ii) *According to Type, Australia.* In the following table, details of the total rated horse-power of the various types of engines in use are given for Australia for the years 1938-39, and 1949-50 to 1954-55.

FACTORIES(a): TYPES AND TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, AUSTRALIA.

Year.	Steam.		Internal Combustion.			Water.	Motors driven by Electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
1938-39 ..	268,409	84,149	32,916	17,971	55,799	1,616	1,017,912	179,890	1,478,772
1949-50 ..	232,047	135,217	15,035	67,986	92,151	1,703	2,421,174	186,566	2,965,313
1950-51 ..	230,664	140,145	15,879	91,415	135,260	1,882	2,635,713	181,788	3,250,958
1951-52 ..	232,512	149,435	13,684	122,704	160,142	1,826	2,764,321	205,729	3,444,624
1952-53 ..	232,570	171,824	10,268	109,172	150,342	1,666	2,913,521	214,617	3,589,363
1953-54 ..	237,533	170,914	8,457	109,919	109,293	1,771	3,135,395	255,917	3,773,282
1954-55 ..	225,192	202,162	7,407	103,954	93,465	1,695	3,398,135	226,625	4,032,010

(a) Includes Gas Works but excludes Central Electric Stations. (b) Excludes particulars in column (c).

(iii) *In Classes of Industry, 1954-55.* The next table shows the total rated horse-power of engines and electric motors ordinarily in use in the various classes of industry in each State.

FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE(b), 1954-55.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metallic ferous Mine and Quarry Products	80,446	45,001	16,154	18,996	11,562	13,970	186,129
II. Bricks, Pottery, Glass, etc. ..	46,682	31,163	7,778	8,308	10,265	1,865	106,061
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	104,010	108,301	8,867	16,471	34,619	3,767	276,035
IV. Industrial Metals, Machines, Conveyances	828,050	343,524	92,004	140,734	48,913	46,801	1,500,026
V. Precious Metals, Jewellery, Plate	4,629	6,216	360	1,115	623	48	12,991
VI. Textile and Textile Goods (not Dress)	54,041	92,349	5,766	7,755	2,490	5,512	167,913
VII. Skins and Leather (not Cloth- ing or Footwear)	18,954	20,501	5,617	5,315	2,557	504	53,448
VIII. Clothing (except Knitted) ..	23,254	28,895	4,662	3,079	2,257	895	63,042
IX. Food, Drink and Tobacco ..	201,546	185,322	185,453	51,698	36,642	18,474	679,135
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	171,819	119,200	89,474	30,647	43,243	37,261	491,644
XI. Furniture of Wood, Bedding, etc.	17,907	17,874	7,982	6,424	4,283	1,765	56,235
XII. Paper, Stationery, Printing, Bookbinding, etc.	56,450	88,982	8,574	14,003	4,992	78,897	251,898
XIII. Rubber	46,774	46,926	7,816	3,002	632	324	105,474
XIV. Musical Instruments	2,424	514	45	13	7	..	3,003
XV. Miscellaneous Products	20,874	21,405	538	1,840	518	412	45,587
<i>Total, Classes I. to XV. ..</i>	<i>1,677,860</i>	<i>1,156,173</i>	<i>441,090</i>	<i>309,400</i>	<i>203,603</i>	<i>210,495</i>	<i>3,998,621</i>
XVI. Gas Works	18,786	8,838	2,275	2,134	1,245	111	33,389
Grand Total	1,696,646	1,165,011	443,365	311,534	204,848	210,606	4,032,010

(a) Excludes Central Electric Stations. (b) Excludes motors driven by electricity generated in factories not classified as Central Electric Stations.

4. Capacity of Engines and Generators installed in Central Electric Stations.—(i) *According to Type, Australia.* Particulars of the type and the capacity of engines and generators installed in Central Electric Stations in Australia in 1954–55 are given in the following table:—

CENTRAL ELECTRIC STATIONS: POWER EQUIPMENT, AUSTRALIA, 1954-55.

Particulars.	Capacity of Engines and Generators.						Total.
	Steam.		Internal Combustion.			Water.	
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		
Engines installed . . Rated H.P.	7,226	4,255,372	14,524	11,383	347,235	793,738	5,429,478
Generators installed—							
Kilowatt capacity—							
Total installed . . . K.W.	5,085	3,126,212	10,188	8,092	231,756	572,505	3,953,838
Effective capacity . . . "	4,725	2,874,229	8,188	6,007	212,526	566,375	3,672,050
Horse-power equivalent—							
Total installed . . . H.P.	6,816	4,190,625	13,657	10,847	310,664	767,432	5,300,041
Effective capacity . . . "	6,333	3,852,846	10,976	8,052	284,887	759,214	4,922,308

NOTE.—The number of establishments classified as Central Electric Stations in 1954–55 was 351.

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1954–55 are given in the next table.

CENTRAL ELECTRIC STATIONS: NUMBER AND POWER EQUIPMENT, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Central Electric Stations No.	85	62	59	42	94	9	351
Engines installed . . Rated H.P.	2,231,954	1,319,327	576,500	(a)	323,119	(a)	5,429,478
Generators installed—							
Kilowatt capacity—							
Total installed . . . K.W.	1,635,751	944,028	428,720	(a)	232,407	(a)	3,953,838
Effective capacity . . . "	1,502,150	921,954	328,479	(a)	220,616	(a)	3,672,050
Horse-power equivalent—							
Total installed . . . H.P.	2,192,692	1,265,450	574,691	(a)	311,537	(a)	5,300,041
Effective capacity . . . "	2,013,602	1,235,860	440,320	(a)	295,731	(a)	4,922,308

(a) Not available for publication.

§ 5. Employment in Factories.

1. Number Employed.—(i) *General.* All persons employed in the manufacturing activities of a factory, including proprietors who work in their own business and "out-workers" (see para. 4 (ii), page 215), are counted as factory employees, while those employed in selling and distributing, such as salesmen, travellers, collectors, carters employed solely on outward delivery of manufactured goods and retailing storemen, are excluded. Prior to 1945–46, the occupational grouping collected was (i) working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) enginedrivers and firemen; (v) workers in factory, skilled and unskilled; (vi) carters and messengers; and (vii) persons working regularly at home for the establishment. This grouping did not record separate details for technical staff (e.g., chemists, draftsmen, etc.) and supervisory staff and in 1945–46 the set-up on the collection form was amended to obtain the following groupings:—(i) Working proprietors; (ii) managerial and clerical staff including salaried managers and working directors; (iii) chemists, draftsmen and other laboratory and research staff; (iv) foremen and overseers; (v) skilled and unskilled workers; (vi) carters (excluding delivery only), messengers and persons working regularly at home.

Prior to the year 1928-29, average employment in factories was computed by dividing the sum of the number employed each week by the number of weeks worked. The figures therefore represented the average number employed over the period worked, which, for many factories, was less than a full year. Commencing with the year 1928-29, the figures represent the equivalent average number employed over a full year of fifty-two weeks. The classification of factories according to the number of persons employed (see § 3, page 207), however, is still based on the old method, but for all other purposes the average number engaged over the full year is used.

(ii) *Australia.* Particulars of the numbers employed, the increase in employment and the rate per cent. of such increase are given for years 1938-39 and 1949-50 to 1954-55 in the following table :—

FACTORIES : EMPLOYMENT, AUSTRALIA.

Year.	Males.			Females.			Persons.		
	Number Employed.	Increase on Preceding Year.		Number Employed.	Increase on Preceding Year.		Number Employed.	Increase on Preceding Year.	
		Number	Per Cent.		Number	Per Cent.		Number	Per Cent.
1938-39 ..	412,591	3,989	0.98	152,515	1,957	1.30	565,106	5,946	1.06
1949-50 ..	689,347	19,386	2.90	228,152	7,996	3.63	917,499	27,382	3.08
1950-51 ..	726,051	36,704	5.33	242,867	14,715	6.45	968,918	51,419	5.60
1951-52 ..	741,971	15,920	2.19	235,546	-7,321	-3.02	977,517	8,599	0.89
1952-53 ..	723,404	-18,567	-2.50	209,857	-25,689	-10.91	933,261	-44,256	-4.53
1953-54 ..	758,508	35,104	4.85	231,034	21,177	10.09	989,542	56,281	6.03
1954-55 ..	788,691	30,183	3.98	242,391	11,357	4.92	1,031,082	41,540	4.20

NOTE.—Minus sign (—) indicates decrease.

(iii) *States.* The following table shows, for the same years, (a) the average number of persons employed in manufacturing industries in each State ; (b) for each State, the percentage of the total number employed in factories in Australia ; and (c) the number so employed per ten thousand of mean population in each State and Australia.

FACTORIES : EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
AVERAGE NUMBER EMPLOYED DURING FULL YEAR (52 WEEKS).							
1938-39 ..	228,781	201,831	54,110	43,371	23,211	13,802	565,106
1949-50 ..	382,385	303,476	88,963	78,436	40,733	23,506	917,499
1950-51 ..	406,965	316,792	94,579	82,994	43,761	23,827	968,918
1951-52 ..	405,994	324,143	94,349	83,907	45,097	24,027	977,517
1952-53 ..	380,213	310,759	93,123	80,483	45,188	23,495	933,261
1953-54 ..	402,595	331,277	98,119	85,503	47,459	24,589	989,542
1954-55 ..	419,810	346,648	100,293	89,565	49,314	25,452	1,031,082

PERCENTAGE OF AUSTRALIAN TOTAL.

1938-39 ..	40.48	35.72	9.58	7.67	4.11	2.44	100.00
1949-50 ..	41.68	33.07	9.70	8.55	4.44	2.56	100.00
1950-51 ..	42.00	32.69	9.76	8.57	4.52	2.46	100.00
1951-52 ..	41.53	33.16	9.65	8.58	4.62	2.46	100.00
1952-53 ..	40.74	33.30	9.98	8.62	4.84	2.52	100.00
1953-54 ..	40.68	33.48	9.92	8.64	4.80	2.48	100.00
1954-55 ..	40.71	33.62	9.73	8.69	4.78	2.47	100.00

FACTORIES : EMPLOYMENT—*continued.*

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
PER 10,000 OF POPULATION.							
1938-39 ..	836	1,078	537	729	497	581	815
1949-50 ..	1,206	1,398	765	1,129	746	847	1,140
1950-51 ..	1,243	1,416	793	1,167	766	829	1,166
1951-52 ..	1,208	1,409	773	1,150	763	801	1,145
1952-53 ..	1,112	1,315	746	1,074	737	761	1,067
1953-54 ..	1,182	1,367	754	1,088	753	795	1,112
1954-55 ..	1,213	1,393	757	1,109	746	813	1,134

2. Rates of Increase, 1938-39 and 1949-50 to 1954-55—The percentage increase on the average number of persons employed in the preceding year is shown below for each State :—

FACTORIES : ANNUAL PERCENTAGE INCREASE OF PERSONS EMPLOYED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	1.74	0.02	3.82	-1.62	0.34	4.80	1.06
1949-50 ..	1.06	3.93	7.26	3.44	6.20	4.00	3.08
1950-51 ..	6.43	4.39	6.31	5.81	7.43	1.37	5.60
1951-52 ..	-0.24	2.32	-0.24	1.10	2.99	0.84	0.89
1952-53 ..	-6.35	-4.13	-1.30	-4.08	0.20	-2.21	-4.53
1953-54 ..	5.89	6.60	5.36	6.24	5.03	4.66	6.03
1954-55 ..	4.28	4.64	2.22	4.75	3.91	3.51	4.20

NOTE.—Minus sign (-) indicates decrease.

3. Persons Employed in Classes of Industry.—(i) *Australia.* The following table shows the average number of persons employed in factories in each industrial class in Australia for the years 1938-39 and 1950-51 to 1954-55 :—

FACTORIES : PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
I. Treatment of Non-metalliferous Mine and Quarry Products	10,343	18,436	19,365	18,752	18,748	20,560
II. Bricks, Pottery, Glass, etc.	15,709	20,449	20,912	19,571	21,708	22,549
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	19,816	36,323	38,248	36,139	37,988	41,324
IV. Industrial Metals, Machines, Conveyances	177,677	373,798	389,252	376,398	397,713	422,124
V. Precious Metals, Jewellery, Plate	3,726	6,344	5,953	5,398	5,970	6,029
VI. Textiles and Textile Goods (not Dress)	46,082	68,280	63,548	60,087	69,482	69,046
VII. Skins and Leather (not Clothing or Footwear)	10,767	15,801	14,324	14,126	14,676	14,502
VIII. Clothing (except Knitted)	86,092	122,464	116,705	105,681	112,520	112,802
IX. Food, Drink and Tobacco	83,846	124,350	122,734	120,668	123,073	125,934
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	30,739	56,300	59,664	56,984	58,932	61,153
XI. Furniture of Wood, Bedding, etc. ..	15,287	22,818	22,156	20,353	20,975	21,342
XII. Paper, Stationery, Printing, Book-binding, etc.	39,913	55,328	56,455	53,219	56,119	59,777
XIII. Rubber	7,502	13,526	14,021	12,288	14,962	16,325
XIV. Musical Instruments	451	1,614	1,581	1,267	1,575	1,623
XV. Miscellaneous Products	7,727	19,401	18,176	17,240	19,565	19,962
<i>Total, Classes I. to XV.</i>	<i>555,577</i>	<i>955,232</i>	<i>963,094</i>	<i>918,171</i>	<i>974,006</i>	<i>1,015,052</i>
XVI. Heat, Light and Power	9,429	13,686	14,423	15,090	15,536	16,030
Grand Total	565,106	968,918	977,517	933,261	989,542	1,031,082

(ii) *States.* Particulars of the numbers employed in each industrial class are shown in the following table for each State :—

FACTORIES : PERSONS EMPLOYED IN INDUSTRIAL CLASSES, 1954-55.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	8,312	6,088	1,780	1,716	1,944	720	20,560
II. Bricks, Pottery, Glass, etc. ..	11,462	5,752	1,279	2,076	1,643	337	22,549
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	18,434	15,418	1,675	3,068	2,315	414	41,324
IV. Industrial Metals, Machines, Conveyances ..	187,492	125,289	33,840	48,307	18,726	8,470	422,124
V. Precious Metals, Jewellery, Plate ..	2,265	2,785	314	388	257	20	6,029
VI. Textiles and Textile Goods (not Dress) ..	23,876	37,455	2,075	2,304	886	2,450	69,046
VII. Skins and Leather (not Clothing or Footwear) ..	5,656	5,460	1,322	1,316	668	80	14,502
VIII. Clothing (except Knitted) ..	45,458	47,571	8,823	5,865	4,144	941	112,802
IX. Food, Drink and Tobacco ..	38,940	39,496	26,309	10,615	6,496	4,078	125,934
X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving ..	20,537	15,259	10,676	4,577	6,634	3,470	61,153
XI. Furniture of Wood, Bedding, etc. ..	8,085	6,168	3,119	1,997	1,461	512	21,342
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	25,040	20,061	5,104	3,787	2,355	3,430	59,777
XIII. Rubber ..	7,235	6,122	1,607	1,002	210	149	16,325
XIV. Musical Instruments ..	1,235	286	41	34	27	..	1,623
XV. Miscellaneous Products ..	8,863	9,081	594	839	403	182	19,962
<i>Total, Classes I. to XV.</i>	<i>412,890</i>	<i>342,291</i>	<i>98,558</i>	<i>87,891</i>	<i>48,169</i>	<i>25,253</i>	<i>1,015,052</i>
XVI. Heat, Light and Power ..	6,920	4,357	1,735	1,674	1,145	199	16,030
Grand Total ..	419,810	346,648	100,293	89,565	49,314	25,452	1,031,082

4. *Persons Employed According to Occupational Grouping.*—(i) *General.* In the following table, the average number of persons employed in each State during 1954-55 are classified according to their occupational grouping. As mentioned previously, persons employed in factories are now classified on a basis different from that adopted prior to 1945-46. The nature of this change is indicated in para. 1 of this section (*see p. 211*).

FACTORIES : PERSONS EMPLOYED—OCCUPATIONAL GROUPING, 1954-55.

State.	Average Number of Persons Employed.						Total.
	Working Proprietors.	Managerial and Clerical Staff, etc.(a)	Chemists, Draftsmen, etc.	Foremen and Overseers.	Workers in Factory (Skilled and Unskilled).	Carters (excluding Delivery only) and Messengers, etc. (b)	
New South Wales ..	15,801	47,429	5,791	17,353	331,039	2,397	419,810
Victoria ..	14,053	36,262	4,590	14,862	274,741	2,140	346,648
Queensland ..	4,646	9,375	895	3,583	81,158	636	100,293
South Australia ..	2,718	10,292	1,303	3,907	70,926	419	89,565
Western Australia ..	2,634	3,922	373	1,958	40,323	104	49,314
Tasmania ..	994	2,448	408	1,124	20,370	108	25,452
<i>Total Males</i>	<i>36,397</i>	<i>67,912</i>	<i>12,333</i>	<i>39,686</i>	<i>627,674</i>	<i>4,689</i>	<i>788,691</i>
<i>Total Females</i>	<i>4,449</i>	<i>41,816</i>	<i>1,027</i>	<i>3,101</i>	<i>190,883</i>	<i>1,115</i>	<i>242,391</i>
Total Persons	40,846	109,728	13,360	42,787	818,557	5,804	1,031,082

(a) Includes salaried managers and working directors.

(b) Includes persons working regularly at home.

(ii) *Outworkers.* The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and embraces only persons to whom work is given out by factories to be done at home. Owing to the amended employment groupings adopted in 1945-46, persons working regularly at home for factories are now included with carters, messengers and others and separate details are no longer available. The number of "outworkers" employed by factories in 1944-45 was 1,049.

5. *Monthly Employment, 1938-39 and 1950-51 to 1954-55.*—(i) *Australia.* The following table shows the number of persons (excluding working proprietors) employed in factories on the pay-day nearest to the 15th of each month for the year 1938-39 and on the last pay-day of the month in the later years.

FACTORIES ; MONTHLY EMPLOYMENT, AUSTRALIA.
(EXCLUDING WORKING PROPRIETORS.)

Month.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
MALES.						
July	387,693	682,797	710,373	688,670	704,109	739,450
August	389,979	685,454	711,656	682,882	707,438	741,435
September	391,576	685,873	712,284	680,026	710,246	743,638
October	393,977	687,498	714,424	679,901	715,338	746,139
November	395,192	692,615	716,300	680,398	719,230	750,285
December	394,438	690,565	708,848	678,174	716,202	747,230
January	385,742	692,678	710,357	680,298	722,277	750,823
February	392,056	694,602	709,453	689,012	727,754	755,456
March	395,146	696,262	707,701	694,516	732,000	757,956
April	391,005	700,154	702,571	697,202	731,923	760,139
May	393,609	702,628	696,475	698,711	734,340	761,555
June	390,973	704,515	694,871	701,500	738,002	763,488
FEMALES.						
July	147,282	229,987	243,646	201,464	212,322	231,222
August	149,294	232,090	244,629	200,393	214,644	232,603
September	151,159	233,914	244,712	199,910	218,078	234,818
October	152,473	236,282	245,285	201,107	222,255	236,930
November	152,806	238,740	242,831	201,346	224,672	238,146
December	151,165	237,141	237,174	199,707	224,100	236,804
January	141,853	236,018	231,186	201,596	228,838	236,664
February	151,883	242,902	229,047	209,939	232,678	242,008
March	154,854	243,181	225,487	213,470	236,354	242,573
April	152,614	243,011	216,845	211,725	234,175	239,460
May	150,693	243,768	212,036	211,392	232,333	238,450
June	148,601	244,268	207,163	211,551	232,009	238,529
PERSONS.						
July	534,975	912,784	954,019	890,143	916,431	970,672
August	539,273	917,544	956,285	883,275	922,082	974,038
September	542,735	919,787	956,996	879,936	928,324	978,456
October	546,450	923,780	959,709	881,008	937,593	983,069
November	547,998	931,355	959,131	881,744	943,902	988,431
December	545,603	927,706	946,022	877,881	940,302	984,034
January	527,595	928,696	941,543	881,894	951,115	987,487
February	543,939	937,504	938,500	898,951	960,432	997,464
March	550,000	939,443	933,188	907,986	968,354	1,000,529
April	543,619	943,165	919,416	908,927	966,098	999,599
May	544,302	946,396	908,511	910,103	966,673	1,000,005
June	539,574	948,783	902,034	913,051	970,011	1,002,017

(ii) *States.* Particulars of the numbers employed in each State on the last pay-day of each month in 1954-55 are shown in the following table :—

FACTORIES : MONTHLY EMPLOYMENT, 1954-55.

(EXCLUDING WORKING PROPRIETORS.)

Month.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
July	297,053	234,074	80,072	69,985	38,740	19,526	739,450
August	297,765	234,785	80,341	70,242	38,779	19,523	741,435
September	298,876	236,036	80,045	70,190	38,897	19,594	743,638
October	299,911	237,243	79,681	70,443	39,145	19,716	746,139
November	302,114	238,754	79,617	70,718	39,292	19,790	750,285
December	301,570	238,653	76,564	70,909	39,358	20,176	747,230
January	303,575	240,777	74,571	71,501	40,019	20,380	750,823
February	305,038	241,061	77,044	71,483	40,494	20,336	755,456
March	305,267	242,141	77,432	71,841	40,887	20,388	757,956
April	305,424	242,537	78,446	72,219	41,036	20,477	760,139
May	306,266	242,461	79,660	72,012	40,924	20,232	761,555
June	306,707	242,907	81,256	71,870	40,652	20,096	763,488
FEMALES.							
July	97,881	90,384	16,911	14,941	6,809	4,296	231,222
August	98,618	91,222	16,940	14,944	6,846	4,033	232,603
September	99,952	91,964	16,790	15,106	6,946	4,060	234,818
October	101,276	92,997	16,408	15,246	6,993	4,010	236,930
November	101,973	93,511	16,324	15,285	7,032	4,021	238,146
December	100,618	93,076	16,321	15,717	6,850	4,222	236,800
January	99,393	93,687	16,359	15,840	6,879	4,506	236,660
February	101,668	95,372	17,483	16,200	6,943	4,342	242,008
March	101,801	96,266	16,936	16,118	7,015	4,437	242,573
April	101,008	94,256	16,708	15,725	6,993	4,770	239,460
May	101,230	93,239	16,734	15,541	6,910	4,796	238,450
June	101,376	93,560	16,659	15,524	6,642	4,768	238,529
PERSONS.							
July	394,934	324,458	96,983	84,926	45,549	23,822	970,672
August	396,383	326,007	97,281	85,186	45,625	23,556	974,038
September	398,828	328,000	96,835	85,296	45,843	23,654	978,456
October	401,187	330,240	96,089	85,689	46,138	23,726	983,069
November	404,087	332,265	95,941	86,003	46,324	23,811	988,431
December	402,188	331,729	92,885	86,626	46,208	24,398	984,034
January	402,968	334,464	90,930	87,341	46,898	24,886	987,487
February	406,706	336,433	94,527	87,683	47,437	24,678	997,464
March	407,068	338,407	94,368	87,959	47,902	24,825	1,000,529
April	406,432	336,793	95,154	87,944	48,029	25,247	999,599
May	407,496	335,700	96,394	87,553	47,834	25,028	1,000,005
June	408,083	336,467	97,915	87,394	47,294	24,864	1,002,017

6. **Distribution of Employees According to Age.**—The extension of statistics of employment in factories, decided upon at the Conference of Australian Statisticians held in 1945, permits of a distribution of employees (excluding working proprietors) into seven age-groups from 1945-46 onwards, instead of three as in previous years. The particulars are collected as at June. The numbers employed in each age-group on the last pay-day in June, 1954 and 1955 are given below :—

FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1954 AND 1955.

(EXCLUDING WORKING PROPRIETORS.)

Age Group.	June, 1954.			June, 1955.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Under 16 years ..	9,294	7,228	16,522	9,093	6,605	15,698
16 years ..	12,874	8,945	21,819	13,137	8,547	21,684
17 " ..	14,947	9,899	24,846	14,694	9,902	24,596
18 " ..	14,591	9,702	24,293	15,341	9,994	25,335
19 " ..	12,971	8,719	21,690	13,772	8,600	22,372
20 " ..	12,426	7,807	20,233	12,838	7,710	20,548
21 " and over ..	660,899	179,709	840,608	684,613	187,171	871,784
Total ..	738,002	232,009	970,011	763,488	238,529	1,002,017

As comparative details based on the new age grouping are not available for the years prior to 1945-46, the following table shows the age distribution in sexes for Australia in June, 1939, and 1950 to 1955 on the old basis.

FACTORIES : DISTRIBUTION OF EMPLOYEES IN JUNE, ACCORDING TO AGE, AUSTRALIA.

(EXCLUDING WORKING PROPRIETORS.)

In June—	Under 16 Years.		16 and under 21 Years.		21 Years and Over.		Total.	
	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
MALES.								
1939 ..	16,109	4.12	76,418	19.55	298,436	76.33	390,963	100
1950 ..	7,812	1.15	63,310	9.35	606,391	89.50	677,513	100
1951 ..	8,219	1.17	60,913	8.64	635,383	90.19	704,515	100
1952 ..	9,079	1.31	59,616	8.58	626,176	90.11	694,871	100
1953 ..	9,011	1.28	64,675	9.22	627,814	89.50	701,500	100
1954 ..	9,294	1.26	67,809	9.19	660,899	89.55	738,002	100
1955 ..	9,093	1.19	69,782	9.14	684,613	89.67	763,488	100
FEMALES.								
1939 ..	15,497	10.43	56,273	37.87	76,831	51.70	148,601	100
1950 ..	6,055	2.62	48,021	20.77	177,130	76.61	231,206	100
1951 ..	6,236	2.55	46,848	19.18	191,184	78.27	244,268	100
1952 ..	5,669	2.74	40,431	19.52	161,063	77.74	207,163	100
1953 ..	6,874	3.25	43,180	20.41	161,497	76.34	211,551	100
1954 ..	7,228	3.11	45,072	19.43	179,709	77.46	232,009	100
1955 ..	6,605	2.77	44,753	18.76	187,171	78.47	238,529	100
PERSONS.								
1939 ..	31,606	5.86	132,691	24.59	375,267	69.55	539,564	100
1950 ..	13,867	1.53	111,331	12.25	783,521	86.22	908,719	100
1951 ..	14,455	1.52	107,761	11.36	826,567	87.12	948,783	100
1952 ..	14,748	1.64	100,047	11.09	787,239	87.27	902,034	100
1953 ..	15,885	1.74	107,855	11.81	789,311	86.45	913,051	100
1954 ..	16,522	1.70	112,881	11.64	840,608	86.66	970,011	100
1955 ..	15,698	1.57	114,535	11.43	871,784	87.00	1,002,017	100

§ 6. Sex Distribution in Factories.

1. Average Number of Males and Females Employed. The following table shows the average number of males and females employed in factories in each State for 1938-39 and 1950-51 to 1954-55 :—

FACTORIES : MALES AND FEMALES EMPLOYED.

State.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
MALES.						
New South Wales ..	167,172	301,307	304,808	291,704	305,040	316,673
Victoria ..	136,218	224,919	233,699	228,724	240,698	251,675
Queensland ..	43,941	77,182	77,673	77,627	81,425	83,290
South Australia ..	35,406	66,840	68,045	67,114	70,657	73,714
Western Australia ..	18,704	36,349	37,812	38,614	40,439	42,294
Tasmania ..	11,150	19,454	19,934	19,621	20,249	21,045
Australia ..	412,591	726,051	741,971	723,404	758,508	788,691
FEMALES.						
New South Wales ..	61,609	105,658	101,186	88,509	97,555	103,137
Victoria ..	65,613	91,873	90,444	82,035	90,579	94,973
Queensland ..	10,169	17,397	16,676	15,496	16,694	17,003
South Australia ..	7,965	16,154	15,862	13,369	14,846	15,851
Western Australia ..	4,507	7,412	7,285	6,574	7,020	7,020
Tasmania ..	2,652	4,373	4,093	3,874	4,340	4,407
Australia ..	152,515	242,867	235,546	209,857	231,034	242,391

2. Rate of Variation for each Sex.—The percentages of increase or decrease on the average numbers of males and females employed in the preceding year are shown below for the years 1938-39 and 1950-51 to 1954-55 :—

FACTORIES : ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED.

State.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
MALES.						
New South Wales ..	1.69	6.07	1.16	-4.30	4.57	3.81
Victoria ..	0.04	4.03	3.90	-2.13	5.24	4.56
Queensland ..	3.79	5.80	0.64	-0.06	4.89	2.29
South Australia ..	-2.39	5.87	1.80	-1.37	5.28	4.33
Western Australia ..	-0.30	7.83	4.02	2.12	4.73	4.59
Tasmania ..	4.40	0.79	2.47	-1.57	3.20	3.02
Australia ..	0.98	5.32	2.19	-2.50	4.85	3.98
FEMALES.						
New South Wales ..	1.88	7.45	-4.23	-12.44	10.22	5.72
Victoria ..	-0.03	5.26	-1.56	-9.30	10.42	4.85
Queensland ..	3.96	8.63	-4.14	-7.08	7.73	1.85
South Australia ..	1.98	5.56	-1.81	-15.72	11.05	6.77
Western Australia ..	3.06	5.55	-1.71	-9.76	6.78	..
Tasmania ..	6.51	4.02	-6.40	-5.35	12.03	1.54
Australia ..	1.30	6.45	-3.01	-10.91	10.09	4.92

NOTE.—Minus sign (-) indicates decrease.

3. *Masculinity of Persons Employed in Factories.*—The extent to which females are employed in the factories of Australia may perhaps be more clearly shown by giving the masculinity of persons employed in each State. The following table shows particulars for the years 1938–39 and 1949–50 to 1954–55 :—

FACTORIES : MASCULINITY(a) OF PERSONS EMPLOYED.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938–39	271	208	432	445	415	420	271
1949–50	289	248	455	413	480	459	302
1950–51	285	245	444	414	490	445	299
1951–52	301	258	466	429	519	487	315
1952–53	330	279	501	502	587	506	345
1953–54	313	266	488	476	576	467	328
1954–55	307	265	490	465	602	478	325

(a) Number of males per 100 females.

For a number of years prior to 1926–27, there were on the average 300 males employed in factories for every 100 females, but by 1932–33, as a result of the particularly severe effect of the depression on the heavier industries where males predominate in number, there were only 239 males employed to every 100 females. With the subsequent recovery of employment in the heavier industries, the proportion of males per 100 females increased to 271 in 1937–38 and 1938–39. The enlistment of men in the armed services and the expansion of industry and the consequential absorption of women brought about by the 1939–45 War caused a decrease in masculinity from 1938–39 to 1943–44. However, following the cessation of hostilities in 1945 and the return of servicemen to civilian life, the number of females employed in factories declined and masculinity increased, and in 1954–55 there were 325 males to every 100 females employed in factories.

4. *Employment of Females in Particular Industries.*—(i) *General.* The majority of females in manufacturing industries are employed in four classes, namely :—IV., Industrial Metals, Machines, etc. ; VI., Textiles ; VIII., Clothing ; and IX., Food, Drink and Tobacco. In 1954–55, these industries accounted for 79.18 per cent. of all females in factories. In two classes only did the number of females exceed the number of males, namely, in Class VI., Textiles, where there were 135 females to every 100 males and in Class VIII., Clothing, with 236 females per 100 males. The following tables show the average number of males and females employed in each of these classes in 1954–55 :—

MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1954–55.

Class.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
IV. Industrial Metals, etc. ..	166,746	111,897	31,954	43,480	17,928	8,092	380,097
VI. Textiles and Textile Goods (not Dress) ..	9,670	16,529	710	1,140	442	941	29,432
VIII. Clothing (except Knitted) ..	12,815	14,725	2,596	1,839	1,263	359	33,597
IX. Food, Drink and Tobacco ..	27,422	29,099	22,432	7,899	5,081	2,921	94,854
All Other Classes ..	100,020	79,425	25,598	19,356	17,580	8,732	250,711
Total	316,673	251,675	83,290	73,714	42,294	21,045	788,691
FEMALES.							
IV. Industrial Metals, etc. ..	20,746	13,392	1,886	4,827	798	378	42,027
VI. Textiles and Textile Goods (not Dress) ..	14,206	20,926	1,365	1,164	444	1,509	39,614
VIII. Clothing (except Knitted) ..	32,643	32,846	6,227	4,026	2,881	582	79,205
IX. Food, Drink and Tobacco ..	11,518	10,397	3,877	2,716	1,415	1,157	31,080
All Other Classes ..	24,024	17,412	3,648	3,118	1,482	781	50,465
Total	103,137	94,973	17,003	15,851	7,020	4,407	242,391

(ii) *Females Employed in Clothing Manufacture.* The employment of females in the several industries of Class VIII., Clothing—in which class the largest number of females is employed—and the relation of their number to that of the males so employed are shown in the following table.

FEMALES EMPLOYED IN CLOTHING INDUSTRIES, 1954-55.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Fe-males.	Femini- nity. (a)	Males.	Fe-males.	Femini- nity. (a)	Males.	Fe-males.	Femini- nity. (a)
Tailoring and Ready-made Clothing	3,057	14,305	468	3,110	7,657	246	1,239	4,016	324
Waterproof and Oilskin Clothing	114	623	546	116	272	234	14	82	586
Dressmaking, Hemstitching Millinery	229	2,148	938	1,368	7,946	581	155	2,940	1,897
Shirts, Collars and Under-clothing	241	1,393	578	221	854	386	42	477	1,136
Foundation Garments ..	402	3,872	963	718	5,619	783	165	1,969	1,193
Handkerchiefs, Ties and Scarves	123	1,372	1,115	202	1,381	684	21	186	886
Hats and Caps	169	1,030	609	75	390	520	15	144	960
Gloves	633	701	111	265	218	82	28	115	411
Boots and Shoes	107	362	338	48	238	496	33	159	482
Boot and Shoe Repairing ..	3,524	3,689	105	5,698	5,724	100	2,007	1,625	81
Boot and Shoe Accessories ..	1,464	76	5	687	39	6	676	39	6
Umbrellas and Walking Sticks	227	80	35	377	226	60	36	5	14
Dyeworks and Cleaning (in- cluding Renovating and Repairing)	49	104	212	19	50	263	16	38	238
Other	2,420	2,454	101	1,715	1,859	108	1,610	1,921	119
	56	434	775	106	373	352	..	..	..
Total	12,815	32,643	255	14,725	32,846	223	6,057	13,716	226

(a) Number of females per 100 males.

§ 7. Child Labour in Factories.

1. **Conditions of Child Labour.**—The employment of young persons in factories in the States is regulated by Acts of Parliament, as is the case with the employment of female labour. The object of the restrictions imposed is to ensure, amongst other things, that a proper period shall be devoted to primary education, and that the early years of labour shall not exhaust the worker before the attainment of full growth.

2. **Number of Children Employed, 1939, 1954 and 1955.**—In the returns for the various States, the term "child" denotes any person under sixteen years of age. The decline in the number of children employed from the peak of 33,553 reached in June, 1940 to 15,698 in June, 1955, was probably caused by several factors, including (i) the raising of the school leaving age in New South Wales and Tasmania, (ii) fewer children available for employment owing to the decline in the birth rate and (iii) the high level of employment which enabled parents to keep their children at school beyond the statutory leaving age.

The following table shows the number of children of each sex employed in manufacturing industries in June of the years mentioned.

FACTORIES : CHILDREN(a) EMPLOYED, JUNE.

State.	1939.			1954.			1955.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	5,759	7,084	12,843	2,671	2,257	4,928	2,579	1,982	4,561
Victoria	6,167	5,005	11,172	3,093	2,527	5,620	2,908	2,381	5,289
Queensland	1,790	1,334	3,124	1,768	1,198	2,966	1,754	1,124	2,878
South Australia ..	1,296	1,053	2,349	819	750	1,569	855	723	1,578
Western Australia ..	705	521	1,226	835	430	1,265	876	319	1,195
Tasmania	392	500	892	108	66	174	121	76	197
Australia	16,109	15,497	31,606	9,294	7,228	16,522	9,093	6,605	15,698

(a) Under sixteen years of age.

3. **Industries Employing Child Labour.**—The distribution of children employed in factories in June, 1955 and the proportion of children employed to total employees are given in the following table according to the class of industry :—

FACTORIES : CHILDREN^(a) EMPLOYED, BY CLASSES, AUSTRALIA, JUNE, 1955.

Class of Industry.	Children Employed.		Total Employees. (b)		Proportion (per cent.) of Children Employed to Total Employees. (b)	
	Males.	Females.	Males.	Females.	Males.	Females.
Industrial Metals, Machines, Conveyances ..	4,167	801	374,786	43,364	1.11	1.85
Textiles and Textile Goods (not Dress)	417	1,206	27,937	38,311	1.49	3.15
Clothing (except Knitted)	502	2,610	27,900	76,536	1.80	3.41
Food, Drink and Tobacco	1,050	696	89,232	29,242	1.18	2.38
Sawmills, Joinery, Boxes, etc. ..	802	96	54,296	2,825	1.48	3.40
Furniture of Wood, Bedding, etc. ..	472	54	16,285	3,567	2.90	1.51
Paper, Stationery, Printing, Bookbinding	701	557	43,047	16,203	1.63	3.44
All other Industries	982	585	130,005	28,481	0.76	2.05
Total	9,093	6,605	763,488	238,529	1.19	2.77

(a) Under sixteen years of age.

(b) Excludes working proprietors.

4. **Apprenticeship.**—In all the States, Acts are in force for the regulation of the age at which children may be employed in gainful occupations. Legislative provision is also made for the regulation of apprenticeship under the various State Factories Acts or Arbitration Acts. These Acts, while laying down general principles, leave to the wages tribunals the actual determination of the conditions under which apprentices may be employed.

§ 8. Salaries and Wages Paid and Value of Production.

Note.—In all tables relating to salaries and wages paid in factories the amounts drawn by working proprietors are excluded.

1. **General.**—The importance of the manufacturing industries of Australia is indicated by the fact that the total value of their output for 1954–55 was £3,434,589,000, of which £1,940,698,000 was the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £128,382,000 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of output, namely, £1,365,509,000, represents the value of production as defined by the Conference of Statisticians at Sydney in 1925, i.e., “the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production.” The total amount of salaries and wages paid in factories in 1954–55 was £781,640,000. This figure, which excludes amounts drawn by working proprietors, was the highest ever recorded and shows an increase of £76,503,000 or 10.85 per cent. on that for the previous year.

2. **Salaries and Wages Paid.**—(i) *In Classes of Industry, 1954–55.* The amounts of salaries and wages paid in the various classes of industry in each State are shown in the following table.

FACTORIES : SALARIES AND WAGES PAID, 1954-55.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	7,436	4,910	1,291	1,421	1,512	565	17,135
II. Bricks, Pottery, Glass, etc. . .	9,588	4,556	926	1,732	1,322	281	18,405
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease . . .	16,063	13,283	1,239	2,579	2,044	391	35,599
IV. Industrial Metals, Machines, Conveyances . . .	157,520	103,847	22,956	40,896	13,587	6,485	345,291
V. Precious Metals, Jewellery Plate . . .	1,532	2,019	176	266	155	10	4,158
VI. Textiles and Textile Goods (not Dress) . . .	15,893	24,872	1,091	1,516	542	1,493	45,407
VII. Skins and Leather (not Clothing or Footwear) . . .	4,252	4,068	879	1,036	469	61	10,765
VIII. Clothing (except Knitted) . .	24,888	27,840	4,137	3,076	1,935	498	62,374
IX. Food, Drink and Tobacco . . .	28,138	29,754	20,633	7,328	4,524	2,836	93,213
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving . . .	14,787	10,827	6,851	3,336	4,548	2,459	42,808
XI. Furniture of Wood, Bedding, etc. . .	5,649	4,082	1,740	1,331	850	295	13,947
XII. Paper, Stationery, Printing, Bookbinding, etc. . .	19,833	16,321	3,407	2,903	1,743	3,061	47,268
XIII. Rubber . . .	6,609	5,429	1,110	838	155	117	14,258
XIV. Musical Instruments . . .	984	210	22	22	17		1,255
XV. Miscellaneous Products . . .	6,629	6,537	360	557	224	110	14,417
<i>Total, Classes I. to XV.</i>	<i>319,801</i>	<i>258,555</i>	<i>66,818</i>	<i>68,837</i>	<i>33,627</i>	<i>18,662</i>	<i>766,300</i>
XVI. Heat, Light and Power . . .	6,814	4,195	1,482	1,536	1,111	202	15,340
Grand Total . . .	326,615	262,750	68,300	70,373	34,738	18,864	781,640

(ii) *Totals and Averages, 1938-39 and 1949-50 to 1954-55.*—The following table shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for each of the years indicated. The figures exclude working proprietors and the amounts drawn by them :—

FACTORIES : TOTAL AND AVERAGE SALARIES AND WAGES PAID.

Year.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Aust.
TOTAL AMOUNT PAID (£'000).							
1938-39	44,606	36,027	10,887	8,169	4,574	2,480	106,743
1949-50	162,147	130,255	34,748	33,708	15,293	9,646	385,797
1950-51	211,339	163,207	42,837	42,940	19,658	11,737	491,718
1951-52	263,652	202,586	51,906	53,558	25,384	14,703	611,789
1952-53	265,910	210,878	57,591	56,546	28,344	15,976	635,245
1953-54	293,586	236,037	63,433	63,110	31,590	17,381	705,137
1954-55	326,615	262,750	68,300	70,373	34,738	18,864	781,640
AVERAGE PER EMPLOYEE (£).							
1938-39	201.77	185.64	210.78	195.57	207.90	188.31	196.31
1949-50	439.04	429.21	408.67	441.70	397.13	428.29	436.56
1950-51	537.13	534.64	473.80	531.59	474.15	513.74	526.34
1951-52	673.13	650.79	576.57	656.54	594.67	637.29	650.61
1952-53	728.11	709.15	649.94	724.52	664.59	707.89	710.21
1953-54	758.65	743.29	678.35	761.27	703.26	734.60	742.62
1954-55	804.43	790.00	714.83	810.32	744.17	771.27	789.35

In comparing the figures in the preceding table, regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, a large number of hands is employed in Class VIII., Clothing, comprising a relatively high percentage of women and children. The highest average wages per employee in 1954-55 were paid in South Australia, New South Wales and Victoria, in that order.

The average earnings per employee rose annually from 1938-39 to 1943-44 when a level of £291 was attained as a result of war-time conditions. In 1944-45, the average dropped to £285 and remained at this level in 1945-46. From 1945-46, average earnings rose each year and in 1954-55 reached a record level of over £789.

(iii) *Total and Average Earnings of Males and Females, 1938-39 and 1949-50 to 1954-55.* Particulars for these years are given in the table on the following page.

FACTORIES: TOTAL AND AVERAGE SALARIES AND WAGES—MALES AND FEMALES.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
TOTAL AMOUNT PAID (£'000).							
1938-39	33,272	29,006	9,920	7,488	4,129	2,234	91,049
1949-50	135,875	105,135	30,948	29,809	13,692	8,538	323,997
1950-51	176,031	130,923	37,870	37,786	17,620	10,336	410,566
1951-52	220,885	163,688	46,087	47,194	22,870	13,056	513,780
1952-53	224,745	171,897	51,519	50,594	25,756	14,249	538,760
1953-54	245,749	190,573	56,608	56,299	28,684	15,320	593,233
1954-55	274,467	213,377	61,125	62,942	31,748	16,736	660,395
AVERAGE PER MALE EMPLOYEE (£).							
1938-39	239.24	224.47	238.59	220.95	235.49	212.09	231.84
1949-50	499.33	510.86	446.87	487.39	433.41	465.46	492.20
1950-51	609.05	610.44	516.83	583.37	515.67	558.67	591.41
1951-52	756.84	736.68	625.91	716.25	643.68	687.09	725.57
1952-53	807.77	793.11	701.45	779.90	711.80	761.21	782.98
1953-54	844.05	833.71	733.34	824.49	754.20	791.86	820.98
1954-55	906.61	891.40	773.47	883.13	797.80	833.05	877.84
FEMALES.							
TOTAL AMOUNT PAID (£'000).							
1938-39	6,334	7,021	967	681	445	246	15,694
1949-50	26,272	25,120	3,800	3,899	1,601	1,108	61,800
1950-51	35,308	32,284	4,967	5,154	2,038	1,401	81,152
1951-52	42,767	38,898	5,819	6,364	2,514	1,647	98,009
1952-53	41,165	38,981	6,072	5,952	2,588	1,727	96,485
1953-54	47,837	45,464	6,825	6,811	2,906	2,061	111,904
1954-55	52,148	49,373	7,175	7,431	2,990	2,128	121,245
AVERAGE PER FEMALE EMPLOYEE (£).							
1938-39	103.66	108.25	96.00	86.44	99.58	93.19	103.92
1949-50	270.27	291.34	240.93	257.31	231.57	265.37	274.12
1950-51	338.08	355.57	289.82	322.03	279.55	322.46	338.12
1951-52	428.40	436.60	354.96	405.70	351.30	404.71	422.04
1952-53	473.28	483.46	400.48	451.80	400.32	448.58	467.79
1953-54	499.19	510.96	418.23	465.95	421.93	477.84	493.10
1954-55	514.94	529.63	431.68	477.12	434.21	487.12	509.56

(iv) *Managers, Clerical Staff and Other Employees.* A further analysis of salaries and wages paid is given in the following table for 1954-55 and shows the amounts paid to managerial and clerical staff including salaried managers and working directors, chemists, draftsmen and other laboratory and research staff, and those paid to other employees. As previously mentioned, amounts drawn by working proprietors are excluded in all cases:—

FACTORIES: SALARIES AND WAGES PAID TO MANAGERS, CLERICAL STAFF, ETC., AND OTHER EMPLOYEES, AUSTRALIA, 1954-55.

Class of Industry.	Managers, Clerical Staff, Chemists, Draftsmen, etc.		All Other Employees.	
	Males.	Females.	Males.	Females.
	£'000.	£'000.	£'000.	£'000.
I. Treatment of Non-metalliferous Mine and Quarry Products	1,936	301	14,795	103
II. Bricks, Pottery, Glass, etc.	1,454	371	15,968	612
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	7,184	1,571	23,163	3,681
IV. Industrial Metals, Machines, Conveyances	44,961	9,507	278,388	12,435
V. Precious Metals, Jewellery, Plate	439	157	3,161	401
VI. Textiles and Textile Goods (not Dress)	3,779	1,605	21,615	18,408
VII. Skins and Leather (not Clothing or Footwear)	1,135	226	7,979	1,425
VIII. Clothing (except Knitted)	3,783	2,014	19,810	36,767
IX. Food, Drink and Tobacco	11,160	3,060	66,877	12,116
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	4,003	840	37,547	418
XI. Furniture of Wood, Bedding, etc.	1,259	377	11,047	1,264
XII. Paper, Stationery, Printing, Bookbinding, etc.	5,840	1,943	33,454	6,031
XIII. Rubber	1,864	411	10,564	1,419
XIV. Musical Instruments	138	61	913	143
XV. Miscellaneous Products	1,884	611	9,023	2,899
<i>Total, Classes I. to XV.</i>	<i>90,819</i>	<i>23,055</i>	<i>554,304</i>	<i>98,122</i>
XVI. Heat, Light and Power	1,380	55	13,892	13
Grand Total.	92,199	23,110	568,196	98,135
Average paid per employee	1,148.97	539.41	845.47	503.00

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1954–55.* The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1954–55 it amounted to a new high level of £128,382,000, an increase of £7,924,000 as compared with the previous year and over eight times the corresponding value in 1938–39. The following table shows the value of power, fuel and light, etc., used in the different classes of industry:—

FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(a), 1954–55.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,184	1,551	566	768	747	253	6,069
II. Bricks, Pottery, Glass, etc. ..	3,176	1,903	359	556	583	153	6,730
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	3,590	2,771	207	749	931	112	8,360
IV. Industrial Metals, Machines, Conveyances ..	22,794	4,829	1,616	4,835	764	803	35,641
V. Precious Metals, Jewellery Plate ..	113	108	11	27	12	1	272
VI. Textiles and Textile Goods (not Dress) ..	1,401	1,789	55	154	44	125	3,568
VII. Skins and Leather (not Clothing or Footwear) ..	402	403	62	116	54	3	1,040
VIII. Clothing (except Knitted) ..	836	729	148	123	82	33	1,951
IX. Food, Drink and Tobacco ..	5,706	4,834	2,658	1,214	929	363	15,704
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	1,353	564	357	142	316	228	2,960
XI. Furniture of Wood, Bedding, etc. ..	153	84	39	36	24	6	342
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,128	1,388	119	234	75	1,019	3,963
XIII. Rubber ..	924	834	127	92	18	16	2,011
XIV. Musical Instruments ..	60	13	1	(b)	(b)	..	74
XV. Miscellaneous Products ..	406	372	17	51	9	3	858
<i>Total, Classes I. to XV.</i>	<i>44,226</i>	<i>22,172</i>	<i>6,342</i>	<i>9,097</i>	<i>4,588</i>	<i>3,118</i>	<i>89,543</i>
XVI. Heat, Light and Power ..	16,699	9,595	5,278	3,800	3,458	9	38,839
Grand Total ..	60,925	31,767	11,620	12,897	8,046	3,127	128,382

(a) Includes value of lubricants and water.

(b) Less than £500.

(ii) *Values of Items, 1954–55.* The following table shows the values of the various items of power, fuel and light used in factories in each State, during the year:—

FACTORIES: VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED(a), 1954–55.
(£'000.)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Coal, Black ..	21,302	3,674	6,430	(b) 4,597	3,225	1,036	40,264
" Brown ..	..	6,301	..	..	..	..	6,301
Brown Coal Briquettes ..	..	2,285	..	..	..	..	2,285
Coke ..	11,354	918	470	2,644	144	227	15,757
Wood ..	441	730	419	389	429	168	2,576
Fuel Oil ..	4,414	6,575	1,126	1,449	1,640	375	15,579
Tar (Fuel) ..	780	318	3	93	12	20	1,226
Electricity ..	16,570	7,982	2,296	2,814	1,710	1,045	32,417
Gas ..	2,593	804	148	236	71	36	3,888
Other (Charcoal, etc.) ..	707	415	101	209	445	95	1,972
Water ..	1,749	1,051	277	222	174	55	3,528
Lubricating Oils ..	1,015	714	350	244	196	70	2,589
Total ..	60,925	31,767	11,620	12,897	8,046	3,127	128,382

(a) Includes value of lubricants and water.

(b) Includes £1,183,000, the value of 453,000 tons of Leigh Creek coal.

(iii) *Quantities of Fuel Used, 1954-55.* The following table shows the quantities of fuel used in factories in each State during the year:—

FACTORIES: QUANTITIES OF FUEL USED, 1954-55.

Particulars.	Unit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal, Black	'000 tons	5,370	536	1,511	(a)991	603	234	9,245
" Brown	"	"	7,829	"	"	"	"	7,829
Brown Coal Briquettes..	"	"	514	"	"	"	"	514
Coke	"	2,016	97	45	302	18	15	2,493
Wood	"	214	436	282	161	345	89	1,527
Fuel Oil	'000 gals.	64,634	105,235	14,139	22,283	23,978	4,876	235,145
Tar (Fuel)	"	33,153	6,287	97	2,241	387	478	42,643

(a) Includes 453,000 tons of Leigh Creek coal.

(iv) *Total Value, 1938-39 and 1949-50 to 1954-55.* The next table shows the amounts expended on power, fuel and light during these years:—

FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED.(a)
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1938-39	7,652	4,000	1,423	1,018	1,169	438	15,700
1949-50	25,536	13,695	5,119	5,942	3,184	1,354	54,830
1950-51	35,381	17,371	6,295	7,267	3,759	1,609	71,682
1951-52	48,664	21,990	8,286	10,409	5,173	2,107	96,629
1952-53	53,630	25,626	9,624	11,806	6,175	2,476	109,337
1953-54	58,447	29,080	10,655	12,500	6,972	2,804	120,458
1954-55	60,925	31,767	11,620	12,897	8,046	3,127	128,382

(a) Includes value of lubricants and water.

4. *Value of Materials Used.—(i) In Classes of Industry, 1954-55.* The value of materials used (which includes the value of containers, packing, etc., the cost of tools replaced and repairs to plant) in factories in Australia in 1954-55 reached £1,940,698,000, representing 56.5 per cent. of the value of the final output (see para. 5). The following table shows the value of the materials used in various classes of industry in each State:—

FACTORIES: VALUE OF MATERIALS USED, 1954-55.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	22,843	9,829	2,819	3,211	2,929	1,022	42,653
II. Bricks, Pottery, Glass, etc.	8,195	4,376	606	1,683	821	218	15,899
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	70,990	63,291	6,150	9,978	14,246	1,235	165,890
IV. Industrial Metals, Machines, Conveyances	331,143	160,792	40,383	86,791	17,367	14,507	650,983
V. Precious Metals, Jewellery Plate	1,555	2,717	84	197	77	3	4,633
VI. Textiles and Textile Goods (not Dress)	40,395	58,862	4,324	3,683	2,679	4,681	114,624
VII. Skins and Leather (not Clothing or Footwear)	12,665	12,399	2,662	7,324	1,285	217	36,552
VIII. Clothing (except Knitted)	41,124	45,980	5,901	3,175	2,294	369	98,843
IX. Food, Drink and Tobacco	150,486	157,859	132,604	32,694	26,009	13,904	513,556
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	35,611	23,243	13,811	9,088	7,212	4,901	93,866
XI. Furniture of Wood, Bedding, etc.	11,184	8,047	3,462	2,661	1,774	433	27,561
XII. Paper, Stationery, Printing, Bookbinding, etc.	39,692	35,155	5,475	4,761	2,540	5,406	93,029
XIII. Rubber	17,000	14,499	3,066	1,411	223	162	36,361
XIV. Musical Instruments	1,706	261	8	6	2	"	1,983
XV. Miscellaneous Products	10,256	13,066	484	852	185	65	24,908
<i>Total, Classes I. to XV.</i>	<i>794,845</i>	<i>610,376</i>	<i>221,839</i>	<i>167,515</i>	<i>79,643</i>	<i>47,123</i>	<i>1,921,341</i>
XVI. Heat, Light and Power	7,772	6,290	2,497	1,621	940	237	19,357
Grand Total	802,617	616,666	224,336	169,136	80,583	47,360	1,940,698

(ii) *Total Amount, 1938-39 and 1949-50 to 1954-55.* The following table shows the values of materials used in factories for these years:—

FACTORIES: VALUE OF MATERIALS USED.
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39	120,502	82,971	42,596	20,309	9,604	5,321	281,303
1949-50	384,467	293,528	108,682	83,277	34,750	24,390	929,094
1950-51	522,422	382,002	134,457	117,547	46,452	32,401	1,235,281
1951-52	647,291	477,617	150,427	139,198	58,652	40,025	1,513,210
1952-53	627,954	476,489	187,572	133,818	63,943	38,029	1,527,805
1953-54	721,311	548,111	211,451	152,590	72,468	42,042	1,747,973
1954-55	802,617	616,666	224,336	169,136	80,583	47,360	1,940,698

5. *Value of Output.*—(i) *In Classes of Industry, 1954-55.* The value of the output of factories in the various classes in each State in 1954-55 is shown in the following table. It represents the selling value at the factory of goods made or processed during the year including by-products. In addition, it includes the amount received for other work done such as repair work, assembling and making up for customers. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output is the real value of factory production (*see para. 6*).

FACTORIES: VALUE OF OUTPUT, 1954-55.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	38,202	20,682	5,846	6,863	6,333	2,300	80,226
II. Bricks, Pottery, Glass, etc.	27,280	13,401	2,584	5,150	3,688	832	52,935
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	124,547	99,129	9,805	16,764	19,796	2,335	272,376
IV. Industrial Metals, Machines, Conveyances	599,636	322,848	78,590	151,469	39,388	27,662	1,219,593
V. Precious Metals, Jewellery Plate	4,270	5,994	392	701	384	21	11,762
VI. Textiles and Textile Goods (not Dress)	68,470	104,575	6,354	6,187	3,750	7,250	196,586
VII. Skins and Leather (not Clothing or Footwear)	19,611	19,390	4,151	8,928	2,136	293	54,509
VIII. Clothing (except Knitted)	82,312	89,933	12,771	7,680	5,423	1,092	199,211
IX. Food, Drink and Tobacco	220,625	219,943	173,096	46,547	36,285	19,303	715,799
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	63,029	42,750	25,926	14,538	14,886	9,934	171,063
XI. Furniture of Wood, Bedding, etc.	20,832	15,237	6,399	4,832	3,287	913	51,560
XII. Paper, Stationery, Printing, Bookbinding, etc.	77,863	67,830	11,546	10,228	5,876	14,189	187,532
XIII. Rubber	26,530	25,282	5,492	2,867	544	382	61,097
XIV. Musical Instruments	3,439	578	44	36	25	..	4,122
XV. Miscellaneous Products	22,398	25,319	1,046	1,833	525	230	51,351
<i>Total, Classes I. to XV.</i>	<i>1,399,044</i>	<i>1,072,891</i>	<i>344,042</i>	<i>284,683</i>	<i>142,326</i>	<i>86,736</i>	<i>3,329,722</i>
XVI. Heat, Light and Power	47,625	27,765	11,975	8,378	7,259	1,865	104,867
Grand Total	1,446,669	1,100,656	356,017	293,061	149,585	88,601	3,434,589

(ii) *Total, 1938-39 and 1949-50 to 1954-55.* The following table shows the value of output in each State during these years :—

FACTORIES: VALUE OF OUTPUT.
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39	218,420	152,967	63,321	35,005	19,549	11,158	500,420
1949-50	693,203	526,466	175,156	141,573	63,978	45,080	1,645,456
1950-51	923,912	675,033	216,212	192,623	84,431	58,624	2,150,835
1951-52	1,139,346	833,967	250,043	232,853	106,571	71,926	2,634,706
1952-53	1,139,326	860,147	295,405	234,813	119,310	71,003	2,720,004
1953-54	1,299,801	985,505	332,361	265,311	134,587	77,911	3,095,476
1954-55	1,446,669	1,100,656	356,017	293,061	149,585	88,601	3,434,589

6. *Value of Production.*—(i) *In Classes of Industry, 1954-55.* The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as “the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production.”

In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation should be made from the “value of output”. All these deductions with the exception of depreciation are included in the items “value of materials used” and “value of fuel used” as defined above. On account of the difficulty experienced in securing accurate figures for depreciation, it was agreed that no deduction should be made on this account for the present. The value of production as given in the following tables is obtained therefore, by deducting “value of materials used” and “value of fuel used” from the “value of the output”.

The figure thus calculated is, however, not the net value of production. The amount of depreciation, particulars of which are shown in § 9, para, 4, was recorded as £56,484,000 for 1954-55. Many miscellaneous expenses, such as taxation, insurance, advertising and other sundry charges, have not been taken into account. Therefore, it must not be inferred that when wages and salaries are deducted from the value of production the whole of the “surplus” is available for interest and profit.

The value of factory production, therefore, approximates “net value added” in the manufacturing process. It amounted in 1954-55 to £1,366 million to which Class IV., Industrial Metals, etc., with £533 million made the greatest contribution. The total value of production in 1954-55 showed an increase of £139 million (11.28 per cent.) over the figure for 1953-54 and £1,162 million over the value of production recorded in 1938-39.

The following table shows the value of production in 1954-55 in each State for the various classes of industry.

FACTORIES: VALUE OF PRODUCTION, 1954-55.
(*000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	13,175	9,302	2,461	2,884	2,657	1,025	31,504
II. Bricks, Pottery, Glass, etc. ..	15,909	7,122	1,619	2,911	2,284	461	30,306
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	49,967	33,067	3,448	6,037	4,619	988	98,126
IV. Industrial Metals, Machines, Conveyances	245,699	157,227	36,591	59,843	21,257	12,352	532,969
V. Precious Metals, Jewellery, Plate	2,602	3,169	297	477	295	17	6,857
VI. Textiles and Textile Goods (not Dress)	26,674	43,924	1,975	2,350	1,027	2,444	78,394
VII. Skins and Leather (not Clothing or Footwear)	6,544	6,588	1,427	1,488	797	73	16,917
VIII. Clothing (except Knitted) ..	40,352	43,224	6,722	4,382	3,047	690	98,417
IX. Food, Drink and Tobacco ..	64,433	57,250	37,834	12,639	9,347	5,036	186,539
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	26,065	18,943	11,758	5,308	7,358	4,805	74,237
XI. Furniture of Wood, Bedding, etc.	9,495	7,106	2,898	2,195	1,489	474	23,657
XII. Paper, Stationery, Printing, Bookbinding, etc.	37,043	31,287	5,952	5,233	3,261	7,764	90,540
XIII. Rubber	8,606	9,949	2,299	1,364	303	204	22,725
XIV. Musical Instruments	1,673	304	35	30	23	..	2,065
XV. Miscellaneous Products	11,736	11,881	545	930	331	162	25,585
<i>Total, Classes I. to XV.</i>	<i>559,973</i>	<i>440,343</i>	<i>115,861</i>	<i>108,071</i>	<i>58,095</i>	<i>36,495</i>	<i>1,318,838</i>
XVI. Heat, Light and Power	23,154	11,880	4,200	2,957	2,861	1,619	46,671
Grand Total	583,127	452,223	120,061	111,028	60,956	38,114	1,365,509

(ii) *Total and Averages, 1938-39 and 1949-50 to 1954-55.* The value of production and the amount per person employed and per head of population are shown in the following table. For Australia as a whole, the value of production per head of population increased from £29.34 per head in 1938-39 to £150.22 per head in 1954-55. For value per person employed, the increase was not quite so pronounced (from £360 per head in 1938-39 to £1,324 in 1954-55) owing to the considerable increase in the number of persons employed in 1954-55 as compared with 1938-39.

FACTORIES: VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE. (£'000.)							
1938-39	90,266	65,996	19,302	13,678	8,776	5,399	203,417
1949-50	283,201	219,244	61,354	52,353	26,044	19,336	661,532
1950-51	366,109	275,660	75,460	67,809	34,220	24,614	843,872
1951-52	443,391	334,360	91,330	83,246	42,746	29,794	1,024,867
1952-53	457,742	358,032	98,209	89,189	49,192	30,498	1,032,862
1953-54	520,043	408,314	110,255	100,221	55,147	33,065	1,227,045
1954-55	583,127	452,223	120,061	111,028	60,956	38,114	1,365,509
PER PERSON EMPLOYED. (£.)							
1938-39	395	327	357	315	378	391	360
1949-50	741	722	690	667	639	823	721
1950-51	900	870	798	817	782	1,033	871
1951-52	1,092	1,032	968	992	947	1,240	1,048
1952-53	1,204	1,152	1,055	1,108	1,089	1,298	1,160
1953-54	1,292	1,233	1,124	1,172	1,162	1,345	1,240
1954-55	1,389	1,305	1,197	1,240	1,236	1,497	1,324
PER HEAD OF POPULATION. (£.)							
1938-39	33.00	35.25	19.14	22.98	18.80	22.72	29.34
1949-50	89.28	101.02	52.75	76.22	47.72	69.71	82.18
1950-51	111.82	123.24	63.26	95.37	59.89	85.59	101.53
1951-52	132.12	145.28	74.79	114.14	72.31	99.79	120.02
1952-53	133.84	151.55	78.64	119.00	80.28	98.72	123.79
1953-54	152.70	168.53	84.78	127.50	87.44	106.85	137.86
1954-55	168.56	181.75	90.59	137.50	93.93	121.78	150.22

7. Value of Output and Cost of Production.—As the total value of the output for Australia for 1954-55 was recorded as £3,434,589,000, there remained, after payment of £1,940,698,000 for the value of the materials used, £781,640,000 for salaries and wages and £128,382,000 for power, fuel and light, a balance of £583,869,000 to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit. The following table gives corresponding particulars for each State for the year 1954-55:—

FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1954-55.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	Balance. (Output less Materials, Fuel and Wages.)(c)	Total Value of Output.
VALUE AND COST, ETC. (£'000.)					
New South Wales	802,617	60,925	326,615	256,512	1,446,669
Victoria	616,666	31,767	262,750	189,473	1,100,656
Queensland	224,336	11,620	68,300	51,761	356,017
South Australia	169,136	12,897	70,373	40,655	293,061
Western Australia	80,583	8,046	34,738	26,218	149,585
Tasmania	47,360	3,127	18,864	19,250	88,601
Australia	1,940,698	128,382	781,640	583,869	3,434,589

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.
 (b) Includes lubricants and water.
 (c) See paragraph preceding this table.

§ 9. Value of Land, Buildings, Plant and Machinery.

1. General.—The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1954-55:—

**FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1954-55.
(£'000.)**

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
Land and buildings	221,519	186,324	46,187	42,133	30,230	29,603	555,996
Plant and machinery	258,596	226,347	76,367	52,145	54,958	29,879	698,292
Total ..	480,115	412,671	122,554	94,278	85,188	59,482	1,254,288

(a) Includes estimated value of rented premises and plant.

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.

2. Value of Land and Buildings.—(i) *Total for Australia.* The following table shows for Australia as a whole, the approximate value of land and buildings occupied in connexion with manufacturing industries for 1938-39, and 1950-51 to 1954-55.

FACTORIES: VALUE OF LAND AND BUILDINGS(a), AUSTRALIA.
(£'000.)

Class of Industry.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
I. Treatment of Non-metalliferous						
Mine and Quarry Products ..	2,779	6,281	6,905	7,431	8,091	9,103
II. Bricks, Pottery, Glass, etc. ..	2,953	5,883	6,761	7,723	8,535	9,849
III. Chemicals, Dyes, Explosives,						
Paints, Oils, Grease ..	7,377	20,920	25,262	30,996	36,931	44,658
IV. Industrial Metals, Machines,						
Conveyances ..	34,841	97,021	117,513	137,724	159,325	184,934
V. Precious Metals, Jewellery, Plate	633	1,688	2,037	2,311	2,523	2,888
VI. Textiles and Textile Goods (not						
Dress) ..	6,000	18,004	20,845	22,482	25,443	29,651
VII. Skins and Leather (not Clothing						
or Footwear) ..	2,096	4,764	5,382	5,734	6,072	6,452
VIII. Clothing (except Knitted) ..	10,624	22,128	24,768	26,359	28,584	31,163
IX. Food, Drink and Tobacco ..	33,273	60,217	68,916	78,278	86,625	94,070
X. Sawmills, Joinery, Boxes, etc.,						
Wood Turning and Carving ..	4,107	11,680	14,505	16,361	18,297	21,225
XI. Furniture of Wood, Bedding, etc.	2,533	5,776	6,812	7,256	8,069	8,981
XII. Paper, Stationery, Printing, Book-						
binding, etc. ..	10,639	20,207	24,691	27,284	30,444	34,156
XIII. Rubber ..	1,676	3,792	4,620	5,530	6,668	7,430
XIV. Musical Instruments ..	105	387	380	398	468	528
XV. Miscellaneous Products ..	1,433	5,035	6,266	6,705	7,570	8,299
<i>Total, Classes I. to XV. ..</i>	<i>121,069</i>	<i>283,783</i>	<i>335,663</i>	<i>382,572</i>	<i>433,645</i>	<i>493,387</i>
XVI. Heat, Light and Power ..	9,851	19,002	23,827	31,874	49,786	62,609
Grand Total	130,920	302,785	359,490	414,446	483,431	555,996

(a) Includes estimated value of rented premises.

(ii) *In Classes of Industry in States, 1954-55.* The following table gives particulars of the various classes of industry in each State.

FACTORIES: VALUE OF LAND AND BUILDINGS(a), 1954-55.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous							
Mine and Quarry Products ..	3,868	2,696	737	613	595	594	9,103
II. Bricks, Pottery, Glass, etc. ..	4,751	2,295	685	810	1,129	179	9,849
III. Chemicals, Dyes, Explosives,							
Paints, Oils, Grease ..	19,138	16,973	1,123	2,415	4,127	882	44,658
IV. Industrial Metals, Machines,							
Conveyances ..	83,262	60,417	11,958	16,465	8,445	4,387	184,934
V. Precious Metals, Jewellery							
Plate ..	1,032	1,384	108	202	146	16	2,888
VI. Textiles and Textile Goods							
(not Dress) ..	10,365	16,845	653	815	471	502	29,651
VII. Skins and Leather (not Cloth-							
ing or Footwear) ..	2,546	2,643	312	583	193	175	6,452
VIII. Clothing (except Knitted) ..	13,765	11,779	2,219	1,607	1,410	383	31,163
IX. Food, Drink and Tobacco ..	31,073	29,951	15,337	7,808	6,308	3,593	94,070
X. Sawmills, Joinery, Boxes, etc.,							
Wood Turning and Carving ..	8,719	5,546	2,030	1,950	1,918	1,062	21,225
XI. Furniture of Wood, Bedding,							
etc. ..	3,441	2,954	1,011	682	695	198	8,981
XII. Paper, Stationery, Printing,							
Bookbinding, etc. ..	13,399	12,822	2,084	1,676	1,015	3,160	34,156
XIII. Rubber ..	3,055	2,857	774	377	254	113	7,430
XIV. Musical Instruments ..	357	134	5	11	21	..	528
XV. Miscellaneous Products ..	3,603	3,993	178	283	176	66	8,299
<i>Total, Classes I. to XV. ..</i>	<i>202,374</i>	<i>173,289</i>	<i>39,214</i>	<i>36,297</i>	<i>26,903</i>	<i>15,310</i>	<i>493,387</i>
XVI. Heat, Light and Power ..	19,145	13,035	6,973	5,836	3,327	14,233	62,609
Grand Total	221,519	186,324	46,187	42,133	30,230	29,603	555,996

(a) Includes estimated value of rented premises.

(iii) *Totals in each State.* The following table shows the value of land and buildings in each State for the years 1938-39 and 1949-50 to 1954-55 :—

FACTORIES : VALUE OF LAND AND BUILDINGS.(a)
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	57,353	42,026	12,299	8,711	6,814	3,717	130,920
1949-50 ..	110,597	84,124	20,806	24,317	11,055	8,650	259,549
1950-51 ..	130,468	101,326	23,958	23,303	13,380	10,350	302,785
1951-52 ..	153,662	119,465	28,610	28,507	16,747	12,499	359,490
1952-53 ..	176,576	135,324	34,720	31,904	20,960	14,962	414,446
1953-54 ..	196,724	158,389	40,003	36,579	24,739	26,997	483,431
1954-55 ..	221,519	186,324	46,187	42,133	30,230	29,603	555,996

(a) Includes estimated value of rented premises.

Prior to 1929-30, the increase in the value of land and buildings was uninterrupted, rising from £23 million in 1903 to £118 million in 1929-30, a growth of £95 million in 27 years. During the three years ended 1932-33, there was a decline of £12 million to £105.8 million, but since that year the value has risen annually and stood at £556.0 million in 1954-55.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1938-39 and 1950-51 to 1954-55.* The following table shows for Australia the approximate value of plant and machinery used in factories.

FACTORIES : VALUE OF PLANT AND MACHINERY(a), AUSTRALIA.
(£'000.)

Class of Industry.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
I. Treatment of Non-metalliferous						
Mine and Quarry Products ..	7,028	9,239	11,911	16,155	17,829	20,625
II. Bricks, Pottery, Glass, etc. ..	3,145	6,057	7,461	8,811	9,741	11,000
III. Chemicals, Dyes, Explosives,						
Paints, Oils, Grease ..	6,754	26,247	30,559	39,024	53,528	97,508
IV. Industrial Metals, Machines,						
Conveyances ..	33,038	90,801	112,940	131,857	148,178	168,651
V. Precious Metals, Jewellery, Plate ..	197	808	955	1,012	1,002	1,094
VI. Textiles and Textile Goods (not						
Dress) ..	6,657	21,218	23,973	25,030	27,567	29,658
VII. Skins and Leather (not Clothing						
or Footwear) ..	973	2,994	3,642	3,894	4,034	4,153
VIII. Clothing (except Knitted) ..	2,557	9,294	10,403	11,181	12,363	13,452
IX. Food, Drink and Tobacco ..	32,101	56,489	66,712	77,512	90,624	101,700
X. Sawmills, Joinery, Boxes, etc.,						
Wood Turning and Carving ..	3,908	12,614	15,869	17,851	19,002	21,827
XI. Furniture of Wood, Bedding, etc.	728	2,035	2,483	2,692	2,870	3,186
XII. Paper, Stationery, Printing, Book-						
binding, etc. ..	9,188	25,301	33,613	38,129	41,866	46,129
XIII. Rubber ..	1,368	3,456	4,171	4,875	5,677	6,843
XIV. Musical Instruments ..	12	227	302	305	458	444
XV. Miscellaneous Products ..	758	4,008	4,674	5,075	5,968	6,614
<i>Total, Classes I. to XV. ..</i>	<i>108,412</i>	<i>270,788</i>	<i>329,668</i>	<i>383,403</i>	<i>440,707</i>	<i>532,884</i>
XVI. Heat, Light and Power ..	35,250	65,827	80,476	110,131	140,008	165,408
Grand Total ..	143,662	336,615	410,144	493,534	580,715	698,292

(a) Includes estimated value of rented plant and machinery.

Except for the years 1930-31 to 1933-34, when decreases were recorded, there has been a continuous increase in the value of plant and machinery in factories in Australia. The increase in 1954-55 of £117.6 million over 1953-54 extended over all industrial classes. The greatest increase occurred in Class III., Chemicals, Dyes, Explosives, Paints, Oils, Grease.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the years 1938-39 and 1949-50 to 1954-55. During 1954-55 increases occurred in all States, Victoria showing the largest increase, £45.3 million.

FACTORIES : VALUE OF PLANT AND MACHINERY.(a)
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39	62,693	38,627	18,095	9,750	8,095	6,402	143,662
1949-50	113,864	92,748	28,904	24,901	11,457	13,728	285,602
1950-51	136,491	107,261	34,235	26,759	14,713	17,156	336,615
1951-52	166,437	128,934	41,290	32,177	20,716	20,590	410,144
1952-53	207,733	147,365	51,670	40,111	24,035	22,620	493,534
1953-54	233,022	181,058	64,160	46,788	28,195	27,492	580,715
1954-55	258,596	226,347	76,367	52,145	54,958	29,879	698,292

(a) Includes estimated value of rented plant and machinery.

(iii) *Value according to Class of Industry, 1954-55.* The following table shows the value of plant and machinery used in factories in each State during 1954-55 according to class of industry.

FACTORIES : VALUE OF PLANT AND MACHINERY(a), 1954-55.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	10,762	3,533	2,295	2,850	799	386	20,625
II. Bricks, Pottery, Glass, etc.	5,344	2,483	1,019	722	1,220	212	11,000
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	26,330	37,325	1,290	3,394	26,753	2,416	97,508
IV. Industrial Metals, Machines, Conveyances	90,535	44,967	8,478	16,499	5,274	2,898	168,651
V. Precious Metals, Jewellery, Plate	426	510	33	72	45	8	1,094
VI. Textiles and Textile Goods (not Dress)	10,151	17,079	936	472	353	667	29,658
VII. Skins and Leather (not Clothing or Footwear)	1,646	1,474	363	441	187	42	4,153
VIII. Clothing (except Knitted)	5,149	5,705	1,075	781	547	195	13,452
IX. Food, Drink and Tobacco	29,087	27,270	30,715	6,892	4,914	2,822	101,700
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	7,634	4,786	3,267	1,572	2,000	2,568	21,827
XI. Furniture of Wood, Bedding, etc.	1,119	1,010	411	315	255	76	3,186
XII. Paper, Stationery, Printing, Bookbinding, etc.	12,909	18,977	2,366	2,165	1,332	8,380	46,129
XIII. Rubber	2,669	3,040	550	360	146	78	6,843
XIV. Musical Instruments	356	81	3	1	3	..	444
XV. Miscellaneous Products	2,628	3,492	98	309	64	23	6,614
<i>Total, Classes I. to XV.</i>	<i>206,745</i>	<i>171,732</i>	<i>52,899</i>	<i>36,845</i>	<i>43,892</i>	<i>20,771</i>	<i>532,884</i>
XVI. Heat, Light and Power	51,851	54,615	23,468	15,300	11,066	9,108	165,408
Grand Total	258,596	226,347	76,367	52,145	54,958	29,879	698,292

(a) Includes estimated value of rented plant and machinery.

4. *Depreciation of Land and Buildings and Plant and Machinery, 1954-55.*—The following table shows the allowance made for the depreciation of land and buildings and plant and machinery used in connexion with the manufacturing industries in each State as recorded by factory proprietors at the annual census of factory production.

FACTORIES : ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, 1954-55.

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,300	363	220	297	129	25	2,334
II. Bricks, Pottery, Glass, etc. ..	591	287	144	69	131	29	1,251
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	2,657	2,499	188	391	1,575	432	7,742
IV. Industrial Metals, Machines, Conveyances ..	7,731	4,852	838	1,778	490	445	16,134
V. Precious Metals, Jewellery, Plate ..	29	50	2	5	2	..	88
VI. Textiles and Textile Goods (not Dress) ..	1,040	1,992	55	83	55	90	3,315
VII. Skins and Leather (not Clothing or Footwear) ..	108	117	24	37	17	2	305
VIII. Clothing (except Knitted) ..	464	420	81	50	45	20	1,080
IX. Food, Drink and Tobacco ..	2,613	2,994	2,407	596	448	234	9,292
X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving ..	699	533	284	173	194	162	2,045
XI. Furniture of Wood, Bedding, etc. ..	93	62	37	23	21	6	242
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,221	1,751	221	159	124	670	4,146
XIII. Rubber ..	624	548	148	60	16	10	1,406
XIV. Musical Instruments ..	42	7	..	..	..	..	49
XV. Miscellaneous Products ..	298	453	10	25	5	3	794
<i>Total, Classes I. to XV.</i>	<i>19,510</i>	<i>16,928</i>	<i>4,659</i>	<i>3,746</i>	<i>3,252</i>	<i>2,128</i>	<i>50,223</i>
XVI. Heat, Light and Power ..	3,725	190	1,019	476	636	215	6,261
Grand Total ..	23,235	17,118	5,678	4,222	3,888	2,343	56,484

5. Land and Buildings, Plant and Machinery—Values, Additions and Replacements, Depreciation, 1938-39 and 1949-50 to 1954-55.—The following table summarizes the recorded totals for Australia, in this section, and also includes particulars of additions and replacements.

FACTORIES : VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY, AUSTRALIA.

(£'000.)

Year.	Book Values as at 30th June.(a)		Additions and Replacements during year.		Depreciation allowed during year.	
	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.
1938-39 ..	130,920	143,662	5,578	17,781	1,911	8,736
1949-50 ..	259,549	285,602	18,551	59,562	2,983	25,906
1950-51 ..	302,785	336,615	26,710	81,003	3,859	33,006
1951-52 ..	359,490	410,144	37,702	96,370	3,634	30,479
1952-53 ..	414,446	493,534	48,006	119,790	4,683	33,039
1953-54 ..	483,431	580,715	55,668	128,453	5,673	41,524
1954-55 ..	555,996	698,292	58,311	170,762	6,568	49,916

(a) Includes estimated value of rented premises, plant and machinery.

§ 10. Principal Factory Products.

The monthly factory production of certain commodities is shown in the monthly and quarterly publications of this Bureau and in the Bulletin *Secondary Industries*.

The following table shows the total recorded production of some of the principal articles manufactured in Australia during the years ended 30th June, 1953 to 1955. A more complete list, together with values, where available, is published in the Bulletin *Secondary Industries*.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES : AUSTRALIA.

Article.	Unit of Quantity.	1952-53.	1953-54.	1954-55.
Acid—				
Nitric	Ton	8,693	11,501	11,777
Sulphuric	"	627,283	731,897	835,245
Aerated and Carbonated Waters	'000 gals.	53,221	56,624	59,648
Asbestos Cement Building Sheets	'000 sq. yds.	24,252	26,074	28,077
Bacon and Ham	Ton	34,254	33,651	35,188
Bags, Leather, Fibre, etc.—				
Handbags—				
Leather	No.	918,485	957,810	935,001
Plastic	"	512,158	470,379	575,085
Other	"	148,891	134,873	125,298
School Bags	"	136,186	137,316	104,993
Suitcases(a)	"	958,099	1,165,399	1,258,306
Trunks	"	2,161	2,902	1,348
All other	"	249,110	253,590	335,575
Baking Powder	lb.	775,982	771,227	701,395
Bath Heaters—				
Electric	No.	17,510	19,045	17,886
Gas	"	23,367	27,360	27,626
Solid Fuel	"	41,087	42,325	41,191
Bathing Suits	Doz.	135,743	156,509	222,473
Baths, C.I.P.E.	No.	64,720	89,387	117,414
Batteries, Wet Cell type	"	1,145,715	1,398,985	1,501,788
Beer (excluding Waste Beer)	'000 gals.	192,344	208,557	221,679
Biscuits	'000 lb.	148,278	150,475	150,816
Blankets	Pair	469,713	601,163	766,199
Boots, Shoes and Slippers (not Rubber)—				
Boots and Shoes	'000 pairs	16,492	18,582	17,901
Sandals	"	1,478	1,895	1,980
Slippers	"	6,982	8,632	7,324
Bran (Wheat)	Ton (2,000 lb.)	304,394	274,307	272,455
Brassieres	Doz.	329,745	416,889	404,893
Bricks, Clay	'000	667,055	801,998	838,579
Brooms	Gross	18,747	18,539	19,715
Brushes (b)	"	71,014	82,257	86,531
Butter	Ton	156,589	156,117	188,010
Candles	Cwt.	14,256	8,611	10,369
Cardigans, Sweaters, etc.	Doz.	700,566	996,701	1,029,250
Cement, Portland	Ton.	1,439,096	1,700,127	1,919,802
Cheese	"	46,592	49,043	45,178
Cigarettes	'000 lb.	13,879	18,303	22,859
Cleansing and Scouring Powders—				
Soap based	Cwt.	94,447	99,187	91,038
Other	"			43,823
Cloth—				
Cotton	'000 sq. yds.	25,716	33,618	34,424
Woolen and Worsted (c)	"	29,400	35,027	31,067
Coke—				
Metallurgical	Ton	1,858,428	2,010,404	2,046,790
Other	"	1,071,106	943,344	1,099,859
Confectionery—				
Chocolate	'000 lb.	58,961	62,599	56,902
Other	"	76,644	76,872	81,506
Coppers—				
Electric	No.	24,673	29,935	28,381
Gas	"	25,039	28,047	27,400
Inserts (all types)	"	79,407	85,300	86,487
Cordials and Syrups	'000 gals.	5,628	3,967	4,537
Corsets and Corselets	Doz.	122,262	155,408	141,265
Cosmetic Creams and Lotions—				
Face Creams	Cwt.	4,923	5,412	5,110
Hand Creams and Lotions	"	3,124	4,800	6,175
Other Skin Creams and Lotions	"	6,958	9,102	8,221
Custard Powder	'000 lb.	5,745	6,155	5,535
Cycles, Assembled	No.	75,414	85,063	91,307

(a) Includes Kitbags. (b) Excludes Tooth, and Industrial Metal and Bristle. (c) Includes Mixtures.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES :
AUSTRALIA—continued.

Article.	Unit of Quantity.	1952-53.	1953-54.	1954-55.
Dynamos—				
Alternators	No.	200	293	264
Generators	"	8,194	9,331	8,473
Electricity	Mill. kWh	12,045	13,707	15,172
Enamels, Natural and Synthetic	'000 gals.	2,108	2,698	3,642
Engines—				
Diesel, other than Marine	No.	4,919	3,787	2,668
Petrol—				
Marine	"	1,232	1,357	1,380
Other (a)	"	16,527	23,680	45,608
Essences, Flavouring—				
Domestic	Gal.	92,592	96,359	111,086
Industrial	"	198,092	245,812	278,348
Face Powder	Cwt.	2,898	3,396	4,336
Fans, Electric	No.	39,292	42,283	63,265
Fats, Edible—				
Dripping	Cwt.	426,010	357,802	367,517
Other	"	237,902	264,267	291,989
Fibrous Plaster Sheets	'000 sq. yds.	15,418	16,185	17,784
Fish, Tinned (including Fish Loaf)	'000 lb.	7,705	6,605	6,646
Floorboards—				
Australian Timber	'000 super. ft.	87,009	110,536	115,640
Imported Timber	"	3,943	3,845	4,474
Flour, Self-raising	Cwt.	1,105,835	1,116,278	1,102,480
Flour, Wheaten (b)	Ton (2,000 lb.)	1,726,300	1,609,058	1,553,019
Fruit Juices—Natural	'000 gals.	2,075	3,161	2,874
Gas	Mill, cubic ft.	40,722	42,100	43,465
Gloves—				
Dress—				
Leather	Doz. pairs	25,254	12,113	6,454
Other	"	90,397	112,892	58,749
Work, all types	"	158,733	214,596	269,408
Golf Clubs	Doz.	8,961	15,563	14,861
Handkerchiefs—				
Men's	"	979,959	1,234,162	1,438,896
Women's	"	882,164	1,538,067	1,375,669
Hats and Caps	"	510,402	530,521	510,382
Hose, Rubber—Garden	'000 lin. ft.	7,419	5,420	5,071
Other	"	5,994	7,111	9,716
Plastic—Garden	"	15,507	29,887	24,893
Ice	Ton	960,034	877,803	766,557
Ice Cream	'000 gals.	13,425	13,678	14,796
Iron and Steel—				
Pig Iron	'000 tons	1,692	1,827	1,869
Steel Ingots	"	1,801	2,117	2,209
Blooms and Billets	"	1,688	1,921	1,953
Irons, Electric (Hand, Domestic)	No.	179,842	229,910	278,777
Jams	'000 lb.	77,521	85,687	81,699
Jelly Crystals	"	9,553	11,028	11,799
Kalsomine	"	3,787	3,396	3,089
Lacquer, Clear and Colours	Gal.	1,012,782	1,306,661	1,476,489
Lard	Cwt.	41,266	40,973	40,472
Lawn Mower—				
Electric	No.	12,849	21,922	25,418
Petrol	"	5,614	9,849	29,423
Hand	"	54,186	85,867	106,005
Leather—				
Dressed from Hides	'000 sq. ft.	46,541	50,733	48,796
Dressed from Skins	"	22,561	26,811	26,376
Harness, Skirt, etc.	'000 lb.	1,607	1,546	1,433
Sole and Belting	"	38,298	38,675	35,001
Upholstery	'000 sq. ft.	10,343	13,097	12,032
Lime—Agricultural	Ton	99,883	108,746	111,170
Hydrated	"	36,877	44,047	48,644
Quick	"	119,731	123,774	128,639
Linseed Oil—extracted from Local Crushing	'000 gals.	1,475	338	438
from treatment of Unrefined	"	1,911	3,946	5,539
Lubricating Oil	"	11,290	14,241	16,084

(a) Excludes Motor Car, Motor Cycle, Tractor and Aero Engines. Baking and Sharps.

(b) Includes Wheatmeal for

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES :
AUSTRALIA—continued.

Article.	Unit of Quantity.	1952-53.	1953-54.	1954-55.
Malt, Barley	'000 bus.	6,620	7,078	7,517
Margarine—				
Table	'000 lb.	15,856	21,866	21,972
Other	"	49,337	49,939	49,171
Mattresses—Wire	No.	238,527	262,930	315,741
Inner Spring	"	329,604	418,811	476,395
Soft Filled, etc.	"	349,426	367,116	380,465
Meat, Tinned	'000 lb.	209,376	161,113	165,394
Milk—				
Concentrated (Whole)	"	32,465	43,599	22,560
Condensed	"	124,063	94,944	86,225
Powdered (Whole) (a)	"	72,654	68,643	59,269
Mops, Floor	Gross	9,658	11,964	13,914
Motor Bodies made	No.	90,767	114,878	127,709
Motor Spirit (including Benzol)	'000 gals.	106,793	182,319	412,955
Motors, Electric	No.	601,659	972,887	1,182,981
Nails	Ton	18,392	22,008	24,214
Neckties	Doz.	522,590	588,730	491,455
Newsprint	Ton	34,010	60,406	73,608
Oatmeal (including Rolled Oats)	Cwt.	381,237	400,095	322,985
Paint—Oil	'000 gals.	4,300	5,180	6,098
Water	'000 lb.	24,846	31,930	28,955
Peanut Butter and Paste	"	3,419	4,313	4,627
Perambulators	No.	131,699	153,048	155,433
Pickles	'000 pints	7,388	6,896	6,765
Pigments—Colours ground in oil.. .. .	Cwt.	18,028	19,047	17,592
Zinc Oxide	"	87,260	172,807	184,853
White Lead	"	68,284	337,794	389,185
Other, including Dry Colours	"	204,684		
Plywood, $\frac{1}{2}$ inch basis	'000 sq. ft.	115,728	161,581	186,604
Pollard	Ton (2,000 lb.)	369,243	335,890	315,028
Preserves—				
Fruit Preserved (b)	'000 lb.	228,379	338,562	319,235
Vegetables Preserved	"	66,306	40,265	51,116
Pyjamas—				
Men's and Boys' (Suits only)	Doz.	180,147	273,423	339,556
Women's and Girls' (inc. Nightdresses)	"	289,104	322,010	343,464
Racquet Frames (all types)	"	17,391	22,224	18,361
Refrigerators—Commercial	No.	1,127	1,442	1,656
Domestic	"	182,134	274,487	280,577
Rice (Cleaned)	Cwt.	718,556	904,207	916,702
Ropes and Cables (excluding Wire)	"	105,519	115,182	125,727
Sauce	'000 pints	25,977	25,770	28,526
Sausage Casings	Cwt.	65,352	61,205	72,377
Semolina	"	109,253	108,382	103,553
Shirts (Men's and Boys')	Doz.	881,447	1,240,069	1,410,573
Sink Heaters	No.	20,565	24,907	23,799
Soap—				
Household	Cwt.	593,201	568,754	534,939
Flakes and Chips (c)	"	76,601	77,406	79,952
Industrial (including Wool Scouring Soap)	"	84,173	99,983	117,174
Sand	"	28,982	22,045	24,312
Toilet and Hand	"	272,630	300,248	329,748
Shaving, (including Sticks and Creams)	"	7,095	7,076	7,218
Soft	"	14,512	18,954	25,522
Liquid	"	124,098	144,215	175,503
Shampoo	"	7,561	8,547	5,775
Soap Extracts and Powders	"	885,158	890,241	994,889
Socks and Stockings—				
Men's	Doz. pairs	1,574,846	1,894,936	1,664,072
Women's	"	2,337,332	2,793,050	3,016,671
Children's	"	422,406	570,167	531,816
Soup (Tinned)	'000 pints	22,621	25,509	27,616
Spades and Shovels	Doz.	21,821	25,322	32,058
Starch—Edible	Cwt.	312,188	334,298	357,557
Indible	"	70,385	90,339	92,004
Steel, Structural, Fabricated	Ton	130,029	135,057	166,779
Stoves, Ovens and Ranges—				
Domestic Cooking—				
Electric (d)	No.	63,385	81,508	85,589
Gas	"	35,731	43,040	58,758
Solid Fuel	"	47,033	50,376	49,758
Sugar—Raw (94 net titre)	Ton	948,886	1,254,387	1,327,546
Refined	"	440,326	449,015	481,639
Sulphate of Ammonia	"	70,174	70,811	78,434
Superphosphate	"	1,581,001	1,771,196	1,960,605

(a) Includes Malted Milk and Infants' and Invalids' Foods. (b) Includes Canned Apple, all types. (c) Includes industrial flakes and chips. (d) Includes Stovettes, Cookers, etc.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES :
AUSTRALIA—*continued.*

Article.	Unit of Quantiv.	1952-53.	1953-54.	1954-55.
Talcum Powder	Cwt.	24,637	30,183	30,454
Tallow—				
Edible	"	317,722	388,222	507,477
Inedible	"	1,120,308	1,101,114	1,126,770
Tiles, Roofing—				
Cement	'000	46,934	44,651	53,720
Terracotta	"	57,977	63,782	63,934
Timber—				
From Native Logs—				
Hardwood	'000 super. ft.	1,115,423	1,157,124	1,184,992
Softwood	"	224,374	242,974	264,296
From Imported Logs—				
Hardwood	"	13,588	20,627	28,748
Softwood	"	117,815	156,909	156,037
Toasters, Electric (Domestic)	No.	22,334	23,400	21,466
Tobacco	'000 lb.	1,863,640	622,314	1,237,714
Tomato Juice	Gal.	626,672	659,987	666,403
Towels	Doz.	3,250	2,949	3,099
Transformers and Converters—				
Above 20 k.v.a.	No.	207,084	309,901	386,517
Below 20 k.v.a.	"	86,465	107,629	116,059
Twine (all types)	Cwt.	1,288,352	2,214,041	2,737,172
Tyres, Pneumatic—				
Motor Car and Motor Cycle	No.	329,848	509,663	587,739
Truck and Omnibus	"	75,834	165,868	190,365
All Other (excl. Bicycle)	"	338,548	430,422	478,144
Umbrellas	'000 doz.	3,243	4,239	4,328
Underwear				
Vacuum Cleaners (Domestic)	No.	38,398	57,275	59,968
Varnishes	'000 gals.	2,930	3,135	3,188
Washing Machines, Household, Electric	No.	91,384	146,259	166,312
Weatherboards—				
Australian Timber	'000 super. ft.	20,944	24,880	23,529
Imported Timber	"	3,003	3,271	3,264
Wheatmeal(a)	Ton (2,000 lb.)	88,101	137,732	128,863
Wheelbarrows (Metal)	No.	62,364	78,874	84,631
Wireless—				
Cabinets—				
Wood	No.	55,044	85,061	86,210
Other	"	190,098	304,452	310,684
Receiving Sets	"	298,955	437,513	453,020
Wool Scoured—				
For Sale	'000 lb.	37,348	40,536	40,994
For use in own works	"	29,218	38,246	37,610
On Commission	"	57,479	57,785	57,643
Wool Tops	"	26,467	32,755	30,886
Yarn(b)				
Cotton	"	27,611	38,101	41,493
Woollen	"	15,468	19,868	19,790
Worsted	"	20,141	26,076	22,897
Zinc Oxide (<i>See</i> Pigments)				

(a) Excludes Wheatmeal for Baking included with Flour.
of the fibre mentioned.

(b) Including mixtures predominantly

§ 11. Individual Industries.

1. General.—Particulars in pages 206-233, §§ 2-9 afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this work, to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour and capital or for other features of special interest. Where there are only one or two establishments in a particular industry in the State or the Commonwealth, details of activities are not published, but are combined with some other factory group so that operations of individual concerns will not be disclosed.

The statistics in the following tables should be read in the light of the following definitions.

Factory. A factory is taken to be a manufacturing establishment in which four or more persons are employed or in which power, other than manual, is used.

Average Number of Persons Employed. All persons employed in the manufacturing activities of a factory are counted as factory employees, including working proprietors and "out-workers". The average number of persons employed means, in general, the average number over the whole year and not the average over the period worked.

Value of Materials Used. This item includes the value, in the usual sense, of the materials used, stores used, containers, tools replaced, and materials used in repairs to plant.

Value of Fuel, etc., Used. This item includes also the cost of power and light used, of lubricants and of water.

Value of Output. The amounts given under this heading represent the selling value, at the factory, of goods made or processed during the year, including by-products, also the value of other work done.

Value of Production. The value of production is obtained by deducting "Value of materials used" and "Value of fuel used", as defined above, from the "Value of output". This method of valuing factory production has been adopted by the Statistical offices throughout Australia.

Rated Horse-power of Engines Used. Statistics of power used in factories other than Central Electric Stations relate to the "rated horse-power" of engines ordinarily in use.

For more detailed definitions see § 1, par. 6 of this chapter, page 203.

Details of some of the principal articles produced in factories in Australia during the years 1952-53 to 1954-55 are shown in the table in the preceding pages (§ 10).

2. **Portland Cement and Cement Goods.**—The manufacture of Portland Cement and Cement goods is an important industry included in Class I. Particulars for the three industries under this general heading are shown for 1954-55 and for a series of years in the following table.

PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT GOODS.

AUSTRALIA, 1954-55.

Items.	Portland Cement.	Asbestos Cement Sheets and Mouldings.	Other Cement Goods.	Total.
Number of factories	14	15	451	480
Number of persons employed	2,925	2,661	4,858	10,444
Salaries and wages paid £	2,653,339	2,255,703	3,794,960	8,704,002
Value of power, fuel, etc., used £	4,058,476	230,419	156,380	4,445,275
Value of materials used £	5,711,625	5,284,529	8,421,748	19,417,902
Value of production £	6,323,394	3,822,882	6,862,386	17,008,662
Total value of output £	16,093,495	9,337,830	15,440,514	40,871,839
Value of land and buildings £	1,918,009	980,476	1,827,672	4,726,157
Value of plant and machinery £	9,601,988	1,317,423	2,288,407	13,207,818
Horse-power of engines ordinarily in use .. h.p.	72,330	10,311	13,229	95,870

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	132	526	559	504	479	480
Number of persons employed	3,932	9,192	9,851	9,352	9,304	10,444
Salaries and wages paid £'000	897	4,860	6,469	6,942	7,435	8,704
Value of power, fuel, etc., used £'000	562	1,794	2,418	3,436	3,950	4,445
Value of materials used £'000	1,542	9,025	12,698	14,303	16,013	19,418
Value of production £'000	2,385	8,635	11,169	12,197	14,198	17,009
Total value of output £'000	4,489	19,454	26,285	29,936	34,161	40,872
Value of land and buildings £'000	1,350	3,250	3,466	3,890	4,206	4,726
Value of plant and machinery £'000	2,516	4,691	6,455	10,018	10,796	13,208
Horse-power of engines ordinarily in use h.p.	39,617	75,584	81,691	91,880	89,260	95,870

3. **Chemicals, Drugs and Medicines.**—In 1945-46, the classification of factories was amended to provide for the separate tabulation of factories engaged in the production of Industrial and Heavy Chemicals and Acids and those engaged in producing Pharmaceutical and Toilet Preparations, which previously had been combined. Details for each of these industries are given in the next two tables for 1954-55 with comparative figures for previous years. However, it should be noted that in order to avoid the publication of confidential information, particulars relating to Industrial and Heavy Chemicals include details for the Explosives industry.

INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS (INCLUDING EXPLOSIVES).
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	133	76	16	9	13	1	248
Number of persons employed ..	5,519	6,155	292	760	(a)	(a)	13,032
Salaries and wages paid .. £	5,330,399	5,318,300	226,046	715,056	(a)	(a)	11,832,853
Value of power, fuel, etc., used .. £	1,662,885	705,714	51,081	535,783	(a)	(a)	3,043,157
Value of materials used .. £	16,935,337	10,300,588	347,289	1,011,154	(a)	(a)	29,003,829
Value of production .. £	12,328,794	9,760,031	487,831	2,065,659	(a)	(a)	25,095,500
Total value of output .. £	30,927,016	20,766,333	886,201	3,612,596	(a)	(a)	57,142,486
Value of land and buildings .. £	7,493,046	5,622,634	124,967	703,321	(a)	(a)	14,189,703
Value of plant and machinery .. £	15,058,949	8,209,674	168,624	1,661,529	(a)	(a)	25,606,607
Horse-power of engines ordinarily in use h.p.	41,958	44,078	1,774	4,404	(a)	(a)	95,188

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	165	207	219	229	234	248
Number of persons employed ..	10,228	10,615	11,504	11,253	11,765	13,032
Salaries and wages paid .. £'000	3,450	6,243	8,539	8,928	9,907	11,833
Value of power, fuel, etc., used .. £'000	618	1,546	2,110	2,210	2,757	3,043
Value of materials used .. £'000	6,007	16,857	21,097	19,538	25,158	29,004
Value of production .. £'000	6,627	13,373	17,180	16,879	20,643	25,095
Total value of output .. £'000	13,252	31,776	40,387	38,627	48,558	57,142
Value of land and buildings .. £'000	11,697	7,770	8,828	11,923	13,389	14,190
Value of plant and machinery .. £'000	10,964	11,043	12,507	19,612	23,573	25,607
Horse-power of engines ordinarily in use h.p.	69,399	74,613	76,890	85,254	90,807	95,188

(a) Not available for publication ; included in total for Australia.

PHARMACEUTICAL AND TOILET PREPARATIONS.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	122	64	5	13	3	3	210
Number of persons employed ..	3,164	2,359	113	491	(a)	(a)	6,233
Salaries and wages paid .. £	2,084,279	1,755,315	55,008	301,920	(a)	(a)	4,255,152
Value of power, fuel, etc., used .. £	79,359	113,215	1,172	25,701	(a)	(a)	222,536
Value of materials used .. £	6,540,051	4,775,725	217,760	1,076,493	(a)	(a)	12,729,164
Value of production .. £	9,485,541	4,035,017	186,907	481,426	(a)	(a)	14,380,127
Total value of output .. £	16,104,951	8,923,957	405,839	1,583,620	(a)	(a)	27,331,827
Value of land and buildings .. £	2,546,994	2,972,838	34,243	316,393	(a)	(a)	6,022,348
Value of plant and machinery .. £	918,515	1,025,863	15,715	139,129	(a)	(a)	2,128,696
Horse-power of engines ordinarily in use h.p.	4,200	7,697	82	1,401	(a)	(a)	13,592

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	215	201	208	206	208	210
Number of persons employed ..	5,514	5,538	6,149	5,363	6,012	6,233
Salaries and wages paid .. £'000	1,699	2,423	3,433	3,468	3,898	4,255
Value of power, fuel, etc., used .. £'000	57	91	150	197	238	223
Value of materials used .. £'000	5,402	8,291	9,877	9,784	12,017	12,729
Value of production .. £'000	4,790	8,985	10,314	10,188	12,969	14,380
Total value of output .. £'000	10,249	17,367	20,341	20,169	25,224	27,332
Value of land and buildings .. £'000	1,534	1,963	3,332	3,931	4,755	6,022
Value of plant and machinery .. £'000	598	823	1,286	1,569	1,793	2,129
Horse-power of engines ordinarily in use h.p.	6,324	8,357	10,618	12,238	12,777	13,592

(a) Not available for publication ; included in the total for Australia.

4. White Lead, Paints and Varnish.—The following table shows particulars of this industry for each State during 1954-55 and for Australia for a series of years.

WHITE LEAD, PAINTS AND VARNISH.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	78	56	17	14	8	2	175
Number of persons employed ..	2,970	1,409	309	533	(a)	(a)	5,322
Salaries and wages paid .. £	2,687,591	1,213,563	228,010	430,327	(a)	(a)	4,636,159
Value of power, fuel, etc., used .. £	260,726	73,816	15,079	21,975	(a)	(a)	375,874
Value of materials used .. £	11,214,144	5,912,701	1,579,801	2,353,764	(a)	(a)	21,553,319
Value of production £	6,298,349	3,312,759	981,304	1,145,518	(a)	(a)	11,980,220
Total value of output £	17,773,219	9,299,276	2,576,184	3,521,257	(a)	(a)	33,909,413
Value of land and buildings .. £	2,339,575	1,646,366	242,735	640,569	(a)	(a)	5,089,428
Value of plant and machinery .. £	1,180,025	1,160,386	157,765	343,790	(a)	(a)	2,891,781
Horse-power of engines ordinarily in use h.p.	13,236	7,407	1,311	1,602	(a)	(a)	24,178

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	102	154	158	175	174	175
Number of persons employed ..	2,271	4,985	5,141	4,622	4,934	5,322
Salaries and wages paid .. £'000	535	2,784	3,378	3,346	3,757	4,636
Value of power, fuel, etc., used .. £'000	45	229	303	258	337	376
Value of materials used £'000	2,275	14,157	16,623	14,657	18,603	21,553
Value of production £'000	1,585	7,010	8,112	8,583	9,891	11,980
Total value of output £'000	3,905	21,396	25,038	23,498	28,831	33,909
Value of land and buildings .. £'000	761	2,831	3,213	3,669	4,066	5,089
Value of plant and machinery .. £'000	324	1,548	1,842	2,113	2,230	2,892
Horse-power of engines ordinarily in use h.p.	7,696	19,875	21,412	22,769	22,719	24,178

(a) Not available for publication ; figures are included in the total for Australia.

5. Soap and Candle Factories.—The following table shows particulars of factories in the Soap and Candle industry in each State for 1954-55 and for Australia for a series of years :—

SOAP AND CANDLES.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	43	29	8	5	3	3	91
Number of persons employed ..	1,768	716	268	132	(a)	(a)	2,962
Salaries and wages paid .. £	1,631,295	614,093	185,605	107,567	(a)	(a)	2,588,603
Value of power, fuel, etc., used .. £	182,031	200,980	18,367	11,783	(a)	(a)	419,959
Value of materials used £	6,634,817	4,135,203	589,095	309,929	(a)	(a)	11,940,793
Value of production £	4,743,001	2,018,355	431,418	132,457	(a)	(a)	7,424,909
Total value of output £	11,559,849	6,354,538	1,038,880	454,169	(a)	(a)	19,785,661
Value of land and buildings .. £	543,099	828,627	111,715	76,507	(a)	(a)	1,619,011
Value of plant and machinery .. £	1,009,216	1,415,504	137,051	58,222	(a)	(a)	2,652,554
Horse-power of engines ordinarily in use h.p.	4,521	2,507	866	537	(a)	(a)	8,676

(a) Not available for publication ; figures are included in the total for Australia.

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	65	93	88	89	89	91
Number of persons employed ..	2,620	3,502	3,440	3,028	3,058	2,962
Salaries and wages paid .. £'000	501	1,974	2,555	2,460	2,544	2,589
Value of power, fuel, etc., used .. £'000	76	353	453	475	427	420
Value of materials used £'000	1,568	6,330	8,384	8,846	10,214	11,941
Value of production £'000	1,886	4,609	4,638	6,324	6,732	7,425
Total value of output £'000	3,530	11,292	13,475	15,645	17,373	19,786
Value of land and buildings .. £'000	666	1,200	1,301	1,487	1,565	1,619
Value of plant and machinery .. £'000	577	1,341	1,693	1,985	2,244	2,653
Horse-power of engines ordinarily in use h.p.	5,267	7,447	8,769	8,606	8,795	8,676
Materials used—						
Tallow cwt.	535,511	1,123,895	1,134,935	1,024,772	1,120,828	1,151,146
Alkali for Soap (a) .. cwt.	194,869	343,378	403,241	386,176	377,451	421,401
Coconut oil—refined and unrefined .. cwt.	138,954	91,404	113,203	95,825	86,576	93,498
Articles produced—						
Soap (b) cwt.	978,113	1,365,669	1,304,987	1,208,853	1,247,228	1,300,143
Soap Extracts and Powders .. cwt.	191,232	754,758	929,310	885,158	890,241	994,889
Candles made	28,649	12,871	16,931	14,256	8,611	10,369

(a) Includes Soda Ash. (b) Soap made in all factories including those not classified as " Soap and Candle " factories.

NOTE.—Preliminary figures of production in 1955-56 were Soap, 1,298,000 cwt. ; Soap Extracts and Powders, 889,000 cwt.

6. **Chemical Fertilizers.**—The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1954–55 and for Australia for a series of years. Details of the consumption, imports and exports of fertilizers will be found in Chapter XXII.—Agricultural Production.

CHEMICAL FERTILIZERS.
1954–55.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	15	9	8	7	6	8	53
Number of persons employed ..	1,043	1,387	(a)	868	1,004	(a)	4,735
Salaries and wages paid .. £	978,339	1,355,529	(a)	789,653	874,866	(a)	4,372,273
Value of power, fuel, etc., used .. £	406,286	194,929	(a)	83,499	141,461	(a)	852,150
Value of materials used .. £	3,755,794	6,616,382	(a)	3,706,932	4,882,795	(a)	21,519,074
Value of production .. £	1,957,834	2,868,270	(a)	1,278,472	1,944,004	(a)	8,794,215
Total value of output .. £	6,119,914	9,679,581	(a)	5,068,903	6,968,260	(a)	31,165,439
Value of land and buildings .. £	2,466,348	769,774	(a)	501,896	1,817,357	(a)	6,512,111
Value of plant and machinery .. £	2,708,966	1,157,073	(a)	995,801	2,253,581	(a)	9,269,940
Horse-power of engines ordinarily in use .. h.p.	15,362	13,683	(a)	6,814	7,533	(a)	47,595

AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54	1954–55.
Number of factories ..	36	49	49	51	51	53
Number of persons employed ..	2,540	4,012	4,325	4,483	4,531	4,735
Salaries and wages paid .. £'000	601	2,540	3,361	3,759	3,988	4,372
Value of power, fuel, etc., used .. £'000	114	440	589	786	842	852
Value of materials used .. £'000	3,231	14,014	20,297	21,100	20,521	21,519
Value of production .. £'000	1,600	4,312	5,998	7,255	8,109	8,794
Total value of output .. £'000	4,945	18,766	26,884	29,141	29,472	31,165
Value of land and buildings .. £'000	1,449	3,900	4,244	4,794	6,067	6,512
Value of plant and machinery .. £'000	2,353	5,418	5,804	6,218	8,067	9,270
Horse-power of engines ordinarily in use .. h.p.	18,165	36,274	38,220	39,850	41,644	47,595

(a) Not available for publication; figures are included in the total for Australia.

7. **Iron and Steel Works and Engineering.**—(i) *General.* In 1945–46, the classification of factories was amended to provide for the tabulation in four separate groups of those industries previously included under Iron and Steel, and Engineering. The first group (Smelting, Converting, Refining and Rolling of Iron and Steel) covers blast furnaces, steel works and rolling mills. The second group, Foundries (Ferrous), covers those engaged in the founding of iron and steel. The third group (Plant, Equipment and Machinery including Machine Tools) covers those industries engaged in the production of boilers, engines, machines and machinery, machine tools, structural steel fabrications, steel furniture, etc. The fourth group (Other Engineering) includes jobbing and general engineers, not elsewhere included.

(ii) *Smelting, Converting, Refining and Rolling of Iron and Steel.* In the following table particulars are shown for each State for 1954–55 and for Australia in selected years for the group Smelting, Converting, Refining and Rolling of Iron and Steel.

SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL.
1954–55.

Items.	N.S.W.	Victoria.	Qld.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	18	11	..	3	1	..	33
Number of persons employed ..	16,102	1,421	..	(a)	(a)	..	17,842
Salaries and wages paid .. £	16,588,476	1,334,971	..	(a)	(a)	..	18,237,786
Value of power, fuel, etc., used .. £	13,635,091	293,813	..	(a)	(a)	..	15,669,815
Value of materials used .. £	93,356,959	1,147,385	..	(a)	(a)	..	94,928,434
Value of production .. £	31,600,732	1,759,507	..	(a)	(a)	..	34,381,181
Total value of output .. £	138,592,782	3,200,705	..	(a)	(a)	..	144,979,430
Value of land and buildings .. £	5,989,980	579,085	..	(a)	(a)	..	6,614,927
Value of plant and machinery .. £	25,429,949	736,643	..	(a)	(a)	..	26,394,485
Horse-power of engines ordinarily in use .. h.p.	327,354	9,180	..	(a)	(a)	..	339,135

AUSTRALIA.

Items.	1945–46.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories ..	27	30	30	32	33	33
Number of persons employed ..	10,413	13,419	14,192	16,188	16,688	17,842
Salaries and wages paid .. £'000	4,164	9,245	11,904	14,455	15,609	18,238
Value of power, fuel, etc., used .. £'000	2,777	7,896	11,186	14,085	15,430	15,670
Value of materials used .. £'000	19,134	40,580	53,342	76,983	88,802	94,928
Value of production .. £'000	7,393	16,594	20,311	27,336	27,995	34,381
Total value of output .. £'000	29,304	65,070	84,839	118,404	132,227	144,979
Value of land and buildings .. £'000	2,197	3,259	4,064	5,278	6,508	6,615
Value of plant and machinery .. £'000	5,669	9,191	14,992	20,753	24,279	26,394
Horse-power of engines ordinarily in use .. h.p.	198,317	216,617	218,857	248,440	287,618	339,135

(a) Not available for publication; figures are included in the total for Australia.

Particulars of the production of pig-iron and steel will be found in Chapter XXVII.—Mineral Industry.

(iii) *Foundries (Ferrous)*. Particulars covering those industries classified as founding of iron and steel are shown for each State for 1954-55 and for Australia in selected years in the following table :—

FOUNDRIES—FERROUS.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	90	216	22	24	16	..	368
Number of persons employed ..	2,830	2,693	627	541	408	..	7,099
Salaries and wages paid .. £	2,486,051	2,330,830	474,998	492,609	331,568	..	6,116,056
Value of power, fuel, etc., used .. £	302,073	264,684	39,977	99,227	90,158	..	796,119
Value of materials used .. £	1,930,099	1,820,062	483,680	377,716	269,722	..	4,881,279
Value of Production .. £	3,372,203	3,505,676	782,380	825,466	497,060	..	8,982,785
Total value of output .. £	5,604,375	5,590,422	1,306,037	1,302,409	856,940	..	14,660,183
Value of land and buildings .. £	943,107	998,868	357,620	197,126	126,512	..	2,623,233
Value of plant and machinery .. £	925,939	727,248	329,432	234,249	125,279	..	2,342,147
Horse-power of engines ordinarily in use .. h.p.	10,088	8,424	2,669	2,840	2,430	..	26,451

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	312	358	365	373	357	368
Number of persons employed ..	5,344	7,198	7,243	6,584	6,611	7,099
Salaries and wages paid .. £'000	1,612	4,134	5,252	4,989	5,129	6,116
Value of power, fuel, etc., used ..	161	475	633	642	702	796
Value of materials used .. £'000	1,210	3,262	4,331	4,026	4,057	4,881
Value of production .. £'000	2,341	6,024	7,622	7,337	7,469	8,983
Total value of output .. £'000	3,712	9,761	12,586	12,005	12,228	14,660
Value of land and buildings .. £'000	988	1,570	1,736	2,144	2,299	2,623
Value of plant and machinery .. £'000	619	1,357	1,574	1,923	2,123	2,342
Horse-power of engines ordinarily in use h.p.	13,381	23,976	25,107	24,467	25,415	26,451

(iv) *Plant, Equipment and Machinery (including Machine Tools)*. The next table shows particulars for this group for each State during 1954-55 and for Australia in selected years.

PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS).
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	999	612	122	153	91	3	1,980
Number of persons employed ..	24,849	21,907	6,009	8,824	2,841	158	64,588
Salaries and wages paid .. £	21,530,556	18,886,946	4,343,646	7,450,964	2,210,155	138,945	54,561,212
Value of power, fuel, etc., used .. £	909,665	763,583	193,889	409,862	99,273	1,791	2,378,063
Value of materials used .. £	32,426,784	28,152,229	5,188,549	11,702,059	2,839,054	153,401	80,462,076
Value of production .. £	34,238,407	31,205,243	6,365,523	11,620,605	3,455,883	154,344	87,040,005
Total value of output .. £	67,574,856	60,121,055	11,747,961	23,732,526	6,394,210	309,536	169,880,144
Value of land and buildings .. £	12,246,287	10,426,064	1,346,032	2,860,621	1,649,266	158,293	28,686,563
Value of plant and machinery .. £	9,401,386	9,058,072	1,322,478	2,368,460	1,281,480	115,737	23,547,613
Horse-power of engines ordinarily in use .. h.p.	80,207	69,685	16,509	24,645	10,078	502	201,626

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	1,038	1,555	1,684	1,787	1,911	1,980
Number of persons employed ..	46,123	60,990	64,066	60,140	60,840	64,588
Salaries and wages paid .. £'000	14,259	35,215	45,434	45,414	47,620	54,561
Value of power, fuel, etc., used .. £'000	605	1,434	1,937	2,095	2,219	2,378
Value of materials used .. £'000	16,455	53,040	68,943	63,134	68,288	80,462
Value of production .. £'000	21,044	55,934	71,810	70,790	75,997	87,040
Total value of output .. £'000	38,104	110,408	142,690	136,019	146,504	169,880
Value of land and buildings .. £'000	7,227	15,904	19,383	22,332	25,259	28,687
Value of plant and machinery .. £'000	7,046	14,968	17,870	19,784	21,335	23,548
Horse-power of engines ordinarily in use h.p.	101,810	205,736	196,664	197,031	198,300	201,626

(v) *Other Engineering*. Details covering jobbing and general engineering works not elsewhere included are shown for each State for 1954-55 and for Australia in selected years in the following table.

OTHER ENGINEERING.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	735	822	148	175	151	97	2,128
Number of persons employed ..	5,970	9,416	1,550	3,060	889	1,655	22,540
Salaries and wages paid .. £	4,545,090	7,600,383	980,280	2,481,401	574,258	1,309,847	17,491,259
Value of power, fuel, etc., used .. £	167,653	246,037	30,502	83,380	30,138	41,943	599,653
Value of materials used .. £	5,023,404	9,605,912	1,017,711	13,103,048	680,449	1,403,316	20,833,840
Value of production .. £	7,516,721	12,453,824	1,533,938	3,577,338	1,007,810	1,935,128	28,024,759
Total value of output .. £	12,707,778	22,305,773	2,582,151	6,763,766	1,718,397	3,380,387	49,458,252
Value of land and buildings .. £	3,044,019	4,769,125	547,138	1,666,838	495,113	767,125	11,289,558
Value of plant and machinery .. £	2,108,093	3,684,613	475,749	1,047,491	274,757	479,324	8,070,027
Horse-power of engines ordinarily in use .. h.p.	15,719	29,507	3,994	8,616	3,009	5,561	66,406

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	963	1,627	1,853	1,975	2,041	2,128
Number of persons employed ..	13,112	18,487	20,398	20,005	20,981	22,540
Salaries and wages paid .. £'000	3,634	9,495	13,124	13,804	15,100	17,491
Value of power, fuel, etc., used .. £'000	162	291	413	460	530	599
Value of materials used .. £'000	3,599	9,855	14,268	14,041	16,427	20,834
Value of production .. £'000	5,432	15,323	20,681	21,551	23,755	28,025
Total value of output .. £'000	9,193	25,469	35,362	36,052	40,712	49,458
Value of land and buildings .. £'000	2,369	5,089	7,021	8,285	9,900	11,289
Value of plant and machinery .. £'000	2,091	4,098	5,434	6,366	7,044	8,070
Horse-power of engines ordinarily in use .. h.p.	26,095	47,396	56,397	59,024	62,774	66,406

8. Extracting and Refining of Non-ferrous Metals : Alloys.—The following table shows particulars of establishments engaged in metal extraction and ore reduction including secondary recovery of metals, but excluding blast furnaces engaged in production of pig iron from iron ore, for each State during 1954-55 and for Australia for a series of years. It should be noted that as "Ore Beneficiation and Concentration", formerly included as part of this section of Manufacturing Industry, was transferred to the Mining Industry in 1952-53 details for that and later years are not comparable with those for 1951-52 and earlier years.

EXTRACTING AND REFINING OF NON-FERROUS METALS : ALLOYS.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories ..	28	22	6	3	1	2	62
Number of persons employed ..	1,505	290	484	(b)	(b)	(b)	6,782
Salaries and wages paid .. £	1,420,481	264,770	501,587	(b)	(b)	(b)	6,432,085
Value of power, fuel, etc., used .. £	557,954	41,780	767,539	(b)	(b)	(b)	3,252,480
Value of materials used .. £	13,345,691	2,623,926	13,436,545	(b)	(b)	(b)	62,859,377
Value of production .. £	2,247,303	668,154	1,869,061	(b)	(b)	(b)	14,147,934
Total value of output .. £	16,150,948	3,333,860	16,073,145	(b)	(b)	(b)	80,259,791
Value of land and buildings .. £	643,229	206,027	945,691	(b)	(b)	(b)	3,044,047
Value of plant and machinery .. £	1,010,981	130,173	1,271,170	(b)	(b)	(b)	6,018,510
Horse-power of engines ordinarily in use .. h.p.	9,189	580	15,004	(b)	(b)	(b)	66,280

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53. (c)	1953-54. (c)	1954-55. (c)
Number of factories ..	42	65	67	59	59	62
Number of persons employed ..	5,532	7,664	7,812	6,958	6,592	6,782
Salaries and wages paid .. £'000	1,613	5,268	6,515	6,085	6,069	6,432
Value of power, fuel, etc., used .. £'000	598	3,223	3,130	2,803	3,063	3,253
Value of materials used .. £'000	16,844	59,735	71,097	44,481	53,711	62,859
Value of production .. £'000	3,892	20,435	27,496	14,163	12,648	14,148
Total value of output .. £'000	21,334	82,493	101,723	61,447	69,422	80,260
Value of land and buildings .. £'000	1,177	2,017	2,075	2,669	2,743	3,044
Value of plant and machinery .. £'000	3,526	4,723	4,936	4,371	5,390	6,019
Horse-power of engines ordinarily in use .. h.p.	54,450	88,410	81,567	70,424	65,067	66,280

(a) In Western Australia the majority of the plants are worked at the mines and are therefore not included. (b) Not available for publication ; figures are included in the total for Australia. (c) See text above table.

9. Electrical Machinery, Cables and Apparatus.—The following table shows particulars of this industry for each State during 1954-55 and for Australia for a series of years.

ELECTRICAL MACHINERY, CABLES AND APPARATUS.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	515	344	61	66	64	14	1,064
Number of persons employed ..	28,424	9,686	1,433	1,479	810	175	42,007
Salaries and wages paid ..	£ 23,199,586	7,486,743	986,875	1,044,715	552,742	132,378	33,403,039
Value of power, fuel, etc., used ..	£ 1,279,305	288,200	26,530	31,699	18,748	6,217	1,650,699
Value of materials used ..	£ 49,984,012	15,983,970	1,850,115	1,193,011	716,614	234,585	69,962,307
Value of production ..	£ 39,217,143	11,231,304	1,475,804	1,479,514	946,705	286,460	54,636,930
Total value of output ..	£ 90,480,460	27,503,474	3,352,449	2,704,224	1,682,067	527,262	126,249,936
Value of land and buildings ..	£ 11,332,042	4,181,513	405,007	474,554	402,035	89,546	16,884,697
Value of plant and machinery ..	£ 8,283,920	2,732,568	437,565	238,155	118,372	104,320	11,914,900
Horse-power of engines ordinarily in use .. h.p.	55,440	17,697	4,574	1,849	1,237	261	81,058

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	360	867	928	965	1,028	1,064
Number of persons employed ..	10,666	35,494	36,772	31,949	38,377	42,007
Salaries and wages paid ..	£'000 2,031	18,816	24,277	22,903	28,699	33,403
Value of power, fuel, etc., used ..	£'000 105	637	976	991	1,391	1,651
Value of materials used ..	£'000 3,195	31,680	40,704	36,668	58,237	69,962
Value of production ..	£'000 3,655	30,867	38,244	38,633	49,032	54,637
Total value of output ..	£'000 6,955	63,184	79,924	76,292	108,660	126,250
Value of land and buildings ..	£'000 1,627	8,224	9,631	11,270	13,829	16,885
Value of plant and machinery ..	£'000 897	5,719	6,957	8,168	9,709	11,915
Horse-power of engines ordinarily in use h.p.	12,043	55,854	62,814	66,512	74,088	81,058

10. *Railway and Tramway Workshops (Government and Local Authority).*—The railway and tramway workshops, which form an important part of Class IV., are chiefly owned by State Governments and Local Authorities. *Workshops (fourteen in 1954-55) controlled by non-public bodies are not included in the figures below :—*

TRAMCARS AND RAILWAY ROLLING STOCK.(a)
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	42	22	13	14	25	7	123
Number of persons employed ..	15,877	7,281	6,527	4,434	3,570	910	38,599
Salaries and wages paid ..	£ 12,955,365	6,093,613	4,534,554	3,846,329	2,688,604	658,068	30,776,533
Value of power, fuel, etc., used ..	£ 426,284	210,171	123,591	159,064	84,047	22,306	1,025,463
Value of materials used ..	£ 6,868,387	4,658,666	2,613,953	2,845,189	1,491,215	340,180	18,817,590
Value of production ..	£ 15,251,237	7,839,017	5,374,180	4,979,109	3,199,468	862,284	37,505,295
Total value of output ..	£ 22,545,908	12,707,854	8,111,724	7,983,362	4,774,730	1,224,770	57,348,348
Value of land and buildings ..	£ 5,627,763	1,829,148	740,239	1,307,222	374,579	644,877	10,523,828
Value of plant and machinery ..	£ 8,231,201	987,443	992,248	1,616,508	974,038	322,406	13,123,844
Horse-power of engines ordinarily in use .. h.p.	43,322	20,521	16,728	17,948	10,415	3,250	112,184

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	117	126	126	123	124	123
Number of persons employed ..	27,310	38,253	38,499	39,073	39,262	38,599
Salaries and wages paid ..	£'000 6,721	20,914	26,281	28,002	28,425	30,777
Value of power, fuel, etc., used ..	£'000 226	617	812	907	994	1,025
Value of materials used ..	£'000 4,976	12,165	15,151	16,706	17,093	18,818
Value of production ..	£'000 8,021	25,738	31,375	33,875	34,354	37,505
Total value of output ..	£'000 13,223	38,520	47,338	51,488	52,441	57,348
Value of land and buildings ..	£'000 6,737	7,983	8,786	9,279	9,730	10,524
Value of plant and machinery ..	£'000 5,390	8,277	9,218	10,701	12,166	13,124
Horse-power of engines ordinarily in use .. h.p.	53,671	93,567	97,585	98,251	108,478	112,184

(a) Government and Local Authority only.

A railway workshop in the Northern Territory is chiefly engaged in making repairs to rolling stock, etc., no new goods being manufactured. Particulars of this establishment are not included in any of the tables in this chapter.

11. *Motor Vehicles.*—The industries catering for the motor trade are included in Class IV., Industrial Metals, Machines and Conveyances. In the table below a summary is given of the principal statistics for 1954-55 for each branch of industry associated with the motor trade of Australia.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., AUSTRALIA.
 1954-55.

Items.	Construction and Assembly.	Repairs.	Motor Bodies. (a)	Motor Accessories.	Total.
Number of factories	69	7,531	1,183	210	8,993
Number of persons employed	16,778	49,955	23,352	8,258	98,343
Salaries and wages paid	£ 15,279,280	31,575,125	19,453,676	6,765,336	73,073,417
Value of power, fuel, etc., used	£ 674,797	982,496	693,505	447,444	2,798,242
Value of materials used	£ 25,755,967	32,520,620	41,881,111	7,960,969	108,118,667
Value of production	£ 25,143,683	48,875,345	27,929,115	10,593,213	112,541,356
Total value of output	£ 51,574,447	82,378,461	70,503,731	19,001,626	223,458,265
Value of land and buildings	£ 8,582,774	33,964,699	9,010,630	3,893,358	55,451,461
Value of plant and machinery	£ 5,152,187	9,901,800	6,103,233	4,915,561	26,072,781
Horse-power of engines ordinarily in use h.p.	34,187	53,511	44,011	28,292	160,001

(a) Includes motor body repairing, panel beating, duco spraying, etc.

In the next table similar details are shown on a State basis for 1954-55 and for Australia for selected years for these branches combined.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.
 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	3,723	2,344	1,127	719	808	272	8,993
Number of persons employed	31,731	32,449	9,585	16,290	6,341	1,947	98,343
Salaries and wages paid	£ 22,379,831	25,521,360	5,688,476	13,864,523	4,374,072	1,245,155	73,073,417
Value of power, fuel, etc., used	£ 910,987	974,921	185,418	522,745	174,777	29,394	2,798,242
Value of materials used	£ 27,691,262	39,458,760	6,022,943	27,427,257	6,220,809	1,297,636	108,118,667
Value of production	£ 36,742,766	36,788,347	11,030,922	18,875,270	7,189,175	1,914,876	112,541,356
Total value of output	£ 65,345,015	77,222,028	17,239,283	46,825,272	13,584,761	3,241,906	223,458,265
Value of land and buildings	£ 21,927,549	18,423,295	4,347,381	5,522,221	3,728,209	1,502,806	55,451,461
Value of plant and machinery	£ 8,723,835	9,172,226	1,566,483	4,906,624	1,345,947	357,666	26,072,781
Horse-power of engines ordinarily in use	h.p. 47,615	56,445	11,022	31,476	11,516	1,927	160,001

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	3,592	5,730	6,587	7,422	8,302	8,993
Number of persons employed	39,706	75,580	82,123	82,609	89,913	98,343
Salaries and wages paid	£'000 10,582	38,789	51,799	54,666	62,454	73,073
Value of power, fuel, etc., used	£'000 395	1,215	1,610	1,987	2,477	2,798
Value of materials used	£'000 12,143	48,542	70,967	74,405	94,173	108,119
Value of production	£'000 15,818	60,592	78,808	86,305	101,054	112,541
Total value of output	£'000 28,356	110,349	151,385	162,697	197,704	223,458
Value of land and buildings	£'000 9,878	23,361	30,799	38,718	45,835	55,451
Value of plant and machinery	£'000 3,758	11,495	14,982	20,129	23,397	26,073
Horse-power of engines ordinarily in use h.p.	56,117	109,707	126,228	139,253	146,930	160,001

The table below shows the production and imports of motor bodies for 1938-39 and 1950-51 to 1955-56 :-

PRODUCTION AND IMPORTS OF MOTOR BODIES(a) : AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Motor Bodies(a)—							(b)
Made	No. 79,436	92,718	98,470	90,822	114,745	127,709	133,680
Value	£'000 6,421	18,465	22,663	22,536	27,969	31,620	(c)
Assembled from imported Panels	No. (d)	33,212	29,205	21,566	43,077	59,863	95,186
Imported(e)	No. 532	92,791	101,628	7,568	26,874	37,924	(f)19,041
Value	£'000 64	14,275	16,657	1,441	5,956	6,456	(g) 387

(a) Excludes sidecars. (b) Preliminary—subject to revision. (c) Not yet available. (d) Not available. (e) Includes bodies on complete vehicles imported. (f) Includes 16,097 bodies on complete vehicles imported for which value is not available. (g) Bodies not forming part of a complete vehicle.

12. **Agricultural Machines and Implements.**—Owing to the extensive agricultural activities conducted in Australia and the demand for modern mechanized farm equipment, the manufacture of agricultural implements constitutes an important branch of Australian

industry. The articles manufactured include a wide range of implements for tillage, seeding, and planting and the harvesting of crops. Other farm machinery made includes windmills, chaff-cutters and machinery used in the dairying industry.

The following table shows details of establishments classified as agricultural implement works in each State for 1954-55 and for Australia for a series of years.

AGRICULTURAL MACHINES AND IMPLEMENTS.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	124	80	41	35	28	..	308
Number of persons employed ..	2,178	6,487	1,503	1,638	376	..	12,182
Salaries and wages paid .. £	1,772,036	5,798,133	1,012,602	1,332,110	291,313	..	10,206,194
Value of power, fuel, etc., used .. £	88,344	445,757	82,678	97,249	10,895	..	694,923
Value of materials used ..	1,808,644	8,878,699	962,545	1,698,774	223,949	..	13,572,611
Value of production ..	2,789,114	8,165,875	1,460,329	1,745,715	393,804	..	14,557,837
Total value of output ..	4,686,102	17,490,331	2,475,552	3,541,738	631,648	..	28,825,371
Value of land and buildings ..	1,357,819	2,136,976	567,492	625,783	349,455	..	5,037,525
Value of plant and machinery ..	784,595	2,556,701	376,528	455,408	108,759	..	4,281,991
Horse-power of engines ordinarily in use h.p.	7,096	19,844	5,134	6,873	911	..	39,858

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	161	225	257	270	293	308
Number of persons employed ..	6,563	11,651	12,481	11,608	11,930	12,182
Salaries and wages paid .. £'000	1,373	6,894	9,044	8,838	9,473	10,206
Value of power, fuel, etc., used .. £'000	82	433	555	600	637	695
Value of materials used ..	1,485	9,952	13,521	11,103	12,988	13,572
Value of production ..	1,836	9,854	13,051	12,787	13,924	14,558
Total value of output ..	3,403	20,239	27,127	24,490	27,549	28,825
Value of land and buildings ..	997	2,814	3,320	3,701	3,918	5,038
Value of plant and machinery ..	911	2,877	3,365	3,526	3,627	4,282
Horse-power of engines ordinarily in use h.p.	13,346	33,464	34,598	37,372	39,843	39,858

13. **Wireless and Amplifying Apparatus.**—The introduction of wireless broadcasting in 1923 gave rise to a new industry in Australia. Early statistical details of the industry are not available as they were grouped together with other electrical apparatus. In 1930-31, a new classification of factories was adopted and "Wireless Apparatus" was shown as a separate industry. The industry is confined mainly to New South Wales and Victoria, but is becoming increasingly important in South Australia. The number of broadcast listeners' licences increased from a third of a million in 1930-31 to over two million at 30th June, 1956 and this increase reflects the advancement of the industry during that period. During the war years, considerable expansion took place in the industry to meet the requirements of the fighting services and apart from a slight drop in output in 1945-46, this expansion has continued.

WIRELESS AND AMPLIFYING APPARATUS : AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	72	139	141	149	162	175
Number of persons employed ..	4,828	10,628	8,733	6,912	8,125	8,550
Salaries and wages paid .. £'000	754	5,140	5,361	4,707	5,751	6,398
Value of power, fuel, etc., used .. £'000	23	147	184	179	199	205
Value of materials used ..	1,356	9,229	8,487	7,661	9,782	10,076
Value of production ..	1,123	7,219	7,023	6,042	7,454	8,624
Total value of output ..	2,502	16,595	15,694	13,882	17,435	18,905
Value of land and buildings ..	558	1,339	1,586	1,713	2,011	2,300
Value of plant and machinery ..	305	946	980	969	1,132	1,242
Horse-power of engines ordinarily in use h.p.	2,710	13,565	12,055	10,596	9,274	8,930
Domestic receiving sets made ^(a) .. No.	163,821	459,436	358,379	298,955	437,513	453,020

(a) Including radiograms and car radios.

NOTE.—There were 455,168 domestic wireless receiving sets and 2,636 television receiving sets made in 1955-56.

14. Cotton.—(i) *General.* Cotton has been grown in Australia since 1860, but never on a very large scale. The average annual quantity of unginned cotton produced during the five years ended 1938–39 was 18 million lb. and slightly over 2.5 million lb. in the five years ended 1954–55. Arising out of the development in the local manufacture of cotton materials and the further expansion following the outbreak of war in 1939, plans were completed for an extension of the area devoted to the cultivation of this crop. The downward trend which commenced with the war in the Pacific persisted until recent years but production has recently risen and in 1954–55 amounted to 3,597,000 lb. The growing of cotton, which is restricted to Queensland, is referred to in some detail in Chapter XXII.—Agricultural Production.

(ii) *Ginning.* The ginning and marketing of cotton is controlled by the Queensland Cotton Board. The Board operates ginneries and processes by-products. The production of raw cotton is insufficient for local factory requirements and is supplemented by imports from overseas, chiefly (in 1954–55) from India, Pakistan, Brazil, Egypt, Peru and the United States of America.

(iii) *Spinning and Weaving.* The recent expansion in the spinning and weaving section of the cotton industry marks an important event in its development. New factories have been established and Australia is now producing an extensive range of cotton goods, including duck and canvas from cotton or flax, denims, drill, etc., tyre cord and tyre cord fabric. The number of establishments engaged in cotton spinning and weaving in Australia and other particulars of the industry are shown in the following table for the years 1938–39, and 1950–51 to 1954–55.

COTTON SPINNING AND WEAVING : AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories	33	91	94	93	96	96
Number of persons employed	3,589	9,233	8,840	7,673	9,470	9,582
Salaries and wages paid £'000	493	4,473	5,297	5,090	6,602	6,845
Value of power, fuel, etc., used	50	441	554	551	690	706
Value of materials used £'000	1,357	16,873	20,803	14,747	18,083	18,505
Value of production £'000	979	7,534	9,272	8,126	10,809	11,343
Total value of output £'000	2,386	24,848	30,629	23,424	29,582	30,554
Value of land and buildings £'000	704	3,215	3,695	3,951	4,104	5,078
Value of plant and machinery £'000	736	4,020	4,214	4,370	4,411	4,355
Horse-power of engines ordinarily in use h.p.	9,128	31,468	32,285	36,517	33,201	34,356

15. Wool Carding, Spinning and Weaving.—The importance of this industry is emphasised by the fact that Australia is the world's chief source of wool and the development of the woollen industry since its establishment at an early period in Australian history is of singular interest. The production consists chiefly of woollen cloth and tweed, worsted cloth, rugs, blankets and yarn, all of which have acquired a reputation for purity and durability.

WOOL CARDING, SPINNING AND WEAVING.

1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	48	88	4	3	3	5	151
Number of persons employed	6,696	11,322	872	582	(a)	(a)	21,844
Salaries and wages paid £	4,339,321	7,373,330	438,367	353,297	(a)	(a)	13,945,474
Value of power, fuel, etc., used £	444,346	651,693	33,444	36,503	(a)	(a)	1,288,440
Value of materials used £	12,203,660	19,138,662	1,618,077	890,323	(a)	(a)	38,937,599
Value of production £	6,861,096	11,522,164	601,304	570,611	(a)	(a)	21,897,501
Total value of output £	19,509,102	31,312,519	2,252,825	1,497,437	(a)	(a)	62,123,540
Value of land and buildings £	2,485,715	4,171,552	188,628	37,574	(a)	(a)	7,368,623
Value of plant and machinery £	2,924,192	6,080,917	373,244	100,081	(a)	(a)	10,052,716
Horse-power of engines ordinarily in use h.p.	18,342	37,289	3,002	2,146	(a)	(a)	66,817

WOOL CARDING, SPINNING AND WEAVING—*continued.*

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
	(b)					
Number of factories	90	176	181	171	164	151
Number of persons employed	19,608	24,333	21,244	19,729	22,619	21,844
Salaries and wages paid	£'000 2,888	11,349	11,543	12,028	14,382	13,945
Value of power, fuel, etc., used	£'000 393	952	1,057	1,175	1,329	1,288
Value of materials used	£'000 7,331	53,872	44,064	34,655	45,033	38,938
Value of production	£'000 4,791	18,610	16,272	19,226	23,237	21,898
Total value of output	£'000 12,515	73,434	61,393	55,056	69,599	62,124
Value of land and buildings	£'000 2,380	5,369	6,161	6,242	6,894	7,369
Value of plant and machinery	£'000 3,370	6,898	7,881	8,183	9,086	10,053
Horse-power of engines ordinarily in use h.p.	42,944	69,070	69,232	67,911	68,715	66,817
Articles produced—						
Woollen and worsted cloth (c)(d)'000 sq. yds.	31,768	38,454	29,790	29,400	35,027	31,067
Blankets and rugs (c)	1,279	2,068	1,382	1,035	1,340	1,673

(a) Not available for publication; figures are included in the total for Australia. (b) Includes Woolscouring Works in Victoria and Tasmania and Woolscouring Works and Feltmongeries in South Australia. (c) Includes production in other industries. (d) Includes mixtures.

16. Hosiery and Other Knitted Goods.—Details for each State for 1954-55 and for Australia for a series of years are shown in the following table :—

HOSIERY AND OTHER KNITTED GOODS.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	203	427	7	11	10	3	661
Number of persons employed	7,758	15,851	608	114	204	79	24,614
Salaries and wages paid	£ 4,861,414	9,736,036	330,793	50,630	99,920	37,805	15,116,598
Value of power, fuel, etc., used	£ 224,975	412,962	9,971	2,812	3,356	2,201	656,277
Value of materials used	£ 9,866,936	19,485,472	1,588,471	83,402	243,062	50,065	31,317,408
Value of production	£ 8,996,431	17,485,174	747,535	83,673	163,473	58,506	27,534,792
Total value of output	£ 19,088,342	37,383,608	2,345,977	169,887	409,891	110,772	59,508,477
Value of land and buildings	£ 2,490,485	5,825,061	172,899	37,567	78,962	37,632	8,642,606
Value of plant and machinery	£ 2,107,156	5,493,936	232,666	25,691	43,997	13,145	7,916,591
Horse-power of engines ordinarily in use h.p.	6,419	13,491	515	191	198	70	20,884

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	313	510	548	587	645	661
Number of persons employed	18,159	22,268	21,342	20,694	23,937	24,614
Salaries and wages paid	£'000 2,332	9,605	11,179	11,641	14,277	15,117
Value of power, fuel, etc., used	£'000 133	386	480	588	684	656
Value of materials used	£'000 4,284	22,834	24,517	23,939	30,372	31,317
Value of production	£'000 3,809	16,257	18,028	21,164	26,155	27,535
Total value of output	£'000 8,226	39,477	43,025	45,691	57,211	59,508
Value of land and buildings	£'000 1,962	4,755	5,602	6,329	7,253	8,643
Value of plant and machinery	£'000 1,931	4,905	5,894	6,038	7,201	7,917
Horse-power of engines ordinarily in use h.p.	8,884	16,925	19,677	17,997	18,478	20,884

The following quantities of yarn were used in these establishments during 1954-55 :—Worsted, 8,497,565 lb.; woollen, 101,524 lb.; wool or worsted and cotton, 249,812 lb.; wool or worsted and rayon, 1,088,392 lb.; cotton, 8,197,738 lb.; mercerised cotton, 759,368 lb.; cotton and rayon, 22,512 lb.; rayon, spun, 1,252,580 lb.; rayon filament, 4,353,592 lb.; silk, 49,889 lb.; nylon, spun, 601,670 lb.; nylon filament, 1,685,135 lb.; other, 496,286 lb. Production of garments and stockings is shown in § 10 (*see p. 234*).

17. Tanning, Currying and Leather Dressing.—(i) *Details of Industry.* In Class VII. the most important industry is tanning. Formerly the production of tanneries in Australia was confined to the coarser sorts of leathers, but there are now very few kinds which cannot be produced locally, and an export trade has been built up in some varieties.

TANNING, CURRYING AND LEATHER DRESSING.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	69	42	13	10	5	1	140
Number of persons employed ..	1,950	2,377	625	223	(a)	(a)	5,393
Salaries and wages paid .. £	1,756,878	1,972,290	443,001	183,236	(a)	(a)	4,518,319
Value of power, fuel, etc., used .. £	188,304	156,236	34,473	17,504	(a)	(a)	408,494
Value of materials used .. £	4,311,882	3,965,727	1,472,535	485,265	(a)	(a)	10,674,538
Value of production .. £	2,471,116	3,091,621	666,919	278,483	(a)	(a)	6,742,529
Total value of output .. £	6,971,302	7,213,584	2,173,927	781,252	(a)	(a)	17,825,561
Value of land and buildings .. £	945,853	1,032,879	103,788	88,884	(a)	(a)	2,218,566
Value of plant and machinery .. £	881,224	823,121	217,940	148,343	(a)	(a)	2,128,409
Horse-power of engines ordinarily in use .. h.p.	13,012	12,490	3,481	1,655	(a)	(a)	31,708

(a) Not available for publication ; figures are included in the total for Australia.

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	132	143	143	141	142	140
Number of persons employed ..	4,375	5,362	5,274	5,240	5,445	5,393
Salaries and wages paid .. £'000	920	3,200	3,889	4,163	4,464	4,518
Value of power, fuel, etc., used .. £'000	88	275	352	382	417	408
Value of materials used .. £'000	2,983	8,221	8,796	9,488	10,477	10,675
Value of production .. £'000	1,522	4,950	5,912	5,983	6,672	6,743
Total value of output .. £'000	4,593	13,446	15,060	15,853	17,566	17,826
Value of land and buildings .. £'000	814	1,638	1,857	1,983	2,055	2,219
Value of plant and machinery .. £'000	524	1,425	1,703	1,832	1,990	2,128
Horse-power of engines ordinarily in use h.p.	12,345	27,684	28,980	30,314	31,182	31,708

(ii) *Materials Used and Articles Produced.* The quantities of materials used and leather produced in tanneries in each State in 1954-55 are shown in the following table :—

TANNERIES : MATERIALS USED AND PRODUCTION, 1954-55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Materials used—							
Hides (cattle) .. No.	970,890	1,158,139	395,337	137,217	(a)	(a)	2,799,906
Skins—							
Calf ..	757,417	481,413	205,510	(a)	(a)	..	1,448,154
Goat ..	521,866	(a)	(a)	..	..	..	544,081
Sheep, including Pelts ..	2,195,760	428,136	(a)	(a)	..	..	63,488,635
Marsupial ..	22,955	20,697	(a)	(a)	..	..	53,462
Bark used—							
Wattle .. tons	3,180	5,455	967	514	(a)	(a)	(b) 10,191
Mallet and Other ..	(a)	1,036	(a)	..	283	..	1,475
Tanning extract used ..	2,767	2,683	2,177	(a)	898	(a)	8,749
Articles produced—							
Leather made—							
So'e and Belting .. lb.	10,248,181	14,112,695	6,495,921	1,026,923	(a)	(a)	35,001,029
Harness ..	537,376	415,993	443,146	(a)	(a)	..	1,432,517
Upholstery .. sq. ft.	(a)	6,511,047	(a)	(a)	(a)	..	12,032,346
Dressed and Upper from Hides—							
Sold by Measurement—							
Patent .. sq. ft.	(a)	(a)	..	..	..	..	2,723,551
All Other ..	15,109,898	17,979,326	7,330,713	3,738,268	(a)	(a)	46,072,798
Sold by Weight (all kinds) .. lb.	52,070	(a)	(a)	..	4,266	..	208,332
Dressed from skins—							
Calf .. sq. ft.	4,886,223	3,742,677	1,545,611	(a)	33,324	(a)	10,227,131
Goat ..	2,285,742	(a)	(a)	..	..	..	2,366,932
Sheep ..	8,163,458	1,062,517	(a)	(a)	..	..	61,274,689
Marsupial ..	96,897	122,653	(a)	(a)	..	..	294,323

(a) Not available for publication ; figures are included in the total for Australia.

(b) Includes an amount produced or used in other works in South Australia.

18. Tailoring and Ready-made Clothing.—Statistics showing the distribution of this industry between States in 1954-55 and for Australia for a series of years are shown in the following table :—

TAILORING AND READY-MADE CLOTHING.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	946	654	137	105	127	16	1,985
Number of persons employed ..	17,362	10,767	2,426	1,661	944	224	33,384
Salaries and wages paid .. £	9,219,031	6,333,315	1,080,617	803,463	416,736	115,033	17,968,195
Value of power, fuel, etc., used .. £	207,804	126,657	22,366	19,728	11,600	2,043	390,198
Value of materials used .. £	17,507,025	12,861,441	2,054,315	1,016,698	671,622	125,940	34,237,041
Value of production .. £	14,497,969	9,723,896	1,877,293	1,114,003	663,782	153,876	28,030,819
Total value of output .. £	32,212,798	22,711,994	3,953,974	2,150,429	1,347,004	281,859	62,658,058
Value of land and buildings .. £	4,760,166	2,609,921	590,349	541,230	351,699	63,313	8,916,678
Value of plant and machinery .. £	1,375,134	999,003	126,969	111,581	42,259	7,868	2,662,814
Horse-power of engines ordinarily in use .. h.p.	4,725	3,302	541	407	181	42	9,198

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	1,177	1,890	1,998	1,961	1,963	1,985
Number of persons employed ..	26,499	38,535	36,226	32,209	33,264	33,384
Salaries and wages paid .. £'000	3,168	14,206	16,132	15,681	17,215	17,968
Value of power, fuel, etc., used .. £'000	72	249	329	363	380	390
Value of materials used .. £'000	4,947	27,539	30,078	28,767	33,598	34,237
Value of production .. £'000	4,812	21,349	23,719	23,581	26,076	28,031
Total value of output .. £'000	9,831	49,137	54,126	52,711	60,054	62,658
Value of land and buildings .. £'000	3,176	6,538	7,398	7,573	8,251	8,917
Value of plant and machinery .. £'000	356	2,030	2,431	2,469	2,523	2,663
Horse-power of engines ordinarily in use h.p.	2,607	10,137	11,093	10,693	9,339	9,198

19. Dressmaking and Millinery Establishments.—Particulars of dressmaking and millinery establishments in Australia for the years 1938-39 and 1950-51 to 1954-55 are shown in the following table :—

DRESSMAKING AND MILLINERY : AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	869	1,328	1,423	1,405	1,433	1,411
Number of persons employed ..	16,398	22,557	20,912	18,913	19,197	18,014
Salaries and wages paid .. £'000	1,653	7,568	8,412	8,490	9,230	8,975
Value of power, fuel, etc., used .. £'000	33	130	149	170	187	176
Value of materials used .. £'000	2,610	11,567	12,123	11,746	13,634	13,109
Value of production .. £'000	2,592	11,868	12,700	13,193	14,392	14,501
Total value of output .. £'000	5,235	23,565	24,972	25,109	28,213	27,786
Value of land and buildings .. £'000	2,052	4,068	4,588	4,726	5,033	5,256
Value of plant and machinery .. £'000	189	903	1,032	1,065	1,108	1,123
Horse-power of engines ordinarily in use h.p.	1,732	4,671	4,899	4,790	4,858	4,740

20. Shirts, Collars and Underclothing.—Particulars of this industry are shown below for each State for 1954-55 and for Australia for a series of years :—

SHIRTS, COLLARS AND UNDERCLOTHING.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	154	173	20	25	18	2	392
Number of persons employed ..	4,274	6,337	998	(a)	617	(a)	12,745
Salaries and wages paid .. £	2,276,601	3,481,097	446,994	(a)	263,357	(a)	6,701,897
Value of power, fuel, etc., used .. £	38,752	51,712	7,347	(a)	4,555	(a)	106,150
Value of materials used .. £	5,992,906	7,656,525	693,186	(a)	422,865	(a)	15,019,445
Value of production .. £	3,730,516	5,790,252	707,778	(a)	365,043	(a)	10,926,992
Total value of output .. £	9,762,174	13,498,489	1,408,311	(a)	792,463	(a)	26,052,587
Value of land and buildings .. £	985,949	1,358,474	166,330	(a)	119,463	(a)	2,719,111
Value of plant and machinery .. £	371,511	543,349	56,951	(a)	51,707	(a)	1,053,186
Horse-power of engines ordinarily in use .. h.p.	1,533	2,236	344	(a)	190	(a)	4,468

(a) Not available for publication ; figures are included in the total for Australia.

SHIRTS, COLLARS AND UNDERCLOTHING—*continued.*

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	283	410	419	379	379	392
Number of persons employed	11,081	12,870	12,640	9,657	11,156	12,745
Salaries and wages paid £'000	1,143	4,452	5,361	4,397	5,684	6,702
Value of power, fuel, etc., used £'000	23	72	82	76	92	106
Value of materials used £'000	2,651	10,730	12,333	9,670	12,077	15,020
Value of production £'000	1,761	7,503	8,715	7,524	9,377	10,927
Total value of output £'000	4,435	18,305	21,130	17,270	21,546	26,053
Value of land and buildings £'000	946	2,155	2,091	2,151	2,417	2,719
Value of plant and machinery £'000	231	845	885	846	905	1,053
Horse-power of engines ordinarily in use h.p.	1,874	6,017	5,189	4,779	4,320	4,468

21. **Boots and Shoes.**—(i) *Details of Industry.* The boot and shoe factories hold an important place both in regard to employment afforded and extent of output. The following tables refer to boot and shoe factories as distinct from those devoted to repairing, except in Tasmania, where it has been necessary to include details of boot and shoe repairing, in order to avoid disclosure of confidential information for that State. Factories engaged in the manufacture of rubber boots and shoes are excluded, being classified under Rubber Goods, *see* para. 38, page 262.

BOOTS AND SHOES.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia.
Number of factories	191	239	31	23	11	21	516
Number of persons employed	7,213	11,422	1,546	1,339	634	169	22,323
Salaries and wages paid £	4,666,567	7,326,002	876,290	879,878	395,058	97,546	14,241,341
Value of power, fuel, etc., used £	83,335	108,569	11,542	14,030	7,914	1,339	226,729
Value of materials used £	6,331,025	11,689,797	1,313,233	1,066,321	481,114	138,272	21,019,762
Value of production £	6,517,682	10,147,236	1,130,551	1,167,483	540,841	136,740	19,640,533
Total value of output £	12,932,042	21,945,602	2,455,326	2,247,834	1,029,869	276,351	40,887,024
Value of land and buildings £	1,278,450	1,767,475	221,596	283,692	149,267	32,110	3,732,590
Value of plant and machinery £	822,825	1,832,364	299,293	273,199	132,424	19,878	3,379,983
Horse-power of engines ordinarily in use h.p.	4,947	9,567	1,389	870	589	126	17,488

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	383	521	540	509	520	516
Number of persons employed	18,264	23,783	22,775	20,920	22,953	22,323
Salaries and wages paid £'000	4,408	10,215	12,405	12,430	14,215	14,241
Value of power, fuel, etc., used £'000	75	141	172	197	225	227
Value of materials used £'000	7,520	15,390	18,058	17,668	20,508	21,020
Value of production £'000	6,472	14,611	17,162	17,162	19,444	19,640
Total value of output £'000	14,067	30,142	35,392	35,027	40,177	40,887
Value of land and buildings £'000	1,518	2,822	3,310	3,227	3,491	3,733
Value of plant and machinery £'000	1,222	2,265	2,402	2,653	3,152	3,380
Horse-power of engines ordinarily in use h.p.	9,678	17,200	18,573	18,214	16,679	17,488

(a) Includes details of boot and shoe repairing.

(ii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers are in factories producing and repairing boots and shoes in each State are shown for 1954-55 in the following table. Particulars relating to the output of rubber boots and shoes are not included :—

BOOT AND SHOE FACTORIES : OUTPUT, 1954-55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Quantity—							
Boots, shoes and sandals pairs	7,007,979	9,432,946	1,336,395	(a)	556,275	(a)	19,880,642
Slippers	2,097,577	4,290,782	440,816	(a)	398,590	(a)	7,323,810
Value—							
Boots, shoes and sandals £	11,866,422	17,976,281	2,049,965	(a)	762,603	(a)	35,019,580
Slippers	£ 1,392,636	2,387,926	215,539	(a)	281,736	(a)	4,326,028

(a) Not available for publication; figures are included in the total for Australia.

22. Flour-milling.—(i) *Details of Industry.* The following table shows the position of the grain-milling industry in each State for the year 1954-55 and for Australia for a series of years :—

FLOUR-MILLING.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	52	35	11	23	20	10	151
Number of persons employed ..	1,629	1,254	(a)	428	507	(a)	4,528
Salaries and wages paid .. £	1,474,629	1,077,712	(a)	342,860	416,199	(a)	3,850,861
Value of power, fuel, etc., used £	360,873	166,399	(a)	85,984	110,402	(a)	805,016
Value of materials used ..	20,803,480	15,559,789	(a)	4,987,134	6,250,307	(a)	54,435,552
Value of production ..	£ 3,217,556	1,800,634	(a)	601,462	705,717	(a)	7,311,394
Total value of output ..	£ 24,381,909	17,526,822	(a)	5,674,580	7,066,426	(a)	62,551,962
Value of land and buildings ..	£ 1,773,894	1,182,064	(a)	257,337	755,517	(a)	4,533,187
Value of plant and machinery ..	£ 2,127,787	1,245,359	(a)	468,149	602,791	(a)	5,060,266
Horse-power of engines ordinarily in use .. h.p.	17,502	14,787	(a)	3,930	5,060	(a)	46,566

(a) Not available for publication; figures are included in the total for Australia.

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	172	165	162	158	157	151
Number of persons employed ..	3,783	4,842	4,681	4,892	4,602	4,528
Salaries and wages paid .. £'000	896	2,933	3,466	3,884	3,847	3,851
Value of power, fuel, etc., used .. £'000	231	545	730	866	847	805
Value of materials used ..	£'000 10,573	34,350	45,576	51,373	53,946	54,436
Value of production ..	£'000 2,091	5,636	7,313	8,296	8,134	7,311
Total value of output ..	£'000 12,895	40,531	53,619	60,535	62,927	62,552
Value of land and buildings ..	£'000 2,091	3,177	3,606	3,912	4,260	4,533
Value of plant and machinery ..	£'000 1,814	3,408	4,106	4,531	4,921	5,060
Horse-power of engines ordinarily in use h.p.	27,795	38,413	41,824	44,781	52,545	46,566

(ii) *Production of Flour and By-products.* The production of flour by the mills in each State (including other than flour mills) for the years 1938-39 and 1950-51 to 1955-56 was as follows :—

FLOUR-MILLING : PRODUCTION OF FLOUR.

(Tons of 2,000 lb.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	547,162	436,829	84,314	146,262	138,583	19,582	1,372,732
1949-50 (a) ..	597,491	447,784	112,995	162,259	161,251	27,243	1,509,023
1950-51 (a) ..	694,036	448,881	116,503	189,962	218,841	27,336	1,695,559
1951-52 (a) ..	578,686	559,224	124,703	206,856	223,936	27,745	1,721,150
1952-53(a)(b) ..	543,693	592,465	132,839	201,685	227,269	28,349	1,726,300
1953-54(a)(b) ..	603,575	473,842	138,524	164,907	197,654	30,556	1,609,058
1954-55(a)(b) ..	586,549	455,906	157,904	143,840	178,851	29,969	1,553,019
1955-56(a)(b)(c)	548,880	451,540	168,138	151,632	186,028	27,660	1,533,878

(a) Includes wheatmeal for baking. (b) Includes also sharps. (c) Preliminary, subject to revision.

In addition, 587,000 tons (2,000 lb. per ton) of bran and pollard were made in 1954-55 and 586,000 tons in 1955-56. The total quantity of wheat ground in flour mills was 70,571,805 bushels in 1954-55 and 70,871,195 bushels in 1955-1956.

23. **Bakeries.**—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on is given in the table below. It should be noted, however, that the details refer only to establishments coming within the definition of a factory as explained at the beginning of this section. For that reason, the tables do not give complete details of the industry, as a large number of bakehouses not coming within the definition are excluded. This is true of all other industries covered by the statistics of manufacturing production, but, in view of the omission of such a large number of establishments in this instance, special mention is deemed necessary.

BAKERIES (INCLUDING CAKES AND PASTRY).

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia.
Number of factories ..	1,525	1,058	479	284	293	161	3,800
Number of persons employed ..	7,347	5,411	2,229	1,562	1,036	1,540	19,125
Salaries and wages paid .. £	4,179,355	3,002,065	1,066,069	857,195	514,905	1,028,253	10,647,843
Value of power, fuel, etc., used £	783,623	534,787	208,969	148,139	100,560	125,555	1,901,633
Value of materials used .. £	12,685,780	9,520,782	3,819,490	2,896,413	1,970,341	5,005,654	35,898,960
Value of production .. £	9,064,798	6,909,807	2,620,392	1,923,718	1,235,151	1,828,532	23,582,398
Total value of output .. £	22,534,201	16,965,376	6,648,851	4,968,270	3,306,552	6,959,741	61,382,991
Value of land and buildings .. £	5,731,132	4,224,463	1,246,454	1,138,732	780,604	1,231,078	14,352,463
Value of plant and machinery .. £	3,043,729	2,691,131	735,934	706,766	468,604	726,655	8,372,819
Horse-power of engines ordinarily in use .. h.p.	8,703	6,968	2,750	2,799	1,663	4,932	27,815

(a) Includes confectionery.

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.	
Number of factories ..	..	1,958	3,167	3,347	3,534	3,687	3,800
Number of persons employed ..	..	11,715	17,929	18,332	18,405	18,758	19,125
Salaries and wages paid ..	£'000	1,993	6,942	8,571	9,368	9,954	10,648
Value of power, fuel, etc., used ..	£'000	306	1,116	1,486	1,694	1,805	1,902
Value of materials used ..	£'000	6,651	20,786	26,451	29,672	32,829	35,899
Value of production ..	£'000	4,509	14,873	18,624	21,788	23,107	23,582
Total value of output ..	£'000	11,466	36,795	46,561	53,154	57,741	61,383
Value of land and buildings ..	£'000	4,960	9,199	10,789	12,145	13,617	14,352
Value of plant and machinery ..	£'000	1,478	4,078	5,082	6,073	7,158	8,373
Horse-power of engines ordinarily in use h.p.	..	10,855	20,483	22,248	23,792	26,462	27,815

24. **Sugar-mills.**—(i) *General.* Sugar-cane is grown in New South Wales and Queensland and particulars of area, yield, etc., are given in extended detail in Chapter XXII.—Agricultural Production.

The products of the sugar-mill are raw sugar and molasses, the former being sent to the refineries in different parts of Australia for further treatment. Particulars of cane crushed and sugar produced embodied in the following table refer to the quantities treated during the years ended 30th June, irrespective of the season in which the cane was grown ; consequently the figures relating to cane crushed and sugar produced may differ slightly from those given in Chapter XXII.—Agricultural Production, which relate to harvest years.

(ii) *Details for States.* The following table shows details of the operations of sugar mills in New South Wales and Queensland for the years 1938–39 and 1950–51 to 1954–55 :—

SUGAR-MILLS.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
NEW SOUTH WALES.						
Number of factories ..	3	3	3	3	3	3
Number of persons employed ..	212	282	176	138	156	187
Cane crushed .. tons	337,038	359,849	321,388	125,714	263,249	222,313
Raw sugar produced (94 net titre) .. tons	45,106	41,258	41,060	14,272	34,004	26,301
QUEENSLAND.						
Number of factories ..	33	32	31	31	31	31
Number of persons employed ..	4,419	6,394	5,612	6,495	7,358	7,272
Cane crushed .. tons	5,432,193	6,691,704	5,005,172	6,841,536	8,751,063	9,864,304
Raw sugar produced (94 net titre) .. tons	775,064	879,844	704,341	934,614	1,220,383	1,301,245
Molasses—						
Sold to distilleries ..'000 gals	8,276	15,234	12,557	15,774	23,323	23,167
Used as fodder .. " "	4,237	5,582	5,900	5,887	5,486	5,753
Used as manure .. " "	3,293	5,555	5,484	7,499	11,466	10,501
Run to waste .. " "	499	50	37	76	168	233
Burnt as fuel .. " "	3,749	2,371	1,005	934	183	1,079
Sold or used for other purposes ..'000 gals	232	581	324	426	516	473
Total molasses disposed of ..'000 gals	20,286	29,373	25,307	30,596	41,142	41,206

25. *Sugar-refining.*—The establishment of the sugar-refining industry considerably antedates the establishment of the sugar-milling industry, the raw material operated on in the earlier years coming chiefly from Mauritius and the East. In 1954–55, there were two sugar refineries in Queensland and one each in New South Wales, Victoria, South Australia and Western Australia. The quantity of raw sugar treated amounted to 502,261 tons for a yield of 481,639 tons of refined sugar.

26. *Confectionery.*—The figures for 1954–55 for each State and for Australia for a series of years are shown hereunder :—

CONFECTIONERY.
1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(b)
Number of factories ..	94	96	21	20	7	(a)	238
Number of persons employed ..	2,850	3,252	321	325	321	(a)	7,069
Salaries and wages paid .. £	1,919,792	2,099,571	136,530	192,718	167,548	(a)	4,516,159
Value of power, fuel, etc., used .. £	230,007	167,375	13,955	18,804	17,282	(a)	447,423
Value of materials used .. £	7,250,135	6,300,986	517,538	389,414	458,521	(a)	14,916,594
Value of production .. £	4,365,626	3,184,659	224,543	231,132	313,657	(a)	8,319,617
Total value of output .. £	11,845,768	9,653,020	756,036	639,350	789,460	(a)	23,683,634
Value of land and buildings .. £	1,344,994	1,159,699	175,035	211,107	73,589	(a)	2,964,424
Value of plant and machinery .. £	1,481,867	1,574,463	114,950	122,279	74,755	(a)	3,368,314
Horse-power of engines ordinarily in use .. h.p.	12,200	12,554	788	1,355	477	(a)	27,374

AUSTRALIA.(b)

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories ..	..	148	250	256	249	238
Number of persons employed ..	..	7,256	7,801	7,361	6,873	7,069
Salaries and wages paid ..	£'000	1,041	3,431	4,006	4,084	4,516
Value of power, fuel, etc., used ..	£'000	107	299	371	436	447
Value of materials used ..	£'000	3,102	10,370	11,997	12,554	14,917
Value of production ..	£'000	2,418	6,810	7,801	7,910	8,307
Total value of output ..	£'000	5,627	17,479	20,169	20,900	22,608
Value of land and buildings ..	£'000	1,423	2,319	2,428	2,510	2,650
Value of plant and machinery ..	£'000	1,364	2,421	2,704	2,872	3,039
Horse-power of engines ordinarily in use .. h.p.	..	16,154	26,473	26,887	26,002	28,763

(a) Not available for publication. Included with Bakeries.

(b) Excludes Tasmania.

27. Jam, Fruit and Vegetable Canning, Pickles, Sauces, Vinegar.—(i) *Details of Industry.* The following table shows particulars of factories included in this class for each State for 1954–55 and for Australia for a series of years :—

JAM, FRUIT AND VEGETABLE CANNING, PICKLES, SAUCES, VINEGAR.
1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	51	62	16	21	12	22	184
Number of persons employed ..	2,622	4,498	1,756	1,040	126	1,019	11,061
Salaries and wages paid .. £	1,941,134	3,389,643	1,273,620	607,724	76,216	656,541	7,944,878
Value of power, fuel, etc., used .. £	203,567	321,872	72,666	44,694	5,322	50,777	698,898
Value of materials used .. £	7,065,052	14,081,902	5,260,266	1,456,883	219,569	1,624,882	23,708,554
Value of production £	3,929,245	7,368,565	2,047,506	900,898	133,641	932,023	15,311,878
Total value of output £	11,197,864	21,772,339	7,380,438	2,402,475	358,532	2,607,682	45,719,330
Value of land and buildings .. £	1,556,772	2,663,715	711,940	464,816	134,758	660,579	6,192,580
Value of plant and machinery .. £	1,351,370	2,421,336	521,775	436,726	37,975	726,998	5,496,180
Horse-power of engines ordinarily in use .. h.p.	8,960	15,225	2,774	2,071	283	3,348	32,661

AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories	123	200	201	204	197	184
Number of persons employed ..	6,476	13,124	13,152	10,845	11,101	11,061
Salaries and wages paid .. £'000	1,149	6,298	7,793	9,391	7,870	7,945
Value of power, fuel, etc., used .. £'000	97	521	672	636	660	699
Value of materials used £'000	4,800	21,234	28,286	27,228	28,875	29,708
Value of production £'000	2,334	10,685	13,623	12,562	14,992	15,312
Total value of output £'000	7,231	32,440	42,581	40,526	44,527	45,719
Value of land and buildings .. £'000	1,382	4,082	5,031	6,025	6,137	6,193
Value of plant and machinery .. £'000	721	3,720	4,425	5,095	5,404	5,496
Horse-power of engines ordinarily in use h.p.	7,873	26,718	29,792	30,241	31,721	32,661

(ii) *Production.* During the 1939–45 War, production of jams increased greatly and an output of 171 million lb. was attained in 1943–44. Production afterwards decreased, but attained a new record of 198.5 million lb. in 1947–48. It dropped to 81.7 million lb. in 1954–55. Preliminary figures for 1955–56 show production as being 82.1 million lb.

The peak output of preserved fruit occurred in 1953–54 with 338.6 million lb. compared with the previous highest level of 256.1 million lb. attained in 1951–52. Preliminary figures for 1955–56 show production as being 300.4 million lb.

There has also been a marked development in the production of canned vegetables. In 1938–39, output totalled 10.3 million lb. but, as a result of the war-time demand by the armed services, production reached the record level of 119.1 million lb. in 1944–45. However, it has since declined and in 1954–55 amounted to 51.1 million lb. Preliminary figures for 1955–56 show production as being 78.1 million lb.

The following table shows the total quantity and value of jams, pickles, sauces and other items manufactured in each State in 1954–55 :—

JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES : OUTPUT.
1954–55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Jams '000 lb.	22,377	(a)43,274	10,916	4,534	598	(b)	81,699
Fruit, preserved "	46,867	169,111	73,387	15,948	(c)	(c)	319,235
Fruit Pulp(d) cwt.	34,974	29,285	11,670	13,197	6,634	98,309	194,069
Fruit Juices, natural '000 gals.	220	55	2,092	287	(c)	(c)	2,874
Vegetables, preserved '000 lb.	22,967	19,401	(c)	(c)	(c)	(c)	51,116
Tomato Pulp(d) cwt.	44,287	197,197	(c)	17,389	18,831	(c)	278,087
Tomato Paste, Puree, etc. '000 pints	(c)	1,509	..	(c)	(c)	..	1,982
Pickles "	3,055	1,877	125	1,520	188	..	6,765
Sauces "	11,307	12,743	1,635	1,942	655	244	28,526
Soup (canned) "	4,210	23,255	..	115	36	..	27,616

(a) Includes Tasmania. (b) Included with Victoria. (c) Not available for publication. Figures are included in the total for Australia. (d) Including quantities made and used in the works producing them.

28. Bacon-curing.—(i) *Details of Industry.* The table hereunder shows particulars of factories engaged in bacon-curing in each State for 1954–55 and for Australia for a series of years :—

BACON-CURING.

1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	32	16	9	13	4	10	84
Number of persons employed ..	662	674	1,128	390	254	93	3,201
Salaries and wages paid £	543,155	548,912	829,771	334,519	189,145	71,130	2,516,632
Value of power, fuel, etc., used £	82,968	66,528	78,251	54,376	33,350	6,748	322,221
Value of materials used £	4,376,125	3,744,733	5,790,183	2,011,690	1,835,133	559,675	18,317,539
Value of production £	1,634,731	1,283,732	1,644,556	577,718	430,063	144,395	5,715,195
Total value of output £	6,093,824	5,094,993	7,512,990	2,643,784	2,298,546	710,818	24,354,955
Value of land and buildings £	550,383	326,716	550,793	300,039	101,687	126,173	1,955,791
Value of plant and machinery £	234,130	205,658	356,714	230,701	43,251	29,699	1,100,153
Horse-power of engines ordinarily in use .. h.p.	2,173	2,793	3,560	1,856	929	480	11,791

AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories ..	76	84	83	85	85	84
Number of persons employed ..	2,047	2,961	2,838	2,994	2,975	3,201
Salaries and wages paid .. £'000	480	1,577	1,895	2,225	2,270	2,517
Value of power, fuel, etc., used .. £'000	77	204	251	292	298	322
Value of materials used .. £'000	3,768	14,076	16,269	18,836	19,448	18,318
Value of production .. £'000	865	2,930	3,907	4,026	4,410	5,715
Total value of output .. £'000	4,710	17,210	20,427	23,154	24,156	24,355
Value of land and buildings .. £'000	750	1,270	1,356	1,635	1,737	1,956
Value of plant and machinery .. £'000	357	610	724	917	955	1,100
Horse-power of engines ordinarily in use h.p.	9,389	10,472	10,700	11,636	11,685	11,791

(ii) *Quantity of Production.* The number of pigs cured and the quantity of bacon and ham and lard produced in factories in each State for 1954–55 are shown in the following table :—

BACON-CURING FACTORIES : PIGS CURED AND PRODUCTION, 1954–55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Figs killed for bacon and ham—							
For curing on own account	208,710	159,110	223,982	71,387	} 89,801	30,760	{ 782,590
For curing on commission	15,418	4,763	3,212	1,158			
Pork and green bacon used for—							
Curing on own account							
'000 lb.	2,306	3,308	(a)	483	828	(a)	6,979
Curing on commission							
'000 lb.	4,834	..	(a)	..	(a)	..	4,970
Sugar used .. ton	42	48	171	27	27	16	331
Finished bacon and ham made (b)—							
On own account '000 lb.	18,017	15,979	21,395	6,867	7,414	2,095	71,767
On commission ..	5,963	445	419	117	14	95	7,053
Green bacon and ham ..	1,357	1,565	2,272	664	765	174	6,797
Lard produced .. cwt.	4,057	7,536	20,409	4,572	3,127	771	40,472

(a) Not available for publication ; figures are included in the total for Australia. (b) Includes smoked bacon and ham, cooked ham (not smoked) made for retail sale, and canned bacon and ham.

Bacon and ham and other pig products are dealt with more fully in Chapter XXIV.—Farmyard, Dairy and Bee Products.

29. Butter, Cheese and Condensed and Dried Milk.—(i) *Details of Industry.* The following table shows particulars of butter, cheese and condensed and dried milk factories in each State for 1954–55 and for Australia for a series of years.

BUTTER, CHEESE AND CONDENSED AND DRIED MILK.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	77	134	89	41	17	21	379
Number of persons employed ..	2,322	5,219	1,626	788	286	326	10,567
Salaries and wages paid ..	£ 1,874,685	£ 4,563,116	£ 1,183,146	£ 587,727	£ 212,371	£ 258,473	£ 8,679,518
Value of power, fuel, etc., used ..	£ 619,571	£ 1,331,858	£ 238,289	£ 111,835	£ 70,109	£ 51,307	£ 2,422,969
Value of materials used ..	£ 17,693,901	£ 46,548,628	£ 23,978,000	£ 5,474,053	£ 3,286,275	£ 3,725,761	£ 100,706,618
Value of production ..	£ 3,191,554	£ 8,037,560	£ 2,125,279	£ 859,534	£ 543,480	£ 636,372	£ 15,393,779
Total value of output ..	£ 21,505,026	£ 55,918,046	£ 26,341,568	£ 6,445,422	£ 3,899,864	£ 4,413,440	£ 118,523,366
Value of land and buildings ..	£ 2,711,921	£ 4,869,822	£ 1,493,223	£ 491,427	£ 201,096	£ 269,337	£ 10,036,826
Value of plant and machinery ..	£ 3,596,582	£ 5,787,405	£ 2,120,704	£ 477,838	£ 336,187	£ 234,433	£ 12,553,149
Horse-power of engines ordinarily in use ..	h.p. 29,193	35,505	22,164	6,041	3,477	2,062	98,442

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	523	409	399	384	380	379
Number of persons employed ..	6,851	10,707	10,473	10,641	10,580	10,567
Salaries and wages paid ..	£'000 1,390	£'000 6,020	£'000 7,186	£'000 8,098	£'000 8,416	£'000 8,680
Value of power, fuel, etc., used ..	£'000 390	£'000 1,504	£'000 1,837	£'000 2,339	£'000 2,396	£'000 2,423
Value of materials used ..	£'000 29,162	£'000 61,581	£'000 68,038	£'000 97,291	£'000 94,020	£'000 100,706
Value of production ..	£'000 3,543	£'000 10,790	£'000 12,535	£'000 14,350	£'000 15,914	£'000 15,394
Total value of output ..	£'000 33,095	£'000 73,875	£'000 82,410	£'000 113,980	£'000 112,330	£'000 118,523
Value of land and buildings ..	£'000 2,880	£'000 5,400	£'000 6,585	£'000 7,571	£'000 9,365	£'000 10,037
Value of plant and machinery ..	£'000 3,067	£'000 7,014	£'000 8,569	£'000 10,250	£'000 12,083	£'000 12,553
Horse-power of engines ordinarily in use ..	b.p. 45,059	74,199	77,439	84,428	94,863	98,442

(ii) *Quantity and Value of Production.* The next table shows the quantities and values of butter, cheese and condensed milk produced and the quantities of milk used in their production during 1954-55. These details are restricted to factory production and therefore exclude farm output.

BUTTER, CHEESE AND CONDENSED MILK, ETC., FACTORIES : PRODUCTION, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MATERIALS USED.							
Whole Milk used in manufacture of—							
Butter '000 gal.	173,857	370,671	211,639	35,506	32,233	38,737	862,643
Cheese	5,761	44,203	17,451	28,163	(a)	(a)	98,520
Condensed, Dried and other Milk Products '000 gal.	11,574	58,406	(a)	(a)	2,581	(a)	76,387
Sugar ton	(a)	12,576	..	..	(a)	(a)	14,458
PRODUCTION.							
Butter ton	38,688	79,418	45,915	8,510	7,145	8,334	188,010
Cheese (Green Weight)	2,508	20,290 (b)	7,921	13,101	(a)	(a)	45,178
Condensed Milk (Sweetened and Unsweetened)	(a)	35,113	..	..	(a)	..	38,493
Concentrated—							
Whole Milk	(a)	4,593	(a)	..	(a)	(a)	10,071
Skim Milk	(a)	(a)	(a)	..	..	..	5,313
Powdered Full Cream Milk—							
Spray	(a)	10,813	(a)	(a)	(a)	(a)	14,230
Roller	(a)	290	(a)	(a)	(a)	(a)	1,309
Infants' and Invalids' Foods (including Malted Milk and Milk Sugar)	(a)	(a)	..	..	..	(a)	10,920
Powdered Skim Milk—							
Spray	6,643	10,200	(a)	(a)	(a)	(a)	17,031
Roller	2,815	4,389	(a)	(a)	(a)	(a)	7,587
Buttermilk and Whey Powder ..	622	2,771	1,250	(a)	(a)	..	5,086
Caseln	(a)	(a)	(a)	..	..	..	6,870
Ice Cream Mix—							
Powder	(a)	(a)	..	(a)	(a)	..	619
Liquid	(a)	(a)	..	..	..	..	2,081
Processed Cheese	(a)	(a)	(a)	..	..	..	13,742

(a) Not available for publication : figures are included in the total for Australia. (b) Includes 101 tons of cheese valued at £21,916 made in establishments not classified as factories.

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XXIV.—Farmyard, Dairy and Bee Products.

30. **Meat and Fish Preserving.**—The industries included in this group are engaged chiefly in the freezing and preserving of meat. Works have been established at the seaports for the purpose of handling beef, lamb and mutton for export, and insulated space for the carriage of chilled and frozen produce is provided by shipping companies trading between Australia and other parts of the world. The substitution of chilled for frozen meat exported is referred to in Chapter XXIII.—Pastoral Production. In recent years, there has been considerable expansion in the canning of meat and fish.

MEAT AND FISH PRESERVING.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	14	16	26	21	33	4	114
Number of persons employed ..	766	1,024	6,242	296	1,043	61	9,432
Salaries and wages paid .. £	559,541	902,035	5,753,817	181,644	884,488	45,207	8,326,732
Value of power, fuel, etc., used .. £	89,422	161,376	718,830	21,208	113,877	5,472	1,110,185
Value of materials used .. £	2,983,382	6,268,783	33,280,460	1,182,510	2,847,701	79,389	46,642,225
Value of production .. £	1,059,602	1,163,769	8,073,495	341,862	1,472,939	70,143	12,181,810
Total value of output .. £	4,132,406	7,593,928	42,072,785	1,545,580	4,434,517	155,004	59,934,220
Value of land and buildings .. £	279,141	826,835	2,507,250	142,023	1,593,367	54,778	5,403,394
Value of plant and machinery .. £	358,439	642,671	1,486,612	167,127	726,686	26,997	3,408,532
Horse-power of engines ordinarily in use .. h.p.	2,015	3,349	21,903	1,137	6,855	341	35,600

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	32	86	87	98	106
Number of persons employed	4,093	7,940	7,386	8,771	9,113
Salaries and wages paid .. £'000	..	1,180	4,752	5,222	6,820	7,395
Value of power, fuel, etc., used .. £'000	..	134	633	742	972	1,015
Value of materials used .. £'000	..	6,351	30,578	33,828	47,637	46,671
Value of production .. £'000	..	1,601	6,528	8,751	12,126	11,374
Total value of output .. £'000	..	8,086	37,739	43,321	60,735	59,060
Value of land and buildings .. £'000	..	1,966	3,223	3,990	4,562	4,500
Value of plant and machinery .. £'000	..	1,325	2,297	2,623	2,786	2,826
Horse-power of engines ordinarily in use .. h.p.	..	13,385	30,081	34,510	33,328	31,810
						35,600

Particulars of the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in Chapter XXIII.—Pastoral Production.

31. **Breweries.**—(i) *Details of Industry.* The following table gives particulars of breweries in each State for the year 1954-55 and for Australia for a series of years. It should be noted, however, that the data shown are not strictly comparable throughout, owing to the inability or failure of some breweries to furnish a separate return for each branch of activity. Consequently the figures for some States include details of employment, wages, output, etc., not connected with the brewing of beer, although associated with it. These extraneous activities include cooperage, malt works, aerated waters, etc.

BREWERIES.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	9	7	6	3	3	2	30
Number of persons employed ..	1,851	2,701	807	(a)	569	(a)	6,791
Salaries and wages paid .. £	1,853,008	2,422,450	630,382	(a)	490,815	(a)	6,272,241
Value of power, fuel, etc., used .. £	513,286	362,406	163,091	(a)	165,025	(a)	1,369,484
Value of materials used .. £	6,928,482	7,405,133	1,844,828	(a)	2,033,943	(a)	20,809,776
Value of production .. £	6,034,782	3,284,012	1,933,493	(a)	1,570,967	(a)	14,854,906
Total value of output (b) .. £	13,476,550	11,051,551	3,941,412	(a)	3,769,935	(a)	37,034,166
Value of land and buildings .. £	2,508,491	2,411,041	1,664,994	(a)	677,146	(a)	8,306,902
Value of plant and machinery .. £	3,403,150	2,716,834	1,536,157	(a)	1,138,558	(a)	10,295,467
Horse-power of engines ordinarily in use .. h.p.	16,714	10,937	6,390	(a)	3,915	(a)	42,359

BREWERIES—continued.

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	34	29	31	32	31	30
Number of persons employed ..	3,698	5,517	5,914	5,904	6,193	6,791
Salaries and wages paid .. £'000	1,215	3,666	4,564	5,030	5,325	6,272
Value of power, fuel, etc., used .. £'000	251	849	1,145	1,388	1,366	1,369
Value of materials used .. £'000	3,407	9,081	11,739	16,452	19,975	20,810
Value of production .. £'000	5,372	8,458	10,298	11,458	13,048	14,855
Total value of output(b) .. £'000	9,030	18,388	23,182	29,298	34,389	37,034
Value of land and buildings .. £'000	2,801	5,162	5,715	6,480	7,256	8,307
Value of plant and machinery .. £'000	2,737	4,489	4,832	5,870	7,681	10,295
Horse-power of engines ordinarily in use .. h.p.	23,231	28,765	30,181	32,754	38,803	42,359

(a) Not available for publication ; figures are included in the total for Australia. (b) Excludes Excise Duty.

(ii) *Production, Consumption, Materials Used.* The quantity of ale, stout and beer brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter increased each year to 109.2 million gallons in 1941-42. Under the Control of Liquor Order which operated between March, 1942 and March, 1946, the production of beer was restricted and consequently output remained static at about 100 million gallons from 1942-43 to 1944-45. Thereafter production increased, and in 1955-56 amounted to over 230 million gallons.

The average annual consumption of ale, stout and beer prior to the economic depression of the early thirties exceeded 11 gallons per head of the population : it dropped to 7.32 gallons in 1931-32, increased to 13.76 gallons in 1941-42 and declined again to about 13 gallons during the period of control. The consumption per head had increased to 24.74 gallons by 1955-56.

The table below shows the quantities of materials used and the quantity and value of ale, stout and beer (excluding waste beer) brewed in each State during 1954-55 :—

BREWERIES : MATERIALS USED AND PRODUCTION, 1954-55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MATERIALS USED.							
Malt bus.	2,500,068	2,194,738	730,774	(a)	637,606	(a)	6,853,223
Hops lb.	2,074,805	1,237,201	487,397	(a)	439,199	(a)	4,813,361
Sugar ton	21,045	13,030	4,311	(a)	2,112	(a)	45,241

ALE, BEER AND STOUT BREWED (EXCLUDING WASTE BEER).

Quantity .. '000 gals.	88,081	68,093	22,151	(a)	17,411	(a)	221,679
Value (b) .. £'000	13,333	10,934	3,917	(a)	3,536	(a)	36,497

(a) Not available for publication ; figures are included in the total for Australia. (b) Excludes Excise Duty.

32. *Wineries and Distilleries.*—The following table shows particulars of the operations of Wineries and Distilleries for each State during 1954-55 and for Australia for a series of years.

WINERIES AND DISTILLERIES.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	30	31	5	74	18	..	158
Number of persons employed ..	291	322	180	1,176	53	..	2,022
Salaries and wages paid .. £	236,695	234,092	146,217	861,358	27,633	..	1,505,995
Value of power, fuel, etc., used .. £	114,094	76,458	74,837	119,367	2,254	..	387,010
Value of materials used .. £	863,898	622,680	337,641	2,950,631	110,392	..	4,885,242
Value of production .. £	607,632	517,514	297,862	1,341,532	80,724	..	2,845,264
Total value of output .. £	1,585,624	1,216,652	710,340	4,411,530	193,370	..	8,117,516
Value of land and buildings .. £	511,959	340,520	123,465	1,283,249	52,624	..	2,311,817
Value of plant and machinery .. £	473,206	377,461	345,943	931,037	41,969	..	2,169,616
Horse-power of engines ordinarily in use .. h.p.	1,451	2,528	591	6,183	301	..	11,054

WINERIES AND DISTILLERIES—*continued.*

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	135	153	158	167	164	158
Number of persons employed	1,133	2,158	2,277	2,021	1,981	2,022
Salaries and wages paid £'000	246	1,122	1,416	1,431	1,475	1,506
Value of power, fuel, etc., used .. £'000	58	294	383	333	365	387
Value of materials used £'000	1,421	4,810	7,076	5,464	5,721	4,885
Value of production £'000	811	2,637	3,118	3,198	3,254	2,846
Total value of output £'000	2,290	7,741	10,577	8,995	9,340	8,118
Value of land and buildings .. £'000	1,002	1,795	1,920	2,104	2,284	2,312
Value of plant and machinery .. £'000	916	1,556	1,774	1,913	2,108	2,170
Horse-power of engines ordinarily in use h.p.	4,396	9,189	11,038	10,995	11,275	11,054

33. Tobacco, Cigars and Cigarettes.—Particulars of establishments in which the manufacture of tobacco, cigars or cigarettes was carried on during 1954-55 are shown below for each State and for Australia for a series of years. There are no such factories in Tasmania.

TOBACCO, CIGARS AND CIGARETTES.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories	13	13	6	..	2	34
Number of persons employed	2,332	2,166	(a)	..	(a)	4,707
Salaries and wages paid £	1,792,713	1,589,254	(a)	..	(a)	3,516,469
Value of power, fuel, etc., used .. £	108,000	43,477	(a)	..	(a)	158,300
Value of materials used £	16,482,816	11,803,745	(a)	..	(a)	28,825,086
Value of production £	3,995,028	5,577,057	(a)	..	(a)	9,744,759
Total value of output £	20,585,844	17,424,279	(a)	..	(a)	38,728,145
Value of land and buildings .. £	342,658	931,915	(a)	..	(a)	1,504,207
Value of plant and machinery .. £	746,410	1,233,047	(a)	..	(a)	2,189,594
Horse-power of engines ordinarily in use h.p.	5,099	2,862	(a)	..	(a)	8,466

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	30	37	36	37	36	34
Number of persons employed	5,544	5,044	4,971	4,704	4,757	4,707
Salaries and wages paid £'000	1,096	2,380	2,932	3,204	3,417	3,516
Value of power, fuel, etc., used .. £'000	34	90	126	144	151	158
Value of materials used £'000	7,081	16,599	19,419	22,416	26,835	28,825
Value of production £'000	2,685	4,897	5,206	7,078	8,341	9,745
Total value of output £'000	9,800	21,586	24,751	29,638	35,327	38,728
Value of land and buildings .. £'000	1,042	1,485	1,598	1,741	1,822	1,504
Value of plant and machinery .. £'000	943	1,171	1,284	1,458	1,917	2,190
Horse-power of engines ordinarily in use h.p.	4,610	6,056	5,862	6,028	6,919	8,466
Leaf used—						
Australian (stemmed) .. '000 lb.	4,489	3,775	3,664	4,222	4,866	4,482
Imported (stemmed) .. '000 lb.	16,011	24,558	26,131	28,410	33,076	36,053
Tobacco made '000 lb.	16,305	20,967	21,615	22,334	23,400	21,466
Cigars made '000 lb.	238	179	175	129	143	151
Cigarettes made '000 lb.	6,731	10,679	11,749	13,879	18,303	22,859

(a) Not available for publication ; figures are included in the total for Australia.

For many years the production of locally-grown leaf was comparatively small, and manufacturers were dependent on imported leaf for the supply of their raw materials. Increased import duties stimulated local production, and the quantity of Australian leaf used by manufacturers rose from 1.2 million lb. in 1929-30 to over 3 million lb. in 1930-31. During the 1939-45 War, about 4.7 million lb. of Australian-grown leaf was used annually, but in subsequent years the figure fell, and the 1954-55 usage was 4.5 million lb. For further information see Chapter XXII.—Agricultural Production.

Imports of tobacco during 1954-55 comprised—manufactured tobacco, 273,342 lb. ; cigars, 45,964 lb. ; cigarettes, 2,858,614 lb. ; unmanufactured tobacco, 43,577,571 lb.

34. *Sawmills, etc.*—The most important industry in Class X. is sawmilling. Because of difficulties associated with the classifying of sawmills into forest and town mills, they have been combined in the following table, together with plywood mills.

SAWMILLS AND PLYWOOD MILLS.

1954-55.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	1,081	639	619	89	258	347	3,033
Number of persons employed ..	10,965	7,712	8,615	2,218	4,698	2,423	36,631
Salaries and wages paid .. £	7,635,686	5,674,204	5,572,612	1,688,578	3,239,019	1,719,676	25,529,775
Value of power, fuel, etc., used £	593,518	418,710	309,899	82,205	276,970	123,280	1,804,582
Value of materials used .. £	21,936,906	13,355,736	10,999,986	5,885,627	5,316,027	3,578,987	61,073,269
Value of production .. £	13,921,296	10,387,796	9,560,107	2,813,482	5,301,581	3,334,409	45,318,671
Total value of output .. £	36,451,720	24,162,242	20,869,992	8,781,314	10,894,578	7,036,676	108,196,522
Value of land and buildings .. £	3,831,078	2,258,151	1,480,151	1,034,423	1,156,090	561,412	10,321,305
Value of plant and machinery .. £	4,348,976	3,214,401	2,829,962	1,009,159	1,553,074	1,940,836	14,896,408
Horse-power of engines ordinarily in use .. h.p.	114,773	82,888	78,166	19,505	34,363	30,091	359,786

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	1,639	2,917	3,113	3,245	3,117	3,033
Number of persons employed ..	19,056	32,937	35,646	34,541	35,448	36,631
Salaries and wages paid .. £'000	3,626	14,985	20,084	21,367	23,536	25,530
Value of power, fuel, etc., used .. £'000	225	1,031	1,399	1,547	1,639	1,805
Value of materials used .. £'000	8,441	34,868	49,131	46,585	53,908	61,073
Value of production .. £'000	5,762	26,718	35,935	35,663	39,799	45,319
Total value of output .. £'000	14,428	62,617	86,465	83,795	95,346	108,197
Value of land and buildings .. £'000	2,029	5,763	7,108	8,043	8,775	10,321
Value of plant and machinery .. £'000	2,777	8,866	10,864	11,906	12,504	14,896
Horse-power of engines ordinarily in use .. h.p.	89,843	275,699	310,387	332,736	336,951	359,786

The sawmill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the depth of the depression, recovered to 717 million super. feet in 1938-39 and by 1955-56 had risen to 1,454 million super. feet. Further reference is made to the sawmilling industry in Chapter XXV.—Forestry.

35. *Cabinet and Furniture Making and Upholstery.*—These industries constitute the principal manufactures in Class XI. The following table shows particulars for each State in 1954-55 :—

CABINET AND FURNITURE MAKING AND UPHOLSTERY, 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	536	537	246	120	151	68	1,658
Number of persons employed ..	5,291	4,461	2,403	1,505	1,170	441	15,271
Salaries and wages paid .. £	3,809,312	2,993,842	1,328,789	1,014,030	669,971	251,420	10,067,364
Value of power, fuel, etc., used .. £	110,654	66,729	30,223	26,727	18,421	4,843	257,597
Value of materials used .. £	6,427,197	4,670,779	2,273,062	1,700,298	1,163,014	304,227	16,538,577
Value of production .. £	5,938,896	4,890,408	2,059,437	1,507,665	1,102,802	388,604	15,887,812
Total value of output .. £	12,476,747	9,627,916	4,362,722	3,234,690	2,284,237	697,674	32,683,986
Value of land and buildings .. £	2,317,889	1,999,356	706,121	475,516	540,096	165,166	6,204,144
Value of plant and machinery .. £	708,750	703,571	305,180	241,417	179,774	57,224	2,195,916
Horse-power of engines ordinarily in use .. h.p.	14,966	14,598	6,600	5,226	3,493	1,530	46,413

36. *Printing Works.*—Printing and bookbinding rank high in importance among the industries of Australia, and in 1954-55 afforded employment for 37,246 employees, and paid £29,270,000 in salaries and wages, while the value of output amounted to £97,215,000. The first table below gives particulars of establishments engaged in general printing in each

State for 1954-55. These establishments include those engaged in lithographic printing, bookbinding, paper ruling and linotyping and Government printing works. Establishments producing newspapers and periodicals are shown separately in the second table to follow :—

GOVERNMENT AND GENERAL PRINTING WORKS, 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	511	500	104	78	71	21	1,285
Number of persons employed..	9,542	8,356	2,218	1,587	1,302	566	23,571
Salaries and wages paid .. £	7,468,766	6,470,272	1,391,170	1,082,440	844,124	415,354	17,672,126
Value of power, fuel, etc., used £	255,029	156,658	37,060	29,419	25,769	7,476	511,411
Value of materials used ..	11,105,763	8,800,605	1,401,677	1,252,452	977,244	412,442	23,950,183
Value of production ..	12,533,850	10,540,571	2,134,105	1,666,694	1,525,721	566,776	28,967,717
Total value of output ..	23,894,642	19,497,834	3,572,842	2,948,565	2,528,734	986,694	53,429,311
Value of land and buildings ..	3,984,806	4,119,696	740,971	529,278	532,787	212,530	10,120,068
Value of plant and machinery ..	4,737,779	4,668,720	694,011	815,378	605,139	247,996	11,769,023
Horse-power of engines ordinarily in use .. h.p.	14,792	12,893	2,195	1,986	1,831	810	34,507

NEWSPAPERS AND PERIODICALS, 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	179	114	57	34	23	6	413
Number of persons employed..	5,943	3,395	2,086	1,181	677	393	13,675
Salaries and wages paid .. £	4,995,214	3,027,916	1,523,332	1,054,516	629,339	367,821	11,598,138
Value of power, fuel, etc., used £	257,253	101,745	62,680	31,391	34,318	5,324	492,711
Value of materials used ..	9,897,422	6,722,750	2,487,744	1,871,774	1,123,747	287,385	22,390,822
Value of production ..	9,264,271	5,172,957	2,743,678	1,900,089	1,307,046	514,002	20,902,043
Total value of output ..	19,418,946	11,997,452	5,294,102	3,803,254	2,465,111	806,711	43,785,576
Value of land and buildings ..	3,843,581	1,278,123	912,858	708,279	317,070	216,813	7,276,724
Value of plant and machinery ..	3,742,353	2,910,241	1,208,398	613,604	615,583	123,334	9,213,513
Horse-power of engines ordinarily in use .. h.p.	15,264	10,316	4,863	3,182	2,265	720	36,610

37. **Paper Making.**—Although the paper manufacturing industry has been established in Australia for many years, it was not until the manufacture of paper pulp from indigenous timber commenced in 1938-39 that any marked development occurred.

Plants producing pulp from eucalypt timber are operating in Victoria and Tasmania, whilst in South Australia pulp is being produced from locally-grown softwoods. The production of pulp rose from 6,000 tons in 1938-39 to 88,000 tons in 1946-47. It remained at about this level until 1949-50 but has since increased steadily to a total of 173,000 tons in 1954-55.

The number of factories operating in 1954-55 comprised three in New South Wales nine in Victoria, one in Queensland and South Australia, two in Western Australia and four in Tasmania. In the latter State, newsprint, writing and printing papers are produced, and in the other States wrappings, other papers and boards. Particulars for this industry are shown in the following table.

PAPER MAKING, INCLUDING PULP MILLS : AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	7	14	16	17	18	20
Number of persons employed ..	1,961	6,336	7,237	6,441	7,179	7,611
Salaries and wages paid .. £'000	467	4,231	5,852	5,338	6,130	7,095
Value of power, fuel, etc., used .. £'000	201	1,181	1,610	1,649	2,048	2,560
Value of materials used .. £'000	1,096	7,487	14,558	12,637	15,198	17,474
Value of production .. £'000	1,005	9,165	12,623	11,085	15,451	18,294
Total value of output .. £'000	2,302	17,833	28,791	25,371	32,697	38,328
Value of land and buildings .. £'000	850	4,871	6,820	7,324	8,106	8,255
Value of plant and machinery .. £'000	1,713	9,814	12,961	15,263	16,810	18,050
Horse-power of engines ordinarily in use h.p.	31,548	103,098	112,469	127,558	141,373	157,948

38. **Rubber Goods.**—The following table shows particulars of this industry for each State during 1954-55 but excludes establishments engaged primarily in the retreading and repairing of tyres.

RUBBER GOODS, 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S.Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	35	51	10	9	2	1	108
Number of persons employed ..	6,325	5,505	1,109	675	(a)	(a)	13,645
Salaries and wages paid ..	£ 5,958,563	£ 4,978,046	£ 818,129	£ 586,047	(a)	(a)	£ 1,236,900
Value of power, fuel, etc., used ..	£ 841,393	£ 767,230	£ 87,911	£ 59,855	(a)	(a)	£ 1,759,080
Value of material used ..	£ 15,853,186	£ 13,442,081	£ 2,538,694	£ 870,448	(a)	(a)	£ 32,732,755
Value of production ..	£ 7,173,268	£ 9,051,091	£ 1,771,403	£ 956,202	(a)	(a)	£ 18,982,613
Total value of output ..	£ 23,867,847	£ 23,260,402	£ 4,398,008	£ 1,886,505	(a)	(a)	£ 53,474,448
Value of land and buildings ..	£ 2,165,316	£ 2,297,461	£ 430,694	£ 113,772	(a)	(a)	£ 5,057,461
Value of plant and machinery ..	£ 2,151,249	£ 2,650,321	£ 286,973	£ 179,104	(a)	(a)	£ 5,284,787
Horse-power of engines ordinarily in use ..	h.p. 44,274	45,196	6,839	2,361	(a)	(a)	98,836

(a) Not available for publication ; figures are included in the total for Australia.

39. Electric Light and Power Works.—(i) *Details of Industry.* The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. For further information on this subject see Chapter VIII.—Electric Power Generation and Distribution. Particulars of the industry for each State during the year 1954-55 and for Australia for a series of years are shown below :—

ELECTRIC LIGHT AND POWER WORKS.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	85	62	59	42	94	9	351
Number of persons employed ..	5,362	2,891	1,350	(a)	945	(a)	11,927
Salaries and wages paid ..	£ 5,253,008	£ 2,790,735	£ 1,177,535	(a)	£ 923,264	(a)	£ 11,456,947
Value of power, fuel, etc., used ..	£ 14,686,504	£ 9,461,575	£ 5,250,414	(a)	£ 3,352,850	(a)	£ 36,547,670
Value of materials used ..	£ 1,579,083	£ 456,557	£ 1,549,706	(a)	£ 306,437	(a)	£ 4,170,627
Value of production ..	£ 18,397,404	£ 9,128,122	£ 3,402,346	(a)	£ 2,602,970	(a)	£ 37,567,647
Total value of output ..	£ 34,662,991	£ 19,046,254	£ 10,202,466	(a)	£ 6,262,257	(a)	£ 78,285,944
Value of land and buildings ..	£ 17,791,097	£ 12,410,583	£ 6,689,324	(a)	£ 3,186,519	(a)	£ 60,120,947
Value of plant and machinery ..	£ 45,991,307	£ 47,397,231	£ 21,735,033	(a)	£ 9,512,914	(a)	£ 146,273,460
Generators installed—Kilowatt capacity ..	kw. 1,635,751	944,028	428,720	(a)	232,407	(a)	3,953,838

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	395	354	331	349	351	351
Number of persons employed ..	6,508	9,815	10,381	10,891	11,395	11,927
Salaries and wages paid ..	£'000 1,977	£ 6,541	£ 8,178	£ 9,675	£ 10,308	£ 11,457
Value of power, fuel, etc., used ..	£'000 3,239	£ 21,259	£ 28,724	£ 32,205	£ 35,083	£ 36,548
Value of materials used ..	£'000 530	£ 2,712	£ 3,481	£ 3,296	£ 4,800	£ 4,170
Value of production ..	£'000 8,714	£ 14,790	£ 18,065	£ 24,582	£ 30,098	£ 37,568
Total value of output ..	£'000 12,483	£ 38,761	£ 50,270	£ 60,083	£ 69,981	£ 78,286
Value of land and buildings ..	£'000 8,388	£ 16,932	£ 21,641	£ 29,531	£ 47,369	£ 60,120
Value of plant and machinery ..	£'000 27,751	£ 53,441	£ 66,630	£ 94,169	£ 122,773	£ 146,273

(a) Not available for publication ; figures are included in the total for Australia.

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on page 211.

(ii) *Production.* The increase in the production of electric light and power in each of the States since 1938-39 is shown in the following table :—

ELECTRIC LIGHT AND POWER WORKS : ELECTRICITY PRODUCED.
(Million kWh.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	1,948.5	1,222.5	387.3	256.3	307.0	566.7	4,688.3
1949-50 ..	3,758.1	2,706.1	971.6	593.8	417.5	1,061.6	9,508.7
1950-51 ..	4,251.4	2,875.9	1,115.4	713.0	469.9	1,077.7	10,503.3
1951-52 ..	4,628.1	2,964.1	1,242.1	787.8	529.7	1,145.5	11,297.3
1952-53 ..	4,868.3	3,192.9	1,349.1	822.3	568.7	1,243.5	12,044.8
1953-54 ..	5,450.1	3,692.7	1,510.7	955.2	626.9	1,471.4	13,707.0
1954-55 ..	5,951.2	4,152.3	1,657.6	1,119.2	702.3	1,589.0	15,171.6
1955-56(a) ..	6,494.9	4,646.8	1,801.2	1,238.7	757.4	1,843.1	16,782.1

(a) Preliminary—subject to revision.

40. Gas-works.—(i) *Details of Industry.* Gas-works are in operation in the majority of important towns in Australia. The following table shows particulars of gas-works in each State for the year 1954–55 and for Australia for a series of years :—

GAS-WORKS.

1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	39	33	16	3	4	2	97
Number of persons employed ..	1,558	1,466	385	(a)	200	(a)	4,103
Salaries and wages paid .. £	1,560,460	1,403,991	304,664	(a)	187,667	(a)	3,882,441
Value of power, fuel, etc., used .. £	2,012,291	134,490	26,481	(a)	104,906	(a)	2,290,820
Value of materials used .. £	6,192,620	5,832,471	948,709	(a)	633,383	(a)	15,186,621
Value of production .. £	4,757,248	2,751,786	797,482	(a)	258,462	(a)	9,103,508
Total value of output .. £	12,962,159	8,718,747	1,772,672	(a)	996,751	(a)	26,580,949
Value of land and buildings .. £	1,354,114	624,968	284,046	(a)	139,951	(a)	2,488,304
Value of plant and machinery .. £	5,859,924	7,217,835	1,732,534	(a)	1,553,038	(a)	19,134,481
Horse-power of engines ordinarily in use .. h.p.	18,786	8,838	2,275	(a)	1,245	(a)	33,389

AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories ..	107	100	100	99	98	97
Number of persons employed ..	2,931	3,871	4,042	4,199	4,141	4,103
Salaries and wages paid .. £'000	785	2,401	3,207	3,553	3,767	3,882
Value of power, fuel, light, etc., used .. £'000	251	1,179	1,777	2,080	2,244	2,291
Value of materials used .. £'000	1,872	9,450	13,401	15,576	15,249	15,187
Value of production .. £'000	2,694	4,426	7,165	8,473	8,121	9,103
Total value of output .. £'000	4,817	15,055	22,343	26,129	25,614	26,581
Value of land and buildings .. £'000	1,463	2,071	2,186	2,342	2,416	2,488
Value of plant and machinery .. £'000	7,498	12,386	13,846	15,962	17,235	19,134
Horse-power of engines ordinarily in use .. h.p.	17,905	28,205	28,427	29,514	30,055	33,389

(a) Not available for publication ; figures are included in the total for Australia.

(ii) *Coal Used and Production.* The following table shows details for 1954–55 :—

GAS-WORKS : COAL USED AND PRODUCTION, 1954-55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Coal used '000 tons	984	696	157	(a)	55	(a)	2,063
Gas produced million cubic ft.	21,360	14,290	2,956	(a)	1,448	(a)	43,465
Gas sold .. "	18,476	12,244	2,614	(a)	1,261	(a)	37,555
Coke produced (b) .. tons	520,646	354,737	108,452	(a)	17,778	(a)	1,099,859

(a) Not available for publication ; figures are included in the total for Australia. (b) In addition, 2,046,790 tons of metallurgical coke were made in Coke Works in 1954–55.

Since 1938–39, when the output of gas was 21 thousand million cubic feet, production has increased each year and reached nearly 45 thousand million cubic feet in 1955–56.

CHAPTER VIII.

ELECTRIC POWER GENERATION AND DISTRIBUTION.

This chapter is divided into three major parts. A.—Introduction, which deals briefly with the resources, generation and distribution and future developments, of electric power in Australia ; B.—The Snowy Mountains Hydro-electric Scheme ; and C.—The origins, development, present situation and new projects of electrical systems in each Australian State and Territory. A Statistical Summary is appended.

It should be noted that the information contained in the chapter relates to situations existing and projects contemplated in 1956 and that it may be considerably affected by changes in policy or plans, or by developments in the projects themselves.

A. INTRODUCTION.

1. *Distribution of Population and Location of Power Resources.*—The geographical pattern of electric power generation and distribution in Australia has been affected by two main influences—the distribution of population, with a resulting distribution of industry, and the location of fuel and water resources.

The Australian population increased between 1939 and 1956 by approximately 2,460,000 to reach a total of 9,428,000. The two principal centres of population and industry, the metropolitan areas of Sydney and Melbourne, make the greatest demands for electric power and their growth has been associated with the development of large deposits of coal located relatively close to the source of demand. This, together with the fact that the major water resources are also located in the south-eastern portion of the Commonwealth, materially influences the distribution of industrial population and the location of major electric power stations.

By far the most important source of energy used in the production of electric power in Australia is coal. At 30th June, 1955, thermal power equipment represented 79 per cent., hydro plant 15 per cent. and internal combustion equipment 6 per cent. of the total installed generating capacity.

Most of Australia is poorly supplied with water, only 15.2 per cent. receiving an annual rainfall of 30 inches or over. This is confined largely to Tasmania and to the narrow coastal strip on the east coast. The possibility of establishing large hydro or steam stations in inland areas is, therefore, strictly limited by the lack of sufficient water for feed and condensing purposes.

The only region on the mainland of Australia where land is high enough to receive reliable winter snowfall, and from which reasonably constant water supplies throughout the year can therefore be expected, is the mountain chain which stretches from the high plateaux of south-eastern New South Wales through to the north-eastern highlands of Victoria. The hydro-electric potential of this area is considerable, and plans have been formulated to develop more than 3,000,000 kW within the next 25 years. The two major construction projects in this area are the Snowy Mountains and Kiewa schemes. Other hydro-electric potential does exist on the mainland on the rivers of the coastal areas of New South Wales and Queensland, but the amount there available is only a small proportion of the potential of the Alpine region. In Tasmania, hydro-electric resources have been estimated at about 50 per cent. of the total Australian hydro-electric potential. Whereas on the mainland the chief source of energy is coal, water occupies this position in Tasmania.

2. *Electric Power Generation and Distribution.*—(i) *Ownership of Undertakings.* At the beginning of this century, Australia's electrical undertakings were carried on mainly by private enterprise, but some measure of governmental control was exercised through various electric light and power Acts. This legislation was designed to provide standards of safety, and to define the scope and obligations of the private organizations engaged in producing electric power for sale. A trend towards public ownership commenced during the 1914–18 War and became more pronounced after the 1939–45 War. By 1956, all major generating stations supplying the public were, in varying degrees, under the control of State statutory organizations, constituted with the object of unifying and co-ordinating the generation and distribution of electricity supplies within the various States. There are, however, still a large number of small private and municipal enterprises generating power

for supply to country towns, although central authorities are extending supply to these places wherever practicable. In many areas, however, it has been and remains the practice for central authorities to sell power in bulk to local distributing organizations who undertake local reticulation.

In addition to the private, local government and statutory organizations who generate and/or distribute electricity for sale, there are numerous firms generating power for use in their own establishments, particularly those engaged in mining pursuits remote from the main centres of population. This chapter, however, is concerned mainly with the activities of central electric stations, and the power regularly produced for such internal consumption is, in any case, a relatively small proportion of total power produced.

(ii) *Power Production and Generating Capacity.* In the period between 1938-39 and 1955-56, production of electric power in Australia increased more than threefold from 4,688 to 16,782 million kilowatt hours.

Since the 1939-45 War, industry and commerce have expanded rapidly, many new houses have been built and the population has increased by approximately 20 per cent. These factors, together with extension of electricity supplies to rural areas and the increased use of domestic electric appliances, have all contributed to bring about a position where the greatly increased demand for power cannot be satisfied by the existing installed capacity of central generating stations.

At 30th June, 1955, installed generating capacity in Australia totalled approximately 3.95 million kW compared with 1.62 million kW in 1939, an increase of about 144 per cent. In 1938-39, each kW of installed capacity produced an average of 3,000 kWh per annum, compared with an average of 3,869 kWh in 1954-55. These figures are based on Commonwealth totals; figures for the States vary, depending on such factors as the distribution of demand, number of consumers, and type of equipment employed.

3. Future Developments.—Each central authority has embarked upon constructional programmes to overcome the lag between supply and demand. Industrial and commercial expansion, however, has continued on a high level, and several projects have been commenced or planned in various parts of the Commonwealth for suburban and main railway line electrification. Other fields directly connected with the demand for power, such as house building, must also be taken into account.

An important factor to be considered in respect of future development is the increasing relative importance of the generation of electric power from water resources.

B. SNOWY MOUNTAINS HYDRO-ELECTRIC SCHEME.*

1. Geography of Area.—The Snowy country in south-eastern New South Wales is the only part of the continent in which any altitudes exceed 7,000 feet, and in which there is a substantial area over the altitude of 6,000 feet. The precipitation which results from the presence of this barrier on the line of the prevailing winter depressions of Antarctic origin amounts to as much as 120 inches a year in the vicinity of Mt. Kosciusko, the highest point in Australia. The drainage from the snowfields is practically all to three systems—those of the Murray and Murrumbidgee Rivers, which flow inland, and that of the Snowy, which flows southwards to Bass Strait.

2. Description of Scheme.—(i) *General.* The proposals at present being implemented by the Snowy Mountains Hydro-electric Authority fall into two groups, Tumut Development and Snowy-Murray Development, each having its associated plans for hydro-electric power production. The features described hereunder may be identified by reference to the map on page 273. It should be remembered that, as the final designs for practically every element of the Scheme have not yet been completed, and in many cases will not be completed for some years, any figures which are now quoted in respect of those elements will undoubtedly be subject to modification in the future.

(ii) *Tumut Development.* The central feature of this part of the Scheme is diversion to, and regulation of, the waters of the Tumut River, a stream which is at present completely unregulated but contributes approximately half of the flow of the Murrumbidgee River at Gundagai below the existing main storage on the Murrumbidgee at Burrinjuck. To the Tumut will be diverted the waters of the Eucumbene, a major tributary of the Snowy, and the headwaters of the Tooma, a tributary of the Upper Murray. The headwaters of the Murrumbidgee itself will also be diverted to the Tumut, principally to secure desirable electric power.

* See also Chapter IX.—Water Conservation and Irrigation, §3, para. 4 of this issue and special detailed article in Official Year Book No. 42, pp. 1103-1130.

A major dam is being constructed on the Eucumbene River at Adaminaby, creating an ultimate usable storage of at least 3.5 million acre feet, and from here, water will be conveyed by a 14-mile tunnel to Tumut Pond, on the upper reaches of the Tumut River, where it will be joined by the waters from the Tooma, diverted by aqueducts and tunnels. From Tumut Pond, the water will be conveyed by another tunnel to power station T1 with an installed capacity of 320,000 kW and by a further tunnel to power station T2 with a capacity of 280,000 kW thence discharging into a smaller storage at Lob's Hole also on the Tumut River.

Between the foot of the Lob's Hole storage and the top of the Blowering storage will be power stations T5 and T6. The total capacity of these stations will be 410,000 kW.

The Blowering storage with its capacity of about 800,000 acre feet, is an adjunct to the Snowy Mountains Hydro-electric Scheme and will be required for the regulation both of the Tumut waters and of the waters diverted into the Tumut. This regulation is essential if the waters impounded are to be fully utilized for irrigation purposes. At the foot of the Blowering Dam will be the last of the Tumut Power stations, T7, with a capacity of some 60,000 kW, but this station will operate only when water is released for irrigation. The State of New South Wales will be responsible for the construction of the Blowering works.

As originally planned, the waters of the Upper Murrumbidgee were to be brought from a major storage at Tantangara by tunnel discharging into a pond on the Yarrangobilly River, a tributary of the Tumut, and thence into the Lob's Hole Reservoir. This part of the Scheme has now been amended and the waters to be stored at Tantangara, 616,500 acre feet, will now be diverted to the Adaminaby storage through 9 miles of tunnel, and augment the flow through power stations T1, T2, T5, T6, and T7 on the Tumut River.

The total extra new water which will reach the Murrumbidgee is expected to average 528,000 acre feet per annum and the total installed capacity of the various power stations is estimated at 1,310,000 kW (excluding T7).

(iii) *Snowy-Murray Development.* The central feature of this part of the Scheme is the diversion of the waters of the Upper Snowy itself from a major dam to be constructed at Jindabyne on that river, a little below its junction with the Eucumbene and the Crackenback Rivers. This reservoir will have a storage capacity of approximately 1,100,000 acre feet and from it a tunnel approximately 28 miles in length will run right through the Great Dividing Range finally discharging into Swampy Plains River, not far above its junction with the Murray proper.

Into this tunnel will be collected a considerable quantity of water from the very high altitude country of the Kosciusko area and from a number of smaller tributaries of the Murray. The collection from the Kosciusko area commences at the Kosciusko Reservoir at an altitude of 5,765 feet, not many miles below the source of the Snowy. A tunnel will convey water from this reservoir to power station M.1.A. with an installed capacity of 60,000 kW and thence to a pond on the Snowy River, at its junction with the Guthega River.

From the Guthega Pond, a further tunnel and penstock lead to station M.1.B. with a capacity of 60,000 kW (ultimate capacity 90,000 kW), which discharges into a pond at the junction of the Mulyang and Snowy Rivers. Construction of this part of the scheme has been completed. Mulyang Pond will discharge into a tunnel leading to station M.2.L., with installed capacity of 60,000 kW. This station also receives the flow of a tributary of the Snowy River via station M.2.H. From station M.2.L., the water discharges into a reservoir at Island Bend on the main stream of the Snowy.

From the Island Bend reservoir, a vertical shaft, 1,100 feet deep, will lead to the main tunnel from Jindabyne reservoir previously referred to, passing on its way through power station M3 with installed capacity of 265,000 kW. Into this main tunnel will also be collected waters from the Upper Murray tributary streams previously mentioned.

Of these, the most important is the Windy Creek-Geehi River series. A pond on Windy Creek, a small tributary of the Geehi, situated at an altitude of over 5,000 feet, will provide water through a tunnel to station M4 with an installed capacity of 75,000 kW thence by aqueducts and tunnel to station M5.H. with an installed capacity of 40,000 kW discharging into the M5.L. Intake Pond on the Geehi River.

A vertical shaft will lead this water into the main tunnel, passing through station M5.L. with an installed capacity of 20,000 kW. The combined waters thus collected into the main tunnel will pass through station M6 with an installed capacity of 540,000 kW and then discharge into a pond on Bogong Creek, another of the Upper Murray tributaries. At this point, the water is still at an altitude of nearly 2,000 feet, and the main tunnel will thence continue to station M7 with a capacity of 540,000 kW.

From M7 the total collected waters will flow into the Swampy Plains River at a point some seven miles, in a direct line, above its confluence with the Murray. It will be necessary, however, to provide a further storage on the Murray for the proper regulation of these waters for irrigation purposes.

The total water flowing to the Murray from these works will amount on the average to 722,000 acre feet per annum, but since 280,000 acre feet which now reaches the Murray from the Tooma will be, as indicated previously, diverted to the Tumut, the total extra water actually reaching the Murray will be, on the average, 442,000 acre feet per annum; the total installed capacity of the power stations will be 1,700,000 kW.

An integral part of each development is the construction of hundreds of miles of aqueducts to collect and divert water from the many streams in the area into storages and tunnels.

3. Utilization of Power.—The total capacity of all stations in the Scheme will be of the order of 3,000,000 kW. By comparison, the present total installed capacity of all the generating stations in the Commonwealth is over 4,000,000 kW.

If, however, the demand for power continues to increase as expected, the major source of power must still be thermal stations. The operation of the whole Scheme is dependent on the appropriate development and integration of these stations, as otherwise there would be a serious loss in ultimate economy; all economic estimates therefore postulate that thermal capacity will be expanded so as to preserve an appropriate ratio.

It has been estimated with a reasonable degree of probability that the power available from the Scheme will save coal to the order of five million tons annually.

The first call on the power generated under the Snowy Scheme will be by the Commonwealth Government for supply to the Australian Capital Territory of power which it needs in that area, particularly for certain projects with defence significance, and no indication can at present be given as to how great that call will be. It is not likely, however, to amount to more than a relatively small fraction of the total power available, and it has been agreed that the balance will be divided between the States of New South Wales and Victoria in a proportion of two-thirds to New South Wales and one-third to Victoria.

The first power station in the scheme, M1.B., the Guthega Project, is now producing power. A 132,000 volt transmission line extends from the power station via Cooma to the Australian Capital Territory where it feeds into the main New South Wales transmission network. The construction of the Eucumbene-Tumut diversion tunnel, Tumut Pond Dam and Power Station T1 is in progress. The construction of the Adaminaby Dam is being carried out by the Public Works Department of New South Wales on behalf of the Authority and a contract for this work was let in May, 1956, to a group of American engineering contractors who were already engaged on the construction of the Eucumbene-Tumut tunnel and Tumut Pond Dam for the Snowy Mountains Authority. Power Station T1 will enter the New South Wales network via a 330,000 volt transmission line early in 1959.

C. STATES AND TERRITORIES.

§ 1. New South Wales.

1. General.—In Official Year Book No. 39, an account was given in some detail of the origin and development of electricity generation and distribution in New South Wales, describing in particular the growth of the systems of the Sydney County Council, the Department of Railways, the Electric Light and Power Supply Corporation Ltd., the Southern Electricity Supply and the Clarence River County Council (now the Northern Rivers County Council). A description was also given of the legislation which constituted the Electricity Authority of New South Wales and the Electricity Commission of New South Wales as well as legislation existing prior to their constitution. At present, the three main Acts governing electricity supply in New South Wales are:—

- (i) The Local Government Act 1919 which lays down the various rights and responsibilities of local government bodies in the establishment and operation of electricity trading undertakings.
- (ii) The Electricity Development Act 1945–1948 which established the Electricity Authority of New South Wales as the body responsible for the co-ordination of electricity supply throughout the State.

- (iii) The Electricity Commission Act 1950 which constituted the Electricity Commission of New South Wales as the major generating authority and not subject to the provisions of the Electricity Development Act.

2. **Organization.**—(i) *The Electricity Commission of New South Wales.*—The Commission, which was constituted under the Electricity Commission Act 1950, consists of five members of whom one is a full-time Chairman. In its administration, the Commission is directly responsible to the Minister for Local Government.

When the Commission was established, 93 per cent. of the State's power requirements were generated by four bodies—the Sydney County Council, the Department of Railways, Southern Electricity Supply (a division of the Department of Public Works) and the privately-owned Electric Light and Power Supply Corporation Ltd. The Electricity Commission Act 1950 and the Electricity Commission (Balmain Electric Light Company Purchase) Act 1950 provided for the acquisition of the power stations and main transmission lines of those bodies. The transfer of the power stations and transmission lines of the Sydney County Council, Southern Electricity Supply and the Department of Railways has now been effected. The date of transfer of the undertaking owned by the Electric Light and Power Supply Corporation Ltd. is dependent upon the determination of the valuation of the undertaking. On 1st July, 1956 the Commission acquired the power station and bulk supply of the Tamworth City Council, which supplied in bulk to a number of distributing bodies in the north of the State.

The main function of the Commission is the generation and transmission of electricity which it sells in bulk to distribution authorities (mainly local government bodies) throughout a large part of the State, to the government railways and tramways and to certain large industrial consumers. As the major generating authority, it is also responsible for the development of new power sources. An important exception is the hydro-electric potential of the Snowy Mountains region which is being developed by the Snowy Mountains Hydro-electric Authority, a Commonwealth Government body.

(ii) *Other Electricity Supply Authorities.* The retail sale of electricity to the public is, in general, carried out by separate electricity supply authorities—municipal and shire councils, electricity county councils (consisting of a grouping of shire and/or municipal councils) or private franchise holders. At 1st July, 1956, there were 116 of these supply authorities throughout the State of which 35 also generated part or the whole of their power requirements. The majority of country power stations are small oil engine plants which are becoming increasingly costly to operate. Consequently, they are gradually being closed down as the main transmission network is extended further afield.

Over the past few years, there has been a distinct trend towards the consolidation of supply areas, many of which have been regarded as being too weak individually to form satisfactory areas for distribution. Generally these consolidations have taken the form of a county district consisting of a number of neighbouring shire and municipal areas grouped for electricity supply purposes only and administered by a county council of representatives elected by the constituent shire and municipal councils.

It is interesting to note that of the 238 shires and municipalities in New South Wales, 145 are included in one or other of the 29 electricity county districts. Twenty-four (24) of these county districts have been constituted since 1945. The largest of the county councils is the Sydney County Council which at 30th June, 1956, was supplying 379,381 consumers in the Sydney Metropolitan Area. Unlike the other county councils, which are constituted under the provisions of the Local Government Act 1919, the Sydney County Council was specially constituted under the Gas and Electricity Act 1935.

(iii) *The Electricity Authority of New South Wales.*—The Electricity Authority was constituted under the Electricity Development Act 1945–1948, for the stated purpose of promoting and regulating the co-ordination, development, expansion, extension and improvement of electricity supply throughout the State. The Authority, which is a regulatory body only, consists of seven members of whom one is a full time Chairman. Like the Commission, it is responsible to the Minister for Local Government.

The main functions of the Authority are as follows :—

- (a) *Distribution.* Under the Act the approval of the Authority is required, *inter alia*, for the establishment or acquisition of an electricity trading undertaking by a local government council, for the granting or renewing by such a council of electricity franchise agreements or corresponding

agreements with other councils, and for the giving or taking of bulk supplies of electricity. It also has power to formulate proposals for the establishment of county councils.

In exercising these powers, the Authority is mainly concerned to see that distributing authorities are sufficiently strong to provide an economical, efficient and satisfactory service. Its most important activities in this regard are in investigating supply areas and in making recommendations to the Minister for the consolidation of such areas into county districts. Many of the new county districts referred to earlier have been formed largely as a result of the Authority's advice.

- (b) *Rural Electrification.* The Authority administers the rural electricity subsidy scheme under which rural electrification throughout the State is progressing very rapidly (see para. 4 below).
- (c) *Safety.* The Electricity Development Act 1945–1948 contains provisions for the making of regulations relating to most aspects of safety and these powers are being used more and more extensively. Safety regulations now in force cover such matters as inspection of consumer's installations, licensing of electricians and electrical contractors, approval of electrical appliances, safety of linesmen and overhead line construction.
- (d) *Generation and Transmission.* The approval of the Authority is required for the establishment or extension of power stations and main transmission lines (with the exception of those of the Electricity Commission). The Authority may, for example, refuse approval for the establishment of a new power station if it is more economical and in the general interest for the supply authority concerned to purchase in bulk from another body.

3. *Generation and Transmission.*—(i) *General.* Except in the Snowy Mountains district, and in one or two other areas, New South Wales is lacking in major water power potential and for the generation of electricity the State is, therefore, mainly dependent on steam power stations. During the year ended 30th June, 1955, coal-fired stations generated 96 per cent. of the State's energy requirements, hydro-electric stations 2 per cent. and internal combustion plants 2 per cent.

The proportion of power generated in hydro-electric stations will increase considerably in the future with the development of the Snowy Mountains Scheme by the Commonwealth Government. Nevertheless, coal-fired steam power stations will continue to supply the greater part of requirements for the foreseeable future.

(ii) *Major Generating Stations.* In New South Wales, the generation of electricity has followed the general world trend towards large centralized power stations supplying large areas through inter-connected transmission networks. The greater part of the coal-fired generating plant is now concentrated within the bounds of the major coal-fields, where the big industrial centres and most of the population are also located.

As at 1st July, 1955, the major power stations within the main inter-connected system and their installed capacities were as follows:—*Steam*—Bunnerong "A" and "B" (Sydney), 362,000 kW; Pyrmont "A" and "B" (Sydney), 182,000 kW; White Bay (Sydney), 118,000 kW; Ultimo (Sydney), 80,000 kW; Balmain (Sydney), 97,000 kW; Port Kembla, 64,500 kW; Zarra-street (Newcastle), 72,000 kW; Tallawarra (Lake Illawarra near Wollongong), 60,000 kW; Maitland, 20,000 kW; Penrith, 20,000 kW; Lithgow, 22,000 kW. *Hydro*—Burrinjuck (near Yass), 20,000 kW. There were also various other steam, hydro and internal combustion stations aggregating 66,650 kW. The total installed capacity of the main inter-connected system was 1,183,150 kW.

It will be seen, therefore, that the greater part of the State's generating plant is concentrated within a hundred mile radius of Sydney—that is, at Sydney itself (five stations), Port Kembla, Newcastle, Maitland, Penrith and Lithgow. The largest single station outside this area is located at Tamworth.

(iii) *Interconnected Network.* Over 90 per cent. of electricity consumers in New South Wales are now supplied through the main inter-connected systems. In this network, transmission lines operating mainly at 132,000, 66,000 or 33,000 volts interconnect the various power stations and distribute power to load centres throughout most of the south-eastern portion of the State and the north coast region. At 30th June, 1955, there were 660 circuit miles of 132 kV and about 1,500 circuit miles of 66 kV transmission lines in service in the interconnected system. The total installed capacity of the interconnected systems, which includes an aggregated capacity of 54,593 kW for various stations, including the Northern Rivers and Bega Valley County Districts linked with the main system, was 1,237,743 kW (as at 1st July, 1955).

(iv) *Separate Systems and Total State Installed Capacity.* There are a number of separate systems and isolated plants which have not yet been interconnected with the main network and which at 1st July, 1955, had an aggregate installed capacity of 67,634 kW. The most notable are the Tamworth and Muswellbrook Coal Company systems. The Tamworth system (23,000 kW), now taken over by the Commission, supplies power to an extensive district in the north of the State through 66,000 volt and 33,000 volt transmission lines. Both the Tamworth and Muswellbrook systems are to be interconnected with the main system within the next five years. Some councils along the Victorian border receive bulk supplies from Victorian authorities.

The aggregate installed capacity for the whole of the New South Wales systems and isolated plants was 1,305,377 kW (as at 1st July, 1955).

(v) *Future Development.* Construction is proceeding on new major power stations on the coalfields at Lake Macquarie, near Newcastle (330,000 kW), Tallawarra, near Port Kembla (320,000 kW), and Wallerawang, near Lithgow (240,000 kW). These stations will be linked with Sydney by 132,000 volt transmission lines, and extensive additions are also planned to the 132,000 volt system to supply increasing loads at various centres. A 132,000 volt system is being established around the outer Sydney Metropolitan Area for the supply of load centres previously fed through 33,000 volt circuits direct from the inner Sydney power stations. The construction of a hydro-electric power station on the Hume Reservoir of 50,000 kW capacity, connected to the New South Wales network through a 132,000 volt transmission line between Hume and Wagga Wagga is almost complete. Plans provide for the construction of a hydro-electric power station on the Warragamba Dam of 50,000 kW capacity to be connected to the 132 kV Sydney metropolitan network.

In addition to the power stations mentioned above which are under construction or planned for the system controlled by the Electricity Commission, a number of local government bodies have plans in hand for the development of independent power stations. Of these the more important are as follows :—The Northern Rivers County Council is extending a steam power station at Koolkhan (near Grafton). Plans provide for an installed capacity of 25,000 kW. The first three units, totalling 17,500 kW, were in operation at 30th June, 1956. The North-West County Council is proceeding with the establishment of a 12,000 kW steam power station on the Ashford coal-field. The New England County Council and the Bega Valley County Council are extending small hydro-electric power stations on the Oakey River (near Armidale), and Georges Creek (near Bega) respectively.

(vi) *Hydro-electricity.* The greater part of the hydro-electric potential of New South Wales is concentrated in the Snowy Mountains Area (see Snowy Mountains Hydro-electric Scheme, p. 266). Apart from this area, there is, at present, only one hydro-electric station in New South Wales with an installed capacity of more than 10,000 kW. This is the 20,000 kW station at Burrinjuck Dam on the Murrumbidgee River the largest of the other installations being the 7,500 kW station at Wyangala Dam on the Lachlan River. The output of both these plants is dependent on the release of waters for irrigation purposes.

Similar schemes, for which the water release will be dependent upon other than electrical requirements, are being constructed at the Hume Irrigation Dam on the Murray River and at Warragamba Dam which is being constructed to provide a water supply for the Sydney Metropolitan Area. At Hume, two 25,000 kW units are to be installed and the output of the station will be shared equally between New South Wales and Victoria. At Warragamba, a 50,000 kW unit is to be installed.

Of the remaining hydro installations, the largest is that of the Northern Rivers County Council on the Nymboida River, a tributary of the Clarence. This station, has a capacity of 4,600 kW.

The New England County Council has constructed a 2,500 kW hydro scheme near Armidale on the Oakey River, a tributary of the Macleay River, and plans to increase the capacity to 5,000 kW.

The Mullumbimby Municipal Council has in operation two 150 kW hydro units on Wilson's Creek, a tributary of the Richmond River.

The Bega Valley County Council operates a hydro-electric scheme at Brown Mountain, utilizing the headwaters of the Bemboka River. This installation now has a capacity of 1,900 kW and work is in progress on extensions to provide for two further 1,000 kW units.

The Clarence Gorge Scheme is a proposal for combined flood mitigation and hydro-electric generation on the Clarence River about 40 miles from Grafton and 240 miles from Newcastle. In February, 1955, the Clarence Advisory Committee which was set up by the New South Wales Government to report on the scheme recommended, because of economic reasons, against the construction of a dam at the Clarence Gorge either solely for flood mitigation or for the dual purpose of hydro-electric power generation and flood mitigation.

There are also possibilities of relatively large scale developments on the Shoalhaven and Macleay Rivers. Investigations have been made by the New South Wales Government but no concrete proposals have as yet been adopted.

Generally, apart from the Snowy Mountains area, hydro-electric developments are not favourable in New South Wales when compared with coal-fired steam power stations.

4. Rural Electrification.—When the Electricity Authority of New South Wales was constituted in 1946, one of its first tasks was the devising of a scheme for subsidizing the cost of rural electrification. At that time only 16,000 New South Wales farms were being served with electricity—less than one-third of those within reasonable reach of public electricity supply systems. In August, 1946, a subsidy scheme was approved by the Government and put into immediate operation. Under this scheme, local electricity supplies receive subsidies from the Electricity Authority towards the cost of new rural lines. The amount of subsidy is based on the estimated cost of a proposed extension and the number of consumers able to be served by the new lines. In order that the funds available for subsidy purposes might be used to the best possible advantage, the scheme is designed to encourage local electricity supply authorities to construct the more economic extensions first. This has been achieved by fixing a limit to the cost eligible for subsidy. Originally this limit was £250 per consumer when averaged over the cost of the whole extension but the limit was raised to £400 in December, 1953. Some subsidy is paid on higher cost extensions but the excess over an average of £400 is not subsidized.

Between August, 1946, and June, 1956, about 22,300 miles of new distribution lines in rural areas were erected at a cost of over £13,750,000. These lines served 28,250 farms and 19,750 other rural consumers. At 30th June, 1956, the Electricity Authority was committed to the payment of almost £6,250,000 in subsidies of which nearly £2,500,000 had actually been paid. At that time the percentage of farms connected had been raised from 22 per cent. (in 1946) to nearly 62 per cent.

§ 2. Victoria.

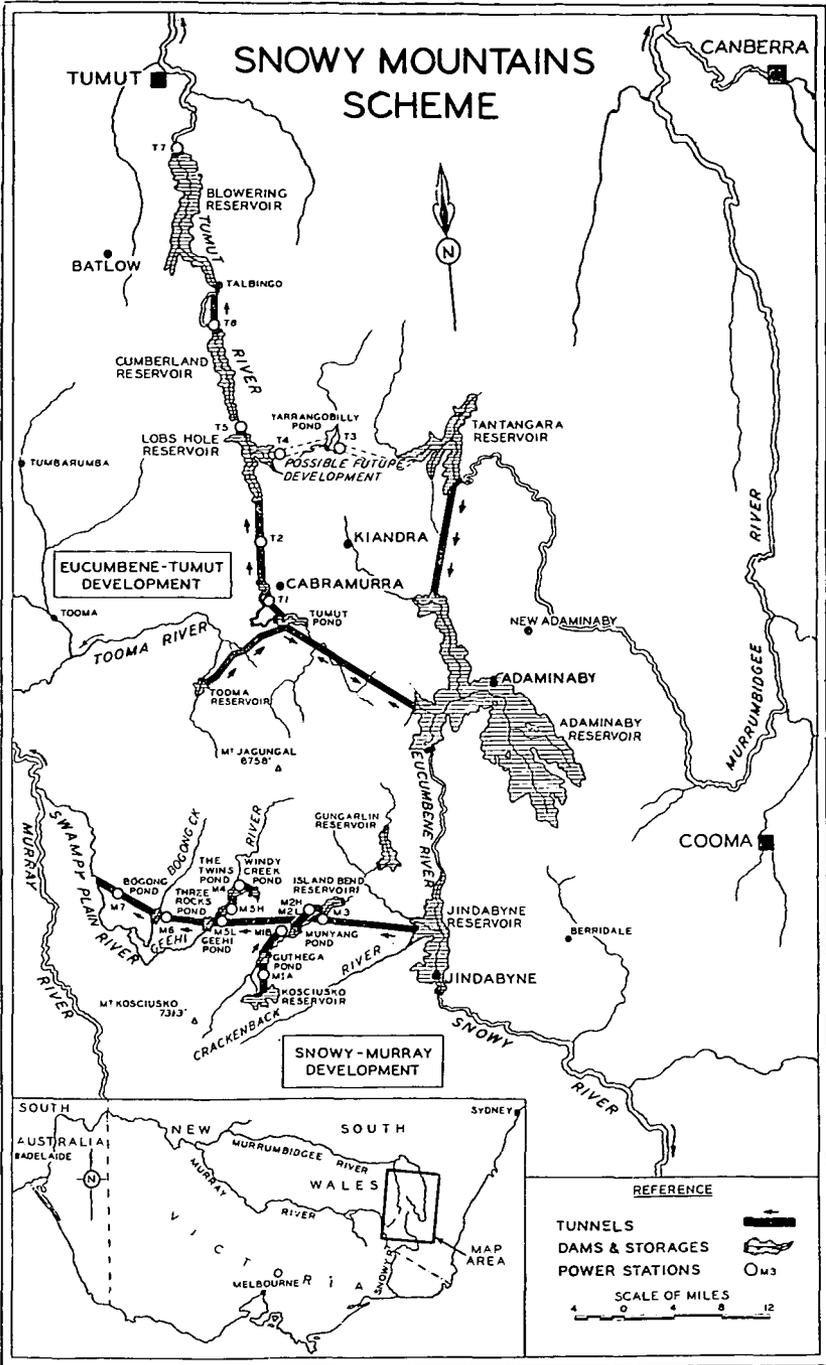
1. General.—In Official Year Book No. 39 a detailed description is given of the development of electricity generation in the cities of Melbourne, Geelong, Bendigo and Ballarat up to the time of transfer of control of electricity undertakings in these cities to the State Electricity Commission of Victoria. An account is also given of the events culminating in the establishment of the Commission in 1919, and of the early developments in the Commission's undertakings.

2. State Electricity Commission of Victoria.—(i) *Power and Fuel Authority.* Since it began operating in 1919, the State Electricity Commission has expanded and co-ordinated the production and supply of electricity on a State-wide basis to the point where its system now generates almost all the electricity produced in Victoria and serves about 95 per cent. of the population through a supply net-work covering approximately two-thirds of the populated area of the State.

Development of Victoria's State electricity system is based on the development of Victoria's extensive brown coal resources for both power and fuel in the Latrobe Valley in eastern Gippsland, with supplementary development of the hydro-electric potential of north-eastern Victoria. Sixty-nine per cent. of the State's electricity is generated from brown coal, either used in its raw state or manufactured into higher quality fuel in the form of brown coal briquettes. Ninety-six per cent. of the brown coal and all the briquette fuel are supplied by undertakings which the Commission itself owns and operates. Output of brown coal in 1955–56 from the three open cuts at Yallourn, Yallourn North and Morwell totalled 9,502,409 tons, of which 6,285,073 tons were used in the Commission's own power stations, and 2,528,540 tons were manufactured into 634,099 tons of brown coal briquettes, 52 per cent. of the briquette output being then used for electricity production in metropolitan and provincial steam power stations.

The two functions—generation of electricity and production of fuel—are closely integrated. Apart from the large proportion of brown coal and briquette fuel directly consumed in the power stations, the actual process of briquette manufacture results also in large-scale generation of electricity, since the steam needed for processing the raw coal in the briquette factories is first used to operate turbo-generators in associated power plant which functions as part of the briquette works.

(ii) *Status and Powers.* Constituted by Act of the Victorian Parliament, the State Electricity Commission is a semi-government authority administered since 1921 by a full-time Chairman and three part-time Commissioners. The principal duty of the Commission is



to co-ordinate and extend on an economic basis the supply of electricity throughout Victoria. For this purpose, it is vested with power to erect, own and operate power stations and other electrical plant and installations, supply electricity retail to individual consumers or in bulk to any corporation or public institution, acquire and operate electricity undertakings, develop, own and operate brown coal open cuts and briquetting works, and develop the State's hydro-electric resources. From its own revenues, which it controls, the Commission must meet all expenditure in the operation of its power, fuel and subsidiary undertakings, and all interest and other charges incurred in the service of its loans and other capital commitments.

The Commission is the controlling authority for all electrical undertakings in Victoria. It is responsible for the registration of electrical contractors, the licensing of electrical mechanics, the control of installation methods and material and the testing and approval of electrical equipment and appliances. Incidental to its main operations, the Commission owns and operates the tramway systems in Ballaarat and Bendigo. For the accommodation of its employees at Yallourn, the Commission owns and administers the town of Yallourn and owns large housing settlements in the surrounding area. In the Kiewa hydro-electric works area, it owns and administers the two townships of Mount Beauty and Bogong.

(iii) *Electricity Supply.* At 30th June, 1956, consumers in Victoria served by the State system totalled 727,363. Outside the State system, there were 24,098 other consumers served by local country undertakings. The system supplies all the Melbourne metropolitan area and over 1,100 other centres of population.

The Commission sells electricity retail in all areas except part of the metropolitan area, where it sells in bulk to eleven municipal undertakings which operate as local retail supply authorities under franchises granted before the Commission was established. Bulk supply is also being given at present to several New South Wales municipalities and irrigation settlements bordering the River Murray. Rural electrification is now four-fifths completed, the over-all plan to extend the State system to all populated regions of Victoria having made rapid progress during recent years. Consumers served by the State system outside the Melbourne metropolitan area (286,008) have more than doubled, and the number of farms connected to supply (32,734) has more than trebled in the past 10 years. More than two-thirds of the new consumers annually connected to supply are outside the metropolitan area. New farm connexions average about 2,500-3,000 a year.

The Commission's retail consumers totalled 561,892 at 30th June, 1956. Retail supply is administered through the metropolitan branch, seven extra-metropolitan branches (namely Ballaarat, Eastern Metropolitan, Geelong, Gippsland, Midland, North Eastern and South Western) and the North Western Region, which comprises Bendigo branch and the two sub-branches based on Mildura and Horsham (Wimmera) respectively. At 30th June, 1956, there were branch and district supply offices in 75 towns in Victoria.

(iv) *Electricity Production.* Electricity generated in the State system totalled 4,429 million kWh in 1955-56 or 99 per cent. of all the electricity generated in Victoria. The system comprises 22 steam, hydro and diesel power stations with a total installed generator capacity at 30th June, 1956, of 961,049 kW. Eighteen of these power stations, totalling 939,195 kW, are interconnected, and feed electricity into a common pool for general supply. The major power station in this interconnected system is the brown coal burning power station at Yallourn, which alone generates over 40 per cent. of Victoria's electricity. Other power stations in the interconnected system comprise steam stations in Melbourne (Newport, Richmond and Spencer Street), Geelong (two stations) and Ballaarat (two stations); hydro-electric stations at Kiewa (two stations) and Eildon, and on the Rubicon and Royston Rivers (four stations), near Eildon; and three diesel stations at Shepparton, Warrnambool and Hamilton. All are Commission owned, except Spencer Street power station, which remains the property of the Melbourne City Council, although operated as a unit in the inter-connected system.

In meeting the total demand on the system, which fluctuates throughout the day and from month to month, each group of stations in the interconnected system, whether steam, hydro or diesel, is assigned a predetermined function dependent upon the availability of power from each group and the over-all economics of generation. The various stations are utilized in a combination that will most economically meet the system load at a given time. This procedure results in an arrangement of the system on the following general lines :—

- (a) Yallourn power station, owing to the low cost of extraction and ample supply of raw brown coal, is a base load station, and is operated continuously at its maximum economic capacity.

- (b) Metropolitan and provincial steam stations and provincial diesel stations situated close to load centres are designed to operate as peak load stations to assist in meeting the heavy, short period load. Pending the completion of extensions to Yallourn power station, a substantial proportion of the base load on the system is carried by Newport power station.
- (c) Hydro stations are operated at all times in accordance with the availability of water. They are designed to effect, where possible, a saving of the more expensive fuels used in the metropolitan and provincial thermal stations.

Commission power stations not yet connected with the rest of the State system comprise the two steam stations (Redcliffs and Mildura) serving the Mildura region, and two local diesel stations at Horsham and Murtoa which have been acquired as the first step in a large-scale plan to extend the State electricity system to the Wimmera.

(v) *Transmission and Distribution.* The electrical transmission and distribution system in the State supply network at 30th June, 1956, comprised 22,746 miles of transmission and distribution power lines, ten terminal receiving stations and over 13,000 distribution substations. Main transmission is by 220 kV, 132 kV and 66 kV power lines which supply the principal distribution centres and also provide inter-connexion between the power stations. The 220 kV system connects Yallourn and Kiewa with metropolitan terminal stations. From Yallourn also, there are four 132 kV transmission lines to Melbourne. The 66 kV lines radiate from Melbourne to Geelong and Warrnambool, Ballarat and Bendigo, and also to Benalla and other main centres in the North East. Further 66 kV lines radiate from Yallourn to main centres in Gippsland.

(vi) *Future Development.* In conformity with its dual responsibility for producing and supplying Victoria's electricity and producing a large proportion of the State's solid fuel, the Commission's developmental programme is in two parts, which are, however, closely dependent one upon the other. The major part of this programme is for the development of the brown coal undertakings at Yallourn and Morwell in the Latrobe Valley; and the second and lesser part for the development of the hydro undertakings at Kiewa and Eildon, joint participation with New South Wales in the Hume Dam hydro undertaking (now being built by the Electricity Commission of New South Wales) and construction of a high voltage transmission line for the supply of power to be purchased from the Snowy Mountains Hydro-electric Authority. At the same time, the commission will continue its programme of rural electrification, extension of the State system (particularly in western and north western Victoria) and reinforcement of supply by the establishment of a 220 kV power transmission grid designed ultimately to encircle central Victoria, linking all principal power stations and all major centres of distribution.

Yallourn power station is being greatly enlarged. One 100,000 kW extension was completed in the latter months of 1956. A second 100,000 kW extension is being built. One of its two 50,000 kW generators is due to be in service in 1957 and the other in 1958. The associated boiler plant will not, however, be fully in service until 1959. A third extension of at least 150,000 kW capacity is under consideration. Enlargement of the power station will require a corresponding expansion in production of brown coal at Yallourn. New dredger plant will increase annual output at the Yallourn open cut to about 11 million tons in 1962.

At Morwell, six miles from Yallourn, the Commission is developing a second brown coal power and fuel project which may at some future date become even larger than the Yallourn undertaking. The new project will comprise a large brown coal open cut and a major new power station which will operate in association with a large new briquetting plant. Some of the electricity generated at Morwell will be needed to operate the briquette works, but most of the output of the power station will be transmitted through Yallourn to metropolitan terminal stations for general supply through the State network. The power station and two units of the briquetting works are now being built, and the power station will start generating electricity in 1959. In 1961, electricity output for general supply will be 91,000 kW, and briquette production will be over 1,500,000 tons per annum. Annual output of brown coal at the Morwell open cut will increase progressively to about six million tons in 1962.

The new hydro station built to operate on the waters of the greatly enlarged Eildon Reservoir is due for completion in the first half of 1957. The total installed capacity will be 136,000 kW, inclusive of the two small generating sets, totalling 16,000 kW transferred from Sugarloaf power station, the original power station which was demolished when the new Eildon Dam was built. As the primary purpose of Eildon Reservoir is to provide water for irrigation, generation of electricity will be mainly governed by irrigation requirements,

but provision has been made for limited operation of the power station in winter when electricity requirements are at their heaviest and there is no irrigation demand for water. At the Kiewa hydro-electric undertaking, construction work has been greatly retarded by the shortage of loan funds for capital works. Following the completion early in 1956 of a new 62,000 kW power station (the second to come into service at Kiewa), work is now in progress on a third power station of 96,000 kW capacity, which is due to have the first of its six generators operating in 1960 and the remainder in service by the beginning of 1962. Work is also in progress on the construction of Rocky Valley Reservoir, which is designed to provide the main high level storage for the operation of the Kiewa power stations. Hume hydro station is due for completion in 1957. Output (50,000 kW) is to be shared equally by Victoria and New South Wales. Since, however, the function of Hume Reservoir (like Eildon) is to provide storage for irrigation, no regular output of electricity can be expected during the non-irrigation months in the winter. The main value of this hydro station to the Victorian electricity system, therefore, will be to save fuel in metropolitan and provincial steam power stations during the summer months.

Connexion with the Snowy Mountains undertaking will be made by a new high voltage transmission line which will feed into the Victorian system via Dederang and Kiewa. It will operate at 330 kV. Two sections of the 220 kV transmission grid (Yallourn-Melbourne and Kiewa-Eildon-Melbourne) are in service and interconnected. Extensions of this new grid are due for completion as follows :—Melbourne to Geelong (1957) ; Geelong to Colac (1958) ; Kiewa to Shepparton (1958) ; Shepparton to Bendigo (1959). Eventually the 220 kV grid will be continued from Bendigo via Ballarat to connect with the Melbourne-Geelong-Colac section.

3. *Local Country Electricity Undertakings.*—At 30th June, 1956, there were 45 independent electricity undertakings in country centres in Victoria generating and distributing their own local supply. Most of these undertakings were in the far south west, west and north west of the State. Under the State Electricity Commission's rural electrification programme, almost all the independent local country undertakings will ultimately be acquired and absorbed into the State system. For the year 1955-56, the total production of the independent undertakings was 43 million kWh. The number of consumers at 30th June, 1956, was 24,098. The operation of the independent undertakings is governed by the Electric Light and Power Act, 1928, which the State Electricity Commission administers.

§ 3. Queensland.

1. *General.* In Official Year Book No. 39, an account is given of the growth of electricity generation in Queensland, with particular reference to the City Electric Light Co. Ltd. of Brisbane (now the Southern Electric Authority of Queensland), the Brisbane City Council and the Toowoomba Electric Light and Power Co. Ltd.

The first of these organizations supplies a large part of Brisbane's electric power requirements and a considerable rural area in the south-east corner of the State from a modern power station at Bulimba, a suburb of Brisbane. Capacity is 95,000 kW at Bulimba "A" plus 10,000 kW, "packaged plant" at Abermain (near Ipswich) and 60,000 kW at a new generating station known as "Bulimba B". The output from a 3,200 kW hydro-electric unit installed at Somerset Dam near Brisbane is fed into the Southern Electric Authority system. With these plants 616 million kWh were generated in 1954-55 while the total number of the Authority's consumers at 30th June, 1955 was 99,906.

The Brisbane City Council's electrical undertaking and power production in 1954-55 had an installed capacity of 105,000 kW plus a 10,000 kW "packaged" plant erected at Tennyson—units purchased and generated amounted to 500 million kWh, and there were 116,696 consumers connected. Since 30th June, 1954, 60,000 kW of plant at a new power station at Tennyson has been commissioned by the Council.

The Toowoomba Electric Light and Power Co. Ltd., which commenced operations in 1905, has now been absorbed by the Southern Electric Authority of Queensland.

The generation and distribution of electric power in Queensland had, until the last decade, tended to lag behind developments in this field in other States of Australia. The comparatively slow growth in the production and consumption of electricity can be attributed to some extent to the absence, prior to 1938, of a central statutory authority constituted to undertake the functions of co-ordinating, unifying and controlling the production and transmission of electric power. In addition, Queensland's vast area, coupled

with a low population density, made large-scale rural electrification, elsewhere than in the south-eastern portion of the State which surrounds the major centres of industry and population, an uneconomic proposition.

Before establishment of the Regional Electricity Boards in 1945, no attempts had been made to unify or co-ordinate electricity supplies outside of South Eastern Queensland, and rural electrification, apart from reticulation within certain townships, was practically unknown.

2. Royal Commission on Generation and Distribution of Electric Power in Queensland 1936.—On 5th December, 1935, the Queensland Government appointed a Royal Commission to inquire into and make recommendations on matters relating to the generation and distribution of electric power in Queensland. An account of the results of its investigations and of the alternative proposals put before it will be found on p. 1182 of Official Year Book No. 39.

3. The State Electricity Commission of Queensland.—In 1937, the State Government legislated to constitute a State Electricity Commission (legislation administering the generation and distribution of electricity in Queensland prior to the establishment of the Commission is referred to on p. 1181 of Year Book No. 39), which commenced to function during January, 1938, and to it was passed administration of the Electric Light and Power Acts 1896–1938. The Commission's main powers were to secure a proper and efficient supply of electric power, review tariffs, grant licences to supply electricity, secure the safety of the public, and control and advise electrical undertakings generally. It was thus a controlling authority as distinct from an operating authority. In addition, the Commission was empowered to co-ordinate the industry's development throughout Queensland. Between 1938 and 1955, the number of private companies was reduced by absorption and acquisition from twenty-one to five, while publicly owned undertakings, after amalgamation into Regional Authorities, and the development of nineteen new schemes for small Western Queensland towns, remain at forty-seven.

By agreement with the Commission in 1939, the City Electric Light Co. Ltd. became the co-ordinating authority for the provision of electricity in an area of some 10,062 square miles, extending from the New South Wales-Queensland border to Gympie, north of Brisbane. The Company acquired the undertakings at Boonah, Beaudesert, Gympie, Coolangatta, Ipswich, Nambour, Southport, Redcliffe and the Somerset Dam supply and transmission line to Brisbane. Certain restrictions were placed on the Company's dividend rate, namely limitation to the rate on Commonwealth bonds plus 2 per cent. During 1940, a similar agreement was made with the Toowoomba Electric Light and Power Co. Ltd. for the supply of electricity in the Toowoomba, Warwick, Killarney and Allora districts, subsequently being extended to cover a comprehensive area of 9,324 square miles, including Stanthorpe and other districts. Transmission line extensions since that year have made supply available to a number of adjacent districts on the Darling Downs. The City Electric Light Co. Ltd. was converted to a public authority as from 1st February, 1953 by the Southern Electric Authority of Queensland Act of 1952 (*see* para. 5 below).

Amending legislation, passed by the Queensland Parliament in March, 1948, changed the constitution of the State Electricity Commission from a body corporate to a corporation sole. On 1st July, 1948, a Commissioner for Electricity Supply was appointed in lieu of the previous Commission of four Commissioners. Since its inception in 1938, the Commission has made considerable progress in its task of developing the State's power resources and promoting a more widespread use of electric power. The degree of utilization of electrical energy in Queensland now compares favourably with other States in the Commonwealth.

4. Regional Electricity Boards.—With a view to facilitating the control and development of electricity supply in areas of low population density or those having a predominantly primary producing economy, the Government in 1945, passed the Regional Electric Authorities Act. This legislation, as later amended, provides for the creation of regions of electricity supply and the constitution of Regional Electricity Boards. The Act provided for transfer to the Boards of local authority electricity undertakings in their regions, and for acquisition by the Boards of privately owned undertakings when purchasing rights fell due. Each Board comprises representatives of local authorities in the region and a representative of the Commission. Financial operations of the Boards are under the control of the Commission.

Soon after passage of the Regional Electric Authorities Act, four regions were defined and four Regional Boards constituted, namely, Wide Bay, Capricornia, Townsville and Cairns. A fifth Board, entitled South Burnett, became an operating authority in October, 1947, but on 1st July, 1951 was absorbed in the Wide Bay Regional Board and the organization is now known as the Wide Bay-Burnett Regional Electricity Board. As power was to be obtained from the Wide Bay Regional Board's station at Howard, the Commission decided that development of the two regions could be planned more effectively by a single authority.

Activities of the four Regional Boards in 1954-55 compared with operations of the stations located in regions in 1945-46, and totals for Queensland as a whole, are shown in the following table :—

QUEENSLAND : REGIONAL OPERATIONS.

Region.	1945-46.		1954-55.	
	Units Generated.	No. of Consumers.	Units Generated.	No. of Consumers.
	m.kWh		m.kWh	
Wide Bay-Burnett	13.7	11,467	53.1	23,736
Capricornia	19.5	11,196	80.5	18,124
Townsville	25.8	11,612	75.9	18,404
Cairns	22.7	9,722	73.0	18,024
<i>Total</i>	<i>81.7</i>	<i>43,997</i>	<i>282.5</i>	<i>78,288</i>
Queensland	487.0	194,429	1,452.5	322,747

Generator capacity of the four existing Regional Boards installed at 30th June, 1956 was :—Wide Bay-Burnett, 22,500 kW ; Capricornia, 37,500 kW ; Townsville, 40,330 kW ; Cairns, 18,445 kW ; total, 118,775 kW.

5. **Creation of Southern Electric Authority of Queensland.**—A further major step in electrical progress, comparable with that taken when the agreements with the City Electric Light Co. Ltd. and Toowoomba Electric Light and Power Co. Ltd. were first entered into, was taken by the passing of the Southern Electric Authority of Queensland Act of 1952. This Act constituted the City Electric Light Co. Ltd. as a public authority to be known as the Southern Electric Authority of Queensland.

Two Government representatives are included on the Board of the new Authority, whose establishment prepares the way for the complete amalgamation, in due course, of the electrical undertakings serving the south-eastern Queensland area of supply.

An important advantage gained by the creation of this Authority is that on 30th June, 1968, acquisition of the Authority by the State Government can be effected without the necessity of a cash payment, as the Government will have the power to convert the Authority's existing stock to inscribed stock. Furthermore, the replacement of the City Electric Light Co. Ltd. by the Southern Electric Authority as a public body relieves electricity consumers in the Authority's area of supply from the burden of taxation which has hitherto been payable by the City Electric Light Co. Ltd., but will not need to be met by the new Authority. An agreement has been signed between the State Government and the Southern Electric Authority giving effect to the principles contained in the new legislation.

As from 1st July, 1954, the Southern Electric Authority acquired the Toowoomba Electric Light and Power Co. Ltd., thus bringing this company's area of supply under its control. The Southern Electric Authority is now responsible for the electrical supply and development of a consolidated area of 19,386 square miles.

6. **Hydro-electricity.**—Behind the coastal plain of the Cairns-Ingham area is an extensive plateau, the elevation ranging from 2,000 to 3,000 feet, although isolated peaks exceed 4,000 feet. The short coastal streams which rise on the plateau descend rapidly

into deep gorges, which they have cut through the old divide. With heavy monsoonal rainfall on their catchments and concentrated fall, these streams represent a considerable potential source of power, but storage, which can in most cases be provided, is essential to control the very variable flow.

The Barron Falls scheme, 14 miles north-west of Cairns, came into operation in 1935. The installed plant operates under a head of 410 feet and comprises three 2,000 h.p. turbines each connected to a 1,320 kW generator. Average rainfall varies from 80–150 inches along the ranges to less than 35 inches in the western portion of the catchment. There is extreme variation from year to year, resulting in great fluctuation of stream flow which, at Kuranda, has varied from a maximum of 117,000 cusecs in 1911 to a minimum of 30 in 1915. Storage to regulate the flow is possible but has not yet been provided. During periods of low flow the supply of electricity is supplemented by fuel plants at Cairns, Atherton and Innisfail. Power is distributed over 22,000 volt transmission lines serving the tableland and extending southward along the coast to Tully.

A small hydro-electric scheme on the Mossman River, 5 miles from Mossman, North Queensland, comprises two 120 h.p. turbines operating under a head of 200 feet.

The development of a hydro-electric power scheme at Tully Falls is now well advanced, the initial plant installation being 36,000 kW, and scheduled for commissioning early in 1957. Water controlled by Koombalooomba Dam to be built on the upper Tully River will be diverted, a short distance above Tully Falls, through a tunnel and steel penstocks to an underground power station in the gorge at the foot of the falls operating with Pelton driven generators under a head of 1,485 feet. Ultimate installation will be four 18,000 kW sets. Future automatic power plants upstream and downstream from Tully Falls will consist of two 7,500 kW sets under 405 feet head and one 5,400 kW set under 230 feet head. The combined peak load for the three plants will be 69,000 kW. Inter-connexion of the Townsville area, currently supplied by a thermal station, with the Tully scheme has been authorized and provision of the 160 mile duplicate 132 kV transmission line is under way. On present estimates, power from the Tully scheme will be sufficient to supply the inter-connected area until 1965, when additional power will be required. A full investigation by the State Electricity Commission of the electricity supply industry in North Queensland is proceeding and the terms of reference include the survey of additional hydro-electric projects.

Other northern schemes which have been investigated include Freshwater Creek (3,900 kW); North Johnstone–Russell Rivers (32,000 kW); Beatrice–North Johnstone Rivers (9,000 kW); South Johnstone River (25,000 kW); extension of Barron Falls scheme (22,000 kW); Herbert River (90,000 kW). The total potential of the plateau region is therefore about 250,000 kW at 50 per cent. load factor.

In the vicinity of Townsville, the Commission, acting on behalf of the Burdekin River Authority, has investigated the proposed hydro-electric development of the Burdekin. The Scheme plans for a power plant immediately below the Burdekin Falls Dam which will operate under an average head of 225 feet. This project is linked with the plan to conserve the waters of the river for irrigation and flood mitigation and surveys undertaken indicate that approximately 80,000 kW could be generated. It has been estimated that a hydro-electric station approaching this size should meet the requirements of Townsville and the coal mines in the region of Collinsville, for at least 20 years, and also transmit supply to Bowen and Proserpine and possibly to the Mackay area, and by obviating the continuous operation of thermal plant achieve significant savings in fuel.

South of the Burdekin River, no appreciable hydro-electric development is practicable. A plant of 3,200 kW capacity has been installed to utilize the outflow from Somerset Dam on the Stanley River a few miles above its confluence with the Brisbane River.

7. New Capacity.—(i) *Regions.* To provide for development of the electric power resources in the regions, the State Electricity Commission formulated a ten-year programme divided into two five-year periods. In the first, it was planned to erect main transmission systems to connect existing power stations located within the regions and supplement generating capacity by the construction of new stations. Work on this section of the plan is now nearing completion. In the second, the transmission system will be extended to more sparsely settled areas, the ultimate purpose being the provision of “ring” transmission lines throughout each region and inter-connexion between the regions.

A number of new generating stations have been commissioned as follows:—Wide Bay (Burnett Region), of which 15,000 kW was placed in service during September, 1951, and 7,500 kW in 1954 while a further set of 15,000 kW was scheduled for installation in 1956;

Rockhampton (Capricornia Region) of which 22,500 kW was placed in service during September, 1952 and a further 15,000 kW in May, 1956, with a further 15,000 kW on order; and Townsville (Townsville Region) of which 22,500 kW was commissioned in July, 1953, and a further 15,000 kW in January, 1956. Each of these stations will have an ultimate capacity of 52,500 kW and be steam-operated. In the Cairns Region, construction is proceeding on the Tully Falls hydro-electric scheme and two 18,000 kW turbo alternator sets should be giving a supply of electric power early in 1957 with a further two 18,000 kW sets to follow shortly afterwards. The scheme is designed for an ultimate installed capacity of 92,400 kW. To augment existing capacity and to meet anticipated demands pending operation of Tully Falls, the Cairns Regional Board has installed twenty-one diesel units with a total capacity of 14,485 kW.

The Tully Falls scheme (*see* para. 6. above) is planned to link with the Townsville Regional Electricity Board's system for the purpose of marginal supply, and construction of this interconnexion has now commenced. Plans for the development of the Burdekin Falls hydro-electric project are also in hand. These schemes and the existing Barron Falls hydro-electric plant will exploit North Queensland's principal hydro-electric potential estimated conservatively at more than 316,000 kW.

At Mackay, where supply was first given in 1924, and Bowen, both situated on the coast between the Capricornia and Townsville Regions, the local Councils operate power stations of 4,500 kW and 1,000 kW respectively. The Mackay City Council has embarked on a scheme for rural development under an agreement with the State Electricity Commission. To cater for the anticipated growth in demand, the capacity of its station has been increased to 9,500 kW. At Bowen, the Town Council, which established the service in 1925, has extended the station's capacity by the installation of one 1,000 kW unit. During 1935, a small (3,800 kW) power house—Australia's first underground hydro station—was placed in service at Barron Falls near Cairns. When the Cairns Regional Board was established during 1946, operation of the station passed to the Board's control and now comprises part of its generating plant, totalling 18,445 kW, supplying an area of approximately 42,000 square miles.

(ii) *Western Queensland.* In Western Queensland, where a number of small isolated generating stations supply power to some of the larger towns, the Commission has evolved a plan to increase and modernize existing capacity. It involves installation of small internal combustion units ranging in size from 100 kW to 600 kW according to the load likely to be experienced, and conversion from direct to alternating current supply. The Government is assisting the scheme by subsidy—a feature of electrical development in Queensland. In general, the assistance provided comprises subsidies of up to one-third of capital cost on annual loan charges, with special subsidies of up to 50 per cent. for authorities in isolated areas.

In addition to improving supplies to the larger western towns, a scheme has been devised for electricity supplies for smaller towns in the western districts, where consumers range from 50 to 200. Subsidies of 65 and 60 per cent. will apply in those cases where the number of consumers supplied is less than 100 and 200, respectively. This plan is now being implemented and at 30th June, 1956 twenty-six townships in the west of Queensland have been provided with the amenities of electricity. In addition, investigations of the possibility of supply have been carried out at a number of other small centres. The power is being supplied by small oil driven generating sets with automatic controls which can be run with a minimum of operating attendance.

Coal-burning gas producers have been successfully commissioned for public electricity supply purposes in the West. They have been installed at Longreach, Clermont, Dalby, Blackall and Barcardine and further extensions of their use in Western Queensland is predicted, as lower tariffs and more efficient production of electricity should follow their use.

(iii) *South-eastern Queensland.* To increase the availability of electric power in the south-eastern area of the State, the two major generating authorities, in conjunction with the Commission, have power station projects under construction which are designed to place in service, by 1956, new generating units totalling 335,300 kW. The Southern Electricity Authority is developing a station known as Bulimba "B" on a site adjacent to Bulimba "A". 60,000 kW has been installed to 30th June, 1956, with a further 30,000 kW to be commissioned during 1956-57, but the ultimate capacity may reach 180,000 kW. At Tennyson in the Brisbane area, the Brisbane City Council has constructed a new power station with an initial capacity of 60,000 kW which may be ultimately increased to 180,000 kW. At 30th June,

1956, generating plant of 60,000 kW was in service at this new station. To supplement capacity pending operation of these projects, "packaged" generating units totalling 20,000 kW were obtained from overseas and commissioned early in 1953, one 10,000 kW set having been installed at Tennyson and another 10,000 kW set at Ipswich.

The power stations of the two major generating authorities at New Farm and Bulimba are interconnected at 33,000 volts.

§ 4. South Australia.

1. **General.**—An account referring to the companies generating electric power in South Australia prior to the establishment of the Adelaide Electric Supply Co. Ltd., and describing the development of that company's activities, was given in Official Year Book No. 39. Also included in the account was some reference to the early measures of public control over electricity supply in South Australia and the extent to which they were applied, and also to the inquiries into the activities of the Adelaide Electric Supply Co. Ltd. in 1932 and 1935.

Following upon an inquiry instituted by the Government in 1943, relative to measures for increasing electricity supply to the metropolitan area and country districts, the Electricity Act 1943 was passed which, *inter alia*, established the South Australian Electricity Commission. However, until the State assumed full responsibility for the supply of electric power, this body was not able to do much more than exercise the formal functions conferred on it by the Act.

2. **The Electricity Trust of South Australia.**—Early in 1946, a Bill was passed transferring the assets of the Adelaide Electric Supply Co. Ltd. to the newly formed public authority, the Electricity Trust of South Australia, which became responsible for unification and co-ordination of the major portion of the State's electricity supplies. This legislation provided that the Trust should take over the powers vested in the South Australian Electricity Commission under the 1943 Act, which, after establishment of the Trust, would cease to exist. In addition to the powers specified in the Adelaide Electric Supply Company's Acts 1897-1931, the Trust may, *inter alia*, supply electricity direct to consumers within a district or municipality with the approval of the local authority, and by agreement with other persons who generate or supply electricity, arrange to inter-connect the mains of the Trust with those of other persons, and give or receive supplies of electricity in bulk.

3. **Capacity and Production.**—There are three main categories of organizations generating electric power in South Australia, namely :—(a) Governmental, which include the Electricity Trust ; (b) Local Authorities, e.g., municipal and district councils, and Renmark Irrigation Trust ; and (c) Other, including individuals and firms primarily engaged in generating power for sale, firms generating power primarily for their own use but supplying outside consumers, and firms generating power for their own use.

In 1954-55, total installed capacity in South Australia was 330,278 kW., an increase of 60,286 kW on the year before. The units generated totalled 1,119 million kWh compared with 955 million kWh in the previous year.

Of the total installed capacity, the Electricity Trust of South Australia operated plant with a capacity of 251,950 kW. It is thus the most important authority supplying electricity in the State. There were approximately 228,400 ultimate consumers of electricity, of whom 199,518 were supplied by the Trust. Its major steam stations were Osborne "A" (79,000 kW), Osborne "B" (120,000 kW) and Port Augusta "A" (45,000 kW) while the balance of the capacity controlled consists of house sets and a limited number of small internal combustion plants located in rural districts.

No hydro-electric potential exists in South Australia. Steam generating units comprise 95 per cent. of installed capacity and the balance, 5 per cent., is internal combustion equipment. Until recently, all fuel consumed in the thermal stations was obtained from sources outside the State, and at times power restrictions were necessary owing to the inadequacy of supplies.

4. **Leigh Creek and other New Capacity.**—With a view to reducing the dependence on external sources of fuel, steps have been taken to produce local coal and to install plant to use it. Fairly extensive deposits of low-grade sub-bituminous coal are obtainable at Leigh Creek, about 360 miles north of Adelaide. Under the Electricity Trust of South Australia Act Amendment Act 1946, the Trust was given authority to develop Leigh Creek coal for use in its own undertakings and also for sale to other consumers. Production from the Leigh Creek field commenced in 1944 and in the year ended 30th June, 1955, 483,603 tons of coal were sold. Of this amount, the Electricity Undertaking used 394,214 tons.

In order to cope with the rapidly increasing demand for power, the Electricity Trust is installing two additional 30,000 kW units at Osborne "B" Power Station. These will complete the "B" station which will then have a total capacity of 180,000 kW. Another major work under construction is the power station at Port Augusta with an ultimate capacity of 90,000 kW. This power station, which was commissioned in June, 1954, is located at Port Augusta because of its proximity to the Leigh Creek coalfield and will use Leigh Creek coal exclusively. A new standard gauge railway line to connect Leigh Creek with Port Augusta has been constructed by the Commonwealth Railways Department. The power station is inter-connected with the Metropolitan Area by two transmission lines which will also supply power at intermediate points. The Trust is to construct a second power station at Port Augusta to be known as Port Augusta "B". This station will have a capacity of 180,000 kW making the combined capacity at Port Augusta 270,000 kW. In addition, the Trust is building steam power stations at Port Lincoln and Mt. Gambier to replace existing diesel stations. The station at Port Lincoln will have a capacity of 5,000 kW and will burn fuel oil while the station at Mt. Gambier will have a capacity of 16,800 kW and will burn either wood waste or fuel oil.

5. **The Municipal Tramways Trust.**—On 30th June, 1956 the Municipal Tramways Trust power station ceased operations and all power required for traction purposes is now supplied from the Electricity Trust system through converter stations and a 5,500 kW frequency changer. The installed capacity of the power station has been reduced from 19,100 kW to 9,000 kW and will only be used in case of emergency.

§ 5. Western Australia.

1. **General.**—Electrical undertakings in Perth and Fremantle formerly owned by the Perth City Council, the Western Australian Government Electricity Supply, the Fremantle Municipal Tramways and Electric Lighting Board and other metropolitan municipal and road board supply authorities have now been taken over by the State Electricity Commission of Western Australia. For information on the early history of electricity supply in the metropolitan area, see Official Year Book No. 39, p. 1189.

2. **Metropolitan Undertaking.**—Statistics relating to activities at the Metropolitan undertaking are shown in the following comparative table.

WESTERN AUSTRALIA : METROPOLITAN UNDERTAKING.

Particulars.	1938-39.	1954-55.	1955-56.
Plant capacity kW	57,000	149,000	179,000
Maximum load kW	33,000	106,000	127,000
Units generated Million kWh	137	462	517
Coal used per unit generated lb.	2.77	1.67	1.56
Coal used tons	168,722	328,832	361,164

As a result of a separate inquiry conducted at the same time as the early investigations into the proposed new station at South Fremantle, a recommendation was made favouring conversion of the East Perth 40 cycle system to the British and Australian Standard Frequency of 50 cycles per second. The recommendation was adopted and implemented by making the frequency of generation at South Fremantle 50 cycles and installing at East Perth a frequency changer able to convert 25,000 kW of energy from one frequency to the other. Change-over of consumers' plant is proceeding and a large number of important loads are now supplied at 50 cycles.

3. **Kalgoorlie.**—In Kalgoorlie, the Municipal Council is supplying approximately 3,800 consumers with either direct or alternating current from a diesel station of 1,825 kW generating capacity. Primarily established to supply power to the gold mines, the Kalgoorlie Electric Power and Lighting Corporation operates a steam station of 11,000 kW and maintains a 22 kV line of 21 miles to the Celebration mine. Alternating current is also supplied to about 1,400 consumers. The Corporation's undertaking generates approximately 35 million kWh per annum and new boilers were installed a short time ago to permit steam-raising from Collie coal.

4. **General Pattern of Electricity Supply.**—The pattern of the generation and distribution of electric power in Western Australia consisted until recently of a number of isolated systems each supplying a particular area. Except in the metropolitan area and in the area embraced by the South-West Power Scheme (See para. 6 below), where in both cases electricity

supply is in the hands of the State Electricity Commission of Western Australia, local authorities are generally responsible for the supply of electricity for domestic, industrial and traction purposes. In the area between the Great Southern Railway from Northam to Albany and the west coast, however, the State Electricity Commission has now constructed transmission lines to give central station supply to the towns and their surrounding rural areas. In addition, there are several mining companies which generate electricity for use in their mines. In order to cater for the expected growth in demand, capacity of the State's major generating stations is being increased.

The system in the Metropolitan area has been inter-connected with the Bunbury area by means of a 132,000 volt transmission line.

The main load centre of the State is, of course, the Perth-Fremantle area into which is concentrated the major portion of the State's population and industry. The inter-connexion between the Metropolitan and Country systems is, however, expected to lead to a gradual decentralization of load.

5. **The State Electricity Commission of Western Australia.**—(i) *Origin and Aims.* In order to ensure an organized and co-ordinated future growth of electricity generation and distribution throughout the State, the Government introduced a Bill in 1945 to establish the State Electricity Commission, which, together with an Electricity Bill, became law early in 1946. Under these Acts, the Commission was given power, *inter alia*, to secure the ultimate co-ordination of all State or other electrical undertakings in the State, to construct and operate power stations and transmission lines and purchase as a going concern and carry on the undertaking of any supply authority. Under the Electricity Act, which should be read in conjunction with, and is subject to, the State Electricity Commission Act, no person or organization is permitted to construct or extend an electricity supply undertaking without consent from the Commission. Local authorities are empowered to operate and construct power stations and other works associated with the supply of electricity, provided that authority is first obtained from the Commission and any proposals are not inconsistent with the Commission's plans.

(ii) *New Projects.* Since its inception in 1946, the Commission has proceeded with the task of increasing generating capacity in an endeavour to cater for a greatly increased demand for power. Long-range plans have been formulated to inter-connect the south-western portion of the State with the Perth-Fremantle system. One of its most important and immediate problems was to increase the capacity of the generating equipment serving Perth and Fremantle. During the 1939-45 War years, it became evident that the growth of demand for electric power would necessitate provision of additional generating equipment in the metropolitan area as soon as possible. Accordingly, the Government Electricity Supply authority commenced design work for a new station of 50,000 kW capacity. Contracts were let in 1945 and construction commenced on a site selected at South Fremantle, on the coast south of Fremantle proper. Responsibility for completion of this project was given to the Commission under the Act of 1946. As it was considered that an even larger station would be required, provision was made for the installation of two additional units giving an ultimate capacity of 100,000 kW. Steam is furnished by eight boilers designed to use pulverized coal from Collie, which is located about 120 miles from the station. At the end of 1954 four units had been placed in service and the output was being fed into the metropolitan system.

At the East Perth power station, a new 30,000 kW unit has just been commissioned, but the full output of this unit will not be available until an additional boiler has been installed. A 25,000 kW unit, commissioned in 1938 (generating 40 cycles) is also available at this station. Older plant with a total capacity of 24,000 kW is also installed, but the usefulness of this plant for standby purposes will be reduced as the 40 cycles load in the metropolitan area is converted to 50 cycles.

6. **South-west Development.**—At the request of the Government, the Electricity Advisory Committee in 1945 submitted a report recommending, amongst other things, that a National Power Scheme for the south-west be proceeded with. The plan provided for acquisition of the existing Collie power station and installation of additional generating capacity, construction of a power station at Bunbury and inter-connexion of the south-west scheme with the metropolitan system. On 12th October, 1946, the State Electricity Commission acquired the Collie power station, which prior to 1946 was owned and operated by the Collie Power Company Limited. At the date of acquisition, the station's installed capacity was 5,000 kW, comprising two steam units. The capacity of the station was increased to 12,500 kW in 1952.

Since 1950, the Commission has acquired a number of electrical undertakings from municipal bodies and private organizations in the south-west area and is proceeding with arrangements for the purchase of others. In August, 1951, the first portion of the South-West Power Scheme was officially opened at Collie and many of the south-west towns

have now been connected by transmission line to the Collie Power Station. When completed, a system of power lines will reticulate electricity over an area of approximately 1,800 square miles. Contracts have been let for the first three 30,000 kW units for a new power station at Bunbury, which will be inter-connected by transmission lines to the Collie and the metropolitan stations, permitting an interchange of power between the metropolitan and south-west systems. Work has proceeded satisfactorily on the Bunbury power station.

§ 6. Tasmania.

1. **General.**—A considerable part of the water catchment in Tasmania is at high level, with a substantial natural storage available, and this has made it possible to produce energy at lower cost than elsewhere in Australia, or in most other countries. Other contributing factors to the low costs are that rainfall is distributed fairly evenly throughout the year, with comparatively small yearly variations. The cheap power has led to the establishment in Tasmania of several large electro-chemical works with high load factor, and as a consequence the system load factor is also very high and at present is 61 per cent.

For information on hydro-electric development in Tasmania prior to the establishment of the Hydro-Electric Commission in 1930, see Official Year Book No. 39, pp. 1192-3.

2. **The Hydro-Electric Commission.**—(i) *Present System.* In 1929, the Government passed the Hydro-Electric Commission Act, under which was established the Hydro-Electric Commission and which vests in the Commission, with some minor exceptions, the right to use the waters of the State of Tasmania and authorizes it to develop and reticulate electric power for all purposes. In 1930, this corporate body took over the State hydro-electric undertaking and the business of the Hydro-Electric Department.

The first project undertaken by the Commission was the Shannon Power Development which utilizes 258 feet of the difference in level between the Great Lake (Miena Dam) and Waddamana forebay. A small earthen dam diverts the outflow from the Great Lake through 2½ miles of canal and then by two pipelines to the Shannon Power Station, where 10,500 kW was added to the system in 1934. After passing through Shannon Power Station the water discharges into the Waddamana canals to be used again at the Waddamana Power Stations.

In 1933, it was decided to proceed with the Tarraleah Power Development. In this scheme, the waters of the River Derwent are picked up near Butler's Gorge by a canal and conveyed 14 miles to the pipeline forebay 982 feet above the power station on the Nive River where three 15,000 kW generators were placed in service in 1938. Shortly afterwards two more 15,000 kW units were added and a sixth machine installed in 1951 brought the total installed capacity at Tarraleah Power Station to 90,000 kW. Storage is provided at Lake St. Clair and at Lake King William, an artificial lake created by the 200-ft. high Clark Dam across the Derwent at Butler's Gorge. In the Butler's Gorge Power Station at the foot of the dam, a single 12,200 kW generator was installed in 1951. To increase the security of the system and to permit variable seasonal loading of Tarraleah station, a second canal from Clark Dam to Tarraleah was completed in 1955.

Early in 1939, it was decided to make full use of the Great Lake storage by increasing the peak capacity at Waddamana. War conditions impeded progress, but by the end of the war two 12,000 kW generators had been installed in a new power station, Waddamana "B", adjacent to the original station Waddamana "A". A third unit installed in 1946 and a fourth in 1949 brought the total to 48,000 kW. To enable a full peak capacity to be maintained at both Waddamana stations a duplicate of the original Waddamana canal was constructed during 1947-48.

Between 1930 and 1948, the generating capacity of the system was increased by 121,500 kW but the demand for power continued to increase rapidly and it was obvious that a greatly accelerated construction programme would have to be undertaken. Construction of the Tungatinah Power Development was started in 1948 and the Trevallyn Power Development in 1949.

The Tungatinah scheme draws water from three separate catchment areas located on the Central Plateau between the Great Lake (Shannon-Waddamana) and the Lake St. Clair (Butler's Gorge-Tarraleah) catchments and control of practically the whole run-off from the Central Plateau has now been affected.

The principal catchment utilized by the Tungatinah scheme is drained by the Nive River. A 120-ft. high dam at Pine Tier diverts the waters of the Nive through 6½ miles of canal system to the first of a chain of four artificial lakes, created by dams constructed across the outlets from natural marshes and linked by large open cuts. From the southernmost lake, a tunnel and then five steel pipelines lead to the six 25,000 kW generators in

Tungatinah Power Station, 1,005 feet below on the Nive River just upstream from Tarraleah station on the opposite bank of the river. Power was first generated at Tungatinah in mid-1953 and with a capacity of 150,000 kW it is the largest hydro-electric power station in Australia. Water from the smaller Clarence River catchment is brought into one of the lakes in the Tungatinah system by means of a woodstave pipeline $5\frac{1}{2}$ miles in length and the third catchment area utilized is the Lake Echo-Dee River catchment. Regulation of this catchment has been achieved by construction of a dam at Lake Echo to provide the main storage reservoir for the Tungatinah scheme, construction of the Lake Echo Power Station (one 32,400 kW generator) to utilize 568 feet of the difference in level between Lake Echo and Dee Lagoon, and the diversion of water from Dee Lagoon through 2 miles of tunnel to the main Tungatinah system.

The Trevallyn Power Development, the first constructed by the Commission outside the Central Plateau region, was undertaken primarily to meet the requirements of the aluminium industry. The waters of the South Esk River are diverted through 2 miles of tunnel and pipeline to a power station on the Tamar River near Launceston. Three 20,000 kW generators were installed in mid-1955 and a fourth unit has since brought the total capacity of Trevallyn Power Station to 80,000 kW.

(ii) *New Capacity.* The Hydro-Electric Commission is still engaged in the most progressive construction programme in its history. Since 1948, the generating capacity of the system has been increased by 276,600 kW to a total of 447,100 kW and present construction is planned to bring this total to 575,800 kW by 1960. There will still remain very considerable resources for future development as it is considered that at least 2,400,000 kW can be economically developed.

The Wayatinah Power Development, now under construction, will comprise two power stations and headworks to utilize water which is in the main already regulated and which has been used several times. The volume of water available is much larger and the head smaller than in the case of other major stations. All the water which has passed through Tarraleah or Tungatinah stations will be diverted, by a weir across the Nive River below Tarraleah, through 4 miles of tunnel and then steel pipes to Wayatinah "A" Power Station lower down on the Nive River where 83,700 kW will be installed by 1960.

A dam across the River Derwent, just below its junction with the Nive, will create a small lake into which will flow all the water from Wayatinah "A" plus water collected by the Derwent below Clark Dam. One mile of tunnel and one mile of pipeline will lead the water to Wayatinah "B" Power Station on the Derwent three-quarters of a mile below its junction with the Florentine River. The lower station, Wayatinah "B", is being constructed first for completion by 1958. Installed capacity will be 45,000 kW.

There is every indication that the demand for power in Tasmania will continue to increase. The Commission is conducting extensive surveys and investigation of other schemes with a view to further construction after the completion of the present programme.

3. *Power Usage by Secondary Industry.*—After 1930, every effort was made to keep pace with anticipated increases in demand by means of a progressive construction policy. The abundant and comparatively cheap supplies of electricity and other natural resources attracted to Tasmania a number of important secondary industries for which energy costs constitute a significant proportion of the total cost of production. Some of the more important organizations and their continuous power demands when plant is operating are as follows:—Electrolytic Zinc Company of Australasia Ltd., 73,000 kW; Australian Aluminium Production Commission, 30,000 kW; Australian Newsprint Mills Ltd., 19,000 kW; Associated Pulp and Paper Mills Ltd., 14,500 kW; Australian Commonwealth Carbide Company Ltd., 7,800 kW; and Goliath Portland Cement Company Ltd., 1,800 kW.

§ 7. Commonwealth Territories.

1. *Internal Territories.*—(i) *General.* The electricity supply undertakings at Canberra in the Australian Capital Territory and at Darwin, Katherine, Tennant Creek and Alice Springs in the Northern Territory are operated by the Commonwealth Government.

(ii) *Australian Capital Territory.* Supply was first established at Canberra during 1915. The Department of the Interior owns steam stand-by plant of 2,100 kW capacity which is operated in conjunction with the New South Wales Electricity Commission's generating equipment. The major portion of Canberra's power requirements are supplied in bulk from the New South Wales inter-connected system. Total population served with electricity at 30th June, 1956 was 34,000 and the total number of ultimate consumers was 9,953. Rapidly increasing domestic, government, and commercial load will absorb appreciable amounts of power from the Snowy Scheme.

(iii) *Northern Territory.* At Darwin, supply was established by the Town Council in October, 1934, but later, during April, 1937, responsibility for generation and supply was placed in the hands of the Northern Territory Administration. The power station is equipped with diesel generating plant of 5,390 kW capacity. Two new 970 kW diesel sets were installed in 1955-56. Small diesel generating units supply the requirements of Alice Springs (1,042 kW), Katherine (297 kW) and Tennant Creek (223 kW).

In 1948, it was announced that the Department of Works and Housing (now the Department of Works) had selected a site for a hydro-electric station on the Adelaide River, 72 miles from Darwin. The scheme is designed to augment supply to Darwin and suburbs when the diesel equipment at present installed is unable to cope with the demand for power. No constructional work has yet been undertaken on the project.

2. *External Territories—Papua and New Guinea.*—Responsibility for the operation and establishment of electrical undertakings in Papua and New Guinea is vested in the Administration of the Territory of Papua and New Guinea, whose headquarters are located at Port Moresby. The total generating capacity of the diesel engine driven generating sets amounts to 5,963 kW. The generating capacity of the power plants at the main centres is—Port Moresby, 2,504 kW; Rabaul, 1,280 kW; Lae, 854 kW; Madang, 280 kW; Samarai, 200 kW; Kavieng, 142 kW; Wewak, 110 kW; Lorengau, 100 kW; Goroka, 100 kW; and 223 kW distributed among eleven outstations where generating capacity is between 5 kW and 60 kW. New power plants at Lae and Rabaul have been completed and are now in operation. The townships of Wau and Bulolo are supplied by the Bulolo Gold Dredging Co., which operates a hydro-electric plant of 5,500 kW. This power is produced mainly to supply the alluvial dredges and, in addition, now supplies the recently constructed plywood mill at Bulolo.

The number of ultimate consumers served was 3,053 in 1954-55 and 3,584 in 1955-56.

Vast hydro-electric potential exists in New Guinea and it has been estimated at 15,000,000 kW, but because of the island's location, absence of large load centres and lack of industrialization, only a small proportion could, at present, be economically developed.

In 1950, it was announced that the Commonwealth Government had joined with British Aluminium Co. Ltd. of London to locate and develop large capacity hydro-electric schemes in New Guinea. A new company was formed, known as New Guinea Resources Prospecting Co. Ltd., with a capital of £100,000. The Commonwealth holds 51 per cent. of the shares and has a controlling interest on a board of five members. The agreement for the formation and operation of the Company is administered by the Commonwealth Department of Supply, except in matters requiring compliance with the law of New Guinea, when responsibility for administration rests with the Department of Territories. Surveys and comprehensive investigations are in progress.

The following hydro-electric schemes are under construction:—Port Moresby— at Rouna on the Laloki River providing 2,000 kW when complete with provision for expansion to 5,000 kW. It is anticipated that the power station should be in operation during 1957. The present project utilizes only portion of the power available from the Laloki River and the economic ultimate development will be of the order of 50,000 kW; Aiyura (for the Agricultural Experimental Station) with an initial capacity of 30 kW. Stream gauging and other preliminary investigations for hydro-electric schemes have been carried out at Lae, Rabaul and Madang.

There are possibilities for major hydro-electric development in the following localities:— Rouna Falls (near Port Moresby), Upper Snake and Busu-Erap-Leron (near Lae), Upper Ramu (near Markham—Ramu divide—80 miles from Lae) and Hathor Gorge (on Purari River) with an estimated average power of 100,000 kW, 150,000 kW, 2 million kW, 250,000 kW, and 3 million kW respectively. These have estimated run-offs of 1,400; 6,000; 12,000; 1,000; and 75,000 cusecs respectively.

In an area of 150,000 square miles of the Eastern New Guinea mainland, the power potential has been estimated at 150 kW per square mile which compares favourably with potentials of 170 kW per square mile for Switzerland and 95 kW per square mile for Norway.

D. STATISTICAL SUMMARY, 1949-50 AND 1954-55.

The following table shows statistics for each State separately and for the six States combined for 1949-50 and 1954-55 and relates to:—(i) the numbers and installed capacity of central electric generating stations, (ii) the values of production and output and the average numbers of persons employed in the generating side of the electricity supply industry and (iii) the amount of electricity generated in both years and the number of ultimate consumers of electricity in 1955-56.

288 CHAPTER VIII.—ELECTRIC POWER GENERATION AND DISTRIBUTION.

For further statistics of the electricity supply industry (years 1938-39 and 1950-51 to 1954-55), see Chapter VII.—Manufacturing Industry.

CENTRAL ELECTRIC STATIONS.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
1949-50.							
Generating Stations—							
Government .. No.	10	10	..	2	12	2	36
Local Authority ..	45	32	36	14	42	..	169
Companies ..	37	25	9	20	61	1	153
Total	92	67	45	36	115	3	358
Installed Capacity of Generators—							
Steam .. '000 kW	889	548	211	(a)	78	(a)	1,923
Hydro ..	33	52	4	(a)	..	(a)	284
Internal combustion ..	59	19	32	(a)	41	(a)	162
Total	981	619	247	(a)	119	(a)	2,369
Persons employed(b) No.	3,968	2,294	967	(a)	1,029	(a)	9,433
Value of output(c) £'000	15,018	6,215	3,477	(a)	2,431	(a)	30,556
Value of production(d) ..	7,197	2,522	857	(a)	754	(a)	12,884
Electricity generated(e) Million kWh	3,758	2,706	972	594	417	1,062	9,509
1954-55.							
Generating Stations—							
Government .. No.	22	16	1	7	9	6	61
Local Authority ..	34	22	51	13	38	..	158
Companies ..	29	24	7	22	47	3	132
Total	85	62	59	42	94	9	351
Installed capacity of Generators—							
Steam .. '000 kW	1,438	815	385	(a)	180	(a)	3,131
Hydro ..	97	86	7	(a)	..	(a)	573
Internal combustion ..	100	43	37	(a)	52	(a)	250
Total	1,635	944	429	(a)	232	(a)	3,954
Persons employed(b) No.	5,362	2,891	1,350	(a)	945	(a)	11,927
Value of output(c) £'000	34,663	19,046	10,202	(a)	6,262	(a)	78,286
Value of production(d) ..	18,397	9,128	3,402	(a)	2,603	(a)	37,568
Electricity generated (e) Million kWh	5,951	4,152	1,658	1,119	702	1,589	15,171
Ultimate consumers(f) No.	960,332	693,165	322,747	228,420	127,890	101,503	2,434,057

(a) Not available for publication ; included in the total for Australia. (b) Average employment, in generating station, over whole year including working proprietors. (c) Value, at generating station, of electricity produced plus certain earnings. (d) Value added to materials and fuel in the process of generation. (e) Total generated including that generated by factories for their own use. (f) Approximate figures supplied by the electricity authority in each State. An "ultimate consumer" is a person, business, undertaking, etc., that has contracted to receive electric power from a public or private organization supplying this service. The number of ultimate consumers is not synonymous with the number of persons served with electricity because one ultimate consumer may embrace three or four persons, e.g., in a household.

CHAPTER IX.

WATER CONSERVATION AND IRRIGATION.

A. RESOURCES, UTILIZATION AND NATIONAL AND INTERSTATE ASPECTS.

§ 1. Introduction.

Official Year Book No. 37, pp. 1096-1141, contained a special article "The Conservation and Use of Water in Australia" prepared by Mr. Ulrich Ellis of Canberra. In subsequent issues, much of Mr. Ellis's article of a statistical nature has been advanced, as has the general information on the more important developments in this field, but for details of general, descriptive and historical matter reference should be made to the original article. Appended to the special article was a bibliography of selected books, reports, papers, etc., dealing with the development of the water resources of Australia and their conservation (*see pp.* 1140-41).

For further details on geographical and climatic features determining the Australian water pattern, reference should be made to Chapter II.—Physiography; on water supply and sewerage in metropolitan areas, cities and towns to Chapter XIX.—Local Government; and on the generation of hydro-electric power to Chapter VIII.—Electric Power Generation and Distribution, of this issue.

A series of maps showing the location of major dams and reservoirs and the various irrigation schemes operating in each of the States was published on pp. 1073-9 of Official Year Book No. 40.

A map showing the extent of known artesian basins throughout Australia is shown on page 307 of this Year Book.

§ 2. Water Resources and their Utilization.

1. **Surface Supplies.**—Though river gaugings have been recorded over considerable periods in some parts of Australia, records elsewhere are intermittent, of short duration, or non-existent. At present, therefore, it is impossible to estimate, with any degree of reliability, the total average annual flow of Australian streams, but it would probably amount to only a small figure in comparison with the flow of rivers in other continents, some examples of which, expressed as mean annual discharges in millions of acre feet, are: Nile, 72; Danube, 228; Amazon, 1,780; Volga, 148; Mississippi, 474; and the ten main rivers of the United States of America, 900 (in the aggregate).

2. **Major Dams and Reservoirs.**—The table below lists existing major dams and reservoirs together with those under construction or projected as at June, 1956.

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA.

Name.	Location.	Capacity (Acre feet).	Height of Wall (Feet)	Remarks.
EXISTING DAMS AND RESERVOIRS.				
Eildon	Upper Goulburn River, Victoria	2,750,000	250	Earthen embankment 3,300 feet long. Storage for irrigation and for the generation of electricity.
Hume	Murray River near Albury	1,382,000	110	Part of Murray River Scheme—storage for domestic, stock and irrigation purposes. Being increased to 2,500,000 acre feet. Hydro-electric power to be developed.
Miena	Great Lake, Tas- mania	1,125,000	40	Regulates water to Waddamana hydro-electric power station.
Burrinjuck ..	Murrumbidgee River, New South Wales	837,000	264	Storage for irrigation and production of hydro-electric power.
Somerset	Stanley River, Queensland	735,000	173	Brisbane-Ipswich water supply, flood mitigation and small hydro-electric power station.
Lake Victoria ..	Murray River near South Australian border, in New South Wales	551,700	..	Natural storage for irrigation in South Australia.

MAJOR DAMS AND RESERVOIRS IN AUSTRALIA—*continued.*

Name.	Location.	Capacity (Acre feet).	Height of Wall (Feet).	Remarks.
<i>EXISTING DAMS AND RESERVOIRS—continued.</i>				
Lake Echo ..	Lake Echo, Tasmania	398,600	60	Storage for Lake Echo and Tunggatinah hydro-electric power stations.
Waranga	Goulburn River, Victoria	333,400	..	Earthen embankment, 23,800 feet long. Irrigation storage.
Wyangala ..	Lachlan River, New South Wales	303,900	190	Storage for domestic, stock and irrigation purposes and for generation of hydro-electric power.
Rocklands ..	Glenelg River, Victoria	272,000	..	Part of Wimmera-Mallee domestic and stock water supply system.
Clark	Derwent River, Tasmania	243,000	200	Serves Tarrareah hydro-electric power station.
Avon	Nepean River, New South Wales	173,800	232	Part of Sydney water supply.
Lake Brewster ..	Lachlan River, near Hillston, New South Wales	123,900	..	Storage of rural water supplies for the lower Lachlan.
Cairn Curran ..	Loddon River, Victoria	120,600	..	Storage for irrigation.
Glenmaggie ..	Gippsland, Victoria	106,000	100	Storage for irrigation.

DAMS AND RESERVOIRS UNDER CONSTRUCTION OR PROJECTED.

Burdekin Falls ..	Burdekin River, North Queensland	6,584,000	150	Projected for generation of hydro-electric power, irrigation and flood mitigation.
Adaminaby ..	Euclumbene River, New South Wales	3,500,000	390	Under construction as part of Snowy Mountains Hydro-electric Scheme.
Menindee Lakes Project	Darling River near Menindee, New South Wales	2,000,000	..	Part of Darling River water conservation scheme—under construction.
Warragamba ..	Warragamba River, New South Wales	1,694,900	373	Under construction for Sydney water supply. Also provides for generation of hydro-electricity and flood mitigation.
Jindabyne ..	Snowy River, New South Wales	1,100,000	274	Projected as part of Snowy Mountains Hydro-electric Scheme.
Burrundong ..	Macquarie River, near Wellington, New South Wales	914,000	193	Under construction for rural water supplies.
Blowering ..	Tumut River, New South Wales	800,000	300	Projected as part of Snowy diversion scheme.
Tantangara ..	Murrumbidgee River, New South Wales	616,500	215	Projected as part of Snowy Mountains Hydro-electric Scheme.
Warkworth ..	Wollombi Brook (Hunter Valley), New South Wales	400,000	100	Projected as a flood mitigation dam for the Hunter Valley.
Keepit	Namoi River, near Gunnedah, New South Wales	345,000	135	Under construction for rural water supplies.
Tinaroo Falls ..	Barron River, North Queensland	320,000	133	Under construction for irrigation purposes in the Mareeba-Dimbulah area.
Glenbawn ..	Hunter River, near Scone, New South Wales	296,000	240	Under construction as part of Hunter Valley conservation work.
Wellington ..	Collie River, Western Australia	150,000	110	Existing dam to be enlarged for supply of water to irrigation districts and to agricultural areas and towns.
Koombooloomba ..	Tully River, North Queensland	146,000	123	Under construction for hydro-electric and possibly irrigation purposes.
Upper Yarra ..	Yarra River, Victoria	110,000	270	Under construction for Melbourne water supply.

The maps on pp. 1073-9 of Official Year Book No. 40 show the positions of the above-mentioned dams and reservoirs.

3. Irrigation.—(i) *History.* For some brief remarks on the history of irrigation in Australia referring to the efforts of the Chaffey Brothers and to the Victorian Irrigation Act in 1886 see issues of the Official Year Book prior to No. 39. Trends in irrigation practice in more recent years were described in Official Year Book No. 37, p. 1009.

(ii) *Extent and Nature of Irrigated Culture.* About half of Australia's irrigated acreage is in Victoria, and about two-thirds is situated along the Murray and its tributaries (including the Murrumbidgee) in the three States of New South Wales, Victoria and South Australia. In these areas served by the Murray and its tributaries, irrigation water is used extensively for vines, orchards, pastures, fodders, and for domestic and stock purposes. Approximately half of Queensland's irrigated acreage is devoted to sugar cane. Western Australia's small irrigated acreage is confined to areas in the south-west where vegetables, orchards, fodders, and pastures are served. Large scale irrigation schemes have not been developed in Tasmania or the Northern Territory although reference is made on page 322 to investigations at present being carried out in the Northern Territory to determine the availability of irrigation water for rice production.

The following table shows the area of land irrigated in each State during the years 1950-51 to 1955-56 :—

AREA OF LAND UNDER IRRIGATED CULTURE.
(Acres.)

Season.	N.S.W. (a)	Vic. (b)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1950-51 ..	597,773	716,051	83,150	79,062	28,197	7,242	..	468	1,511,943
1951-52 ..	596,601	723,797	113,040	58,427	29,106	6,830	..	656	1,528,457
1952-53 ..	494,900	755,030	126,693	57,057	31,067	8,414	..	606	1,473,767
1953-54 ..	540,243	821,025	146,282	62,062	34,247	9,412	..	800	1,614,071
1954-55 ..	616,264	863,563	139,414	69,452	36,130	13,761	151	791	1,739,526
1955-56 ..	379,611	634,334	136,019	70,987	37,164	11,499	225	774	1,207,613

(a) Source : Water Conservation and Irrigation Commission.

(b) Source : State Rivers and Water Supply Commission.

The next table shows the area of land irrigated in each State during 1955-56 according to the nature of irrigated culture.

AREA OF LAND UNDER IRRIGATED CULTURE, 1955-56.
(Acres.)

Crop.	N.S.W. (a)	Vic. (b)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Rice	41,837	..	..	..	..	..	..	..	41,837
Vegetables ..	16,658	16,330	19,828	10,358	6,880	1,125	55	146	71,380
Fruit	18,142	35,452	3,671	16,248	4,768	605	74	8	164,362
Vineyards ..	12,960	45,518	..	26,453	463	..	..	..	..
Sugar-cane ..	(c)	..	58,762	..	..	..	..	..	58,762
Hops .. ..	..	(c)	..	..	..	1,248	..	..	1,248
Cotton .. ..	..	..	685	..	..	..	..	..	685
Other Crops (including Fodder and Fallow land)	70,043	30,891	(d)29,511	3,548	1,725	1,231	96	420	137,465
Total, Crops	159,640	128,191	112,457	56,607	13,836	4,209	225	574	475,739
Pastures ..	219,971	e 506,143	23,562	(e)14,380	23,328	7,290	..	200	794,874
Total ..	379,611	634,334	136,019	70,987	37,164	11,499	225	774	1,270,613

(a) Source : Water Conservation and Irrigation Commission.
Water Supply Commission.

(c) Included in Other Crops.

(b) Source : State Rivers and Water Supply Commission.

(d) Includes Tobacco, 5,545 acres.

(e) Includes lucerne for pasture.

(iii) *Research.* Comprehensive programmes of research and investigation are being pursued by State water and agricultural authorities and the Commonwealth Scientific and Industrial Research Organization, often in collaboration. Special attention is being given to the following :—high water tables due to the application of water ; surface accumulation of salt and other soil changes associated with irrigation ; methods of applying water efficiently ; increasing density of stock on irrigated pastures which leads to the spread of such diseases as foot rot and fluke in sheep, and mastitis and contagious abortion in cattle ; growth problems affecting plants and trees ; the prevention of evaporation from water storages ; and the potability of saline waters for stock.

The Commonwealth Scientific and Industrial Research Organization maintains the following research stations :—Merbein (Victoria)—horticultural problems, particularly of the dried vine fruits industry ; Griffith (New South Wales)—the influence of irrigation on plant life (using horticultural trees as test plants), irrigation methods, land drainage and soil structure ; Deniliquin (New South Wales)—pastures ; and the Kimberley Research Station (Western Australia)—tropical crops and pastures. In the maintenance of Merbein and Griffith Stations, the Commonwealth is assisted, financially and otherwise, by the New South Wales Water Conservation and Irrigation Commission, by the Dried Fruits Export Control Board and by private organizations.

The Soils Division of the Organization has made detailed surveys of more than a million acres since 1927, with less detailed reconnaissance surveys over many millions of acres. The Division works closely with State authorities. The keynote of soil investigations is relationship between soil and land use, and there is an increasing tendency to seek such surveys before irrigation districts are established. Research is also conducted in the field of water percolation in relation to soil structure.

The irrigation Research and Extension Committee plays an important part in the agricultural activity of the Murrumbidgee Irrigation Areas. It is representative of the State Department of Agriculture, the Commonwealth Scientific and Industrial Research Organization, the Rural Bank of New South Wales, the Soil Conservation Service of New South Wales and certain farmers' organizations (including Extension Groups). Finance is provided by these authorities on an agreed basis. The objectives are :—to enable the agricultural extension services to the farmers in the defined sub-region to be continued and developed ; to provide a system for advising on local agricultural policy and organization ; to provide means for farmer opinion to have due weight in the consideration of regional agricultural administration and policy ; to achieve a unified approach to sub-regional extension in all branches of agriculture ; to advise on the research needs of the sub-region and the co-ordination of the agricultural research of the various rural institutions working therein ; to achieve close liaison between research and extension ; and to conduct research in extension methods.

4. **Preservation of Catchments.**—Since water conservation commences on the catchments, it is becoming increasingly recognized that anything which interferes with catchment efficiency affects the quantity of water available for all purposes. Active steps are being taken to counteract soil erosion, to conserve soil generally, and to minimize the effects of floods, overstocking, bush fires, and the destruction of vegetative cover. All States and the Commonwealth have initiated forestry policies which provide for reafforestation and the preservation of catchments. In recent years, efforts to counteract soil erosion have been intensified and there is some evidence of a more unified approach to catchment, water, forestry, and land use factors regarded as parts of a single problem.

5. **Sub-surface Supplies.**—(i) *General.* While a more or less complete general picture of the available and potential surface water resources exists, much remains to be done with regard to the location and development of sub-surface supplies (artesian, sub-artesian and ground water), in view of their importance as the basis of settlement over large areas of Australia.

The extent of the artesian basins—particularly the Great Artesian Basin—has been fairly accurately determined, while the use of sub-artesian supplies is extensive and more development is possible. The shallower ground-water supplies, however, particularly along alluvium valleys and coastal sandbed areas, have not been investigated and developed in any degree, except in a few localities.

(ii) *Artesian and Sub-artesian Supplies.* Pressure water, variable in quantity and quality, either artesian or sub-artesian, is obtainable in many parts of Australia, the various artesian basins extending over approximately one-third of the continent. A map of Australia showing the extent of the known artesian basins appears on page 307 of this Year Book.

The Great Artesian Basin, the most extensive in the world, underlies an area of approximately 670,000 square miles, comprising about 430,000 in Queensland, 80,000 in New South Wales, 120,000 in South Australia and 40,000 in the Northern Territory. Of the numerous defined major and minor water-bearing basins in Australia, the following are the principal :—

PRINCIPAL WATER-BEARING BASINS : AUSTRALIA.

Name.	State.	Geological Age of Chief Aquifers.	Approximate Area.	Depth to Pressure Water.
			Square Miles.	Feet.
Great Artesian ..	Queensland, New South Wales, South Australia and Northern Territory	Pliocene-Permian ..	670,000	Up to 7,000
Murray ..	Victoria, New South Wales and South Australia	Miocene-Oligocene ..	107,000	100 to 900
Pirie-Torrens ..	South Australia ..	Recent Pleistocene ..	4,000	Up to 600
South-west ..	Western Australia	Recent Jurassic ..	10,000	200 to 2,500
Adelaide ..	South Australia ..	Recent Oligocene ..	1,100	10 to 850
East Gippsland ..	Victoria ..	Pleistocene-Oligocene	2,500	200 to 1,800
Eucla ..	Western Australia, South Australia	Pliocene-Miocene ..	68,000	300 to 2,000
North-west ..	Western Australia	Tertiary Permian ..	40,000	230 to 4,000
Desert and Fitzroy	Western Australia	Carnozoic-Palaeozoic	160,000	100 to 1,500
Barkly ..	Northern Territory, Queensland	Cretaceous, Cambrian and Upper Precambrian	57,000	150 to 1,000
Basins of Ord-Victoria Region	Northern Territory, Western Australia	Mainly Cambrian and Permian	Unknown	Unknown

More than 3,000 artesian bores have been constructed within the Great Artesian Basin and the daily free discharge from all bores continuing to flow in Australia has been stated to exceed 350 million gallons, of which the loss by evaporation and seepage has been estimated at more than 90 per cent. Sub-artesian bores and wells throughout Australia number more than 200,000.

Artesian water generally is good stock water, but it is unsuitable for plant life, while in certain areas sub-artesian waters are suitable for all uses including irrigation. In some districts a considerable amount of irrigation is carried out from shallow ground-water supplies.

In common with other countries possessing artesian supplies, Australia has been faced with the problem of flow diminution. It was recognized early that flows were diminishing as more bores were drilled, but it is now considered that while many of the bores will ultimately cease to flow, many will not cease, but will assume a perpetually steady rate of flow, corresponding with the average intake of water from rainfall absorbed by sandstone outcrops. Diminution in flows from artesian bores has emphasized the need to eliminate wastage as much as possible, and investigations have been made regarding wasteful methods of distribution of artesian water by open channels or "bore drains" and the careless use of water. (For greater detail on this subject see Official Year Book No. 37, pp. 1103-4.)

(iii) *Ground Water.* Ground water supplies are used in various parts of Australia for industry, irrigation, stock and domestic purposes. Two of the most important of these supplies are in New South Wales. The Hunter District Water Board pumps 10 million gallons per day for general use from the Tomago coastal sands near Newcastle and at Botany, Sydney, private industry pumps 5 million gallons per day for its own use from similar sands.

Recent exploration of the coastal sands north of the Tomago Sands has revealed a further potential production of 25 million gallons per day.

§ 3. National and Interstate Aspects.

1. *General.*—As the Commonwealth Constitution makes special reference to water problems, both the Federal and the State Governments have an interest in the control and conservation of water. The main responsibility for control of water resources resides in the individual State governments, but as political boundaries sometimes intersect river valleys and catchments, co-operation between governments has been necessary to develop resources in certain cases. Specific examples of Commonwealth-State and interstate co-operation and approach are given in the following sections.

In the Report on Irrigation, Water Conservation and Land Drainage presented to the Commonwealth Government by the Rural Reconstruction Commission in 1945, national aspects of water conservation and use were emphasized. The report recommended that to obviate lack of co-ordination, an all-Australian plan, having the assent of the various governments be adopted, and that the Commonwealth should endeavour to promote interstate co-operation and co-ordinated development generally.

In 1946, a conference between the Commonwealth and States agreed to revive the Irrigation Production Advisory Committee first established under the authority of the Australian Agricultural Council in 1938. Its functions are :—(a) to prepare for the consideration of the Australian Agricultural Council or any Committee of Ministers appointed by the Council, conclusions formed from investigations to be carried out by Commonwealth and State Officers into the various agricultural industries which it is possible to develop on irrigated lands ; (b) to undertake long-term co-ordination of land utilization in irrigable areas served by the River Murray and its tributaries, this involving co-ordination of all available lands and the carrying out of such supplementary investigations as may prove necessary.

2. *Murray River Scheme.*—(i) *General.* The Murray River and its tributaries form the largest river system in Australia. The catchment is approximately 414,000 square miles, or one-seventh of the area of the Australian continent, comprising five-sixths of New South Wales, over one-half of Victoria, one-sixth of Queensland and one-fortieth of South Australia. The Murray proper is 1,600 miles long. Its main tributaries are the Murrumbidgee (980 miles), the Darling (1,700 miles), and the Goulburn (280 miles). The average annual flow of each of the chief contributory streams is as follows :—Upper Murray, including the Mitta Mitta and Kiewa Rivers, 3,506,000 acre feet ; Murrumbidgee River, 2,280,000 acre feet ; Goulburn River (including Broken River), 2,502,000 acre feet ; Darling River, 2,224,000 acre feet ; and Ovens River, 1,169,000 acre feet. Irrigated production in the River Murray basin is mainly in the form of wine, dried fruits, fresh fruits, rice, vegetables, dairy produce, wool, fat lambs, poultry, eggs and pigs.

For a brief summary of the historical events leading up to the River Murray Agreement (1915) by the Governments of the Commonwealth, New South Wales, Victoria, and South Australia, see issues of the Year Book prior to No. 39. The Agreement provided for the construction of works, the allocation of the water between the three States, and the appointment of a Commission to implement the Agreement. The Commission comprises four Commissioners, representing the Commonwealth and the three States respectively. The Commonwealth representative presides.

(ii) *River Murray Waters Agreement.* Under the Agreement, construction works are carried out by the States (who are also responsible for maintenance) subject to the approval and direction of the Commission. The Agreement provides that the minimum quantity of water to be allowed to pass for supply to South Australia in each year shall be sufficient to fill Lake Victoria storage once, and with the aid of water returned from Lake Victoria, to maintain certain specified flows in the lower river varying from 47,000 acre feet per month in the winter months to 134,000 acre feet per month in the four summer months of maximum demand—the total amounting to 1,254,000 acre feet over twelve months. These flows are to meet domestic and stock requirements in South Australia, losses of water in lockages and evaporation losses other than in the lakes at the Murray mouth, together with 603,000 acre feet per annum for diversion from the Murray for irrigation in South Australia. The flow at Albury is shared equally by New South Wales and Victoria, and each of these States has full control of its tributaries below Albury, subject in each case to the fulfilment of the South Australian allocation. For a brief outline of the operation of the Agreement prior to 1949 see Official Year Book No. 40 (p. 1065) and earlier issues.

At a Conference of Ministers held in July, 1949, to consider the diversion of the Snowy River, it was decided that, by diversion of streams in the Snowy Mountains area, an average of approximately 400,000 acre feet per annum would be added to the Murray River (see para. 4, Snowy Mountains Hydro-electric Scheme, page 297) and that a storage of not less than 1,500,000 acre feet should be provided in order to give additional regulation of the Murray River itself as well as to provide for regulation of the diverted waters. Hydro-electric potentialities would also affect the size of the storage.

The River Murray Commission investigated the position and found that an increase in capacity of 500,000 acre feet in storage on the Upper Murray River above Albury was the maximum that was economically justifiable for the regulation for irrigation purposes of the waters of the Upper Murray River and of waters added from the Snowy River. The Commission agreed that this increase could best be provided by increasing the size of the Hume Reservoir from its previously designed capacity of 2,000,000 acre feet to 2,500,000 acre feet, but if for hydro-electric purposes additional storages become justified in the future further increases would best be provided at some other site. It subsequently recommended to the contracting Governments that the River Murray Waters Agreement be amended to provide for this enlargement of the Hume Reservoir to 2,500,000 acre feet. A conference of Ministers considered the recommendation in July, 1954 and agreed to the enlargement. In addition, it was agreed that the Commission should be given power to construct regulators to carry out such other work on the River Murray between Tocumwal and Echuca as it considered necessary to reduce the losses from the regulated flow in that stretch of the river. The amended Agreement was ratified in the Parliaments of the Commonwealth and the three States and was proclaimed on 7th April, 1955.

The total estimated quantity of water diverted from the Murray and its tributaries (under the River Murray Agreement in 1955-56 for irrigation and other purposes, including impounding in dams, was as follows (in acre feet) :—New South Wales, 1,008,000 ; Victoria, 3,108,000 ; South Australia, 190,500 ; a total of 4,306,500 acre feet.

(iii) *River Murray Works.* One of the major works of the Murray River Scheme is the Hume Reservoir, situated just below the junction of the Murray and Mitta Mitta Rivers, 10 miles above Albury, forming a lake of 33,000 acres. The design comprises a mass concrete spillway and outlet works extending 1,000 feet and an earthen embankment 110 feet high extending for 4,000 feet across the river flats. The length of the total structure is approximately one mile. Work is now in progress on the installation of a hydro-electric generating station below the dam and also on the completion of the reservoir to its recently approved capacity of 2,500,000 acre feet.

The Yarrawonga Diversion Weir was completed in 1939 to raise the river level so that water could be diverted by gravitation into main channels constructed on either side of the river. Between the Yarrawonga Weir and the Murray mouth, thirteen weirs and locks have been built. Two flood diversion weirs have been constructed on the Murrumbidgee—one between Hay and the Lachlan Junction and the other below the Lachlan Junction.

The Mulwala Canal, served by the Yarrawonga Weir, has an off-take capacity of 2,500 cubic feet per second, and will serve 1,500,000 acres of land in New South Wales. The Yarrawonga Channel, on the Victorian side, has an off-take capacity of 1,250 cubic feet per second, and is designed to serve 270,000 acres. Only a portion of both these areas will be irrigated.

Adjoining the river in New South Wales and 35 miles from the Murray-Darling Junction, Lake Victoria storage, with a capacity of 551,700 acre feet and a surface area of 27,670 acres, was completed in 1928. The water released from Lake Victoria is used by the South Australian settlements. Work is proceeding on the enlargement of the inlet channel to Lake Victoria to permit greater diversion of periodical flood flows of short duration.

Five barrages across channels near the Murray River mouth connecting Lake Alexandrina with the sea were completed in 1940 to prevent ingress of salt water to Lakes Alexandrina and Albert and to the lower river, thereby increasing the productivity of adjacent lands. The structures maintain a sufficiently high level for 50 miles up river to permit watering by gravitation of a considerable area of reclaimed river flats. The total distance across the barrages and intervening islands is 15 miles.

In addition to the works carried out under the auspices of the Commission, the separate States have constructed thousands of miles of distribution channels and have provided a number of storages on the tributaries, thereby contributing very materially to the large amount of irrigation development in the Murray Basin. The total capacities of such main storages are : New South Wales—Burrinjuck (Murrumbidgee), 837,000 acre feet ; Wyangala (Lachlan), 303,900 acre feet ; Victoria—Eildon (Goulburn), 2,750,000 acre feet ; Waranga (Goulburn), 333,400 acre feet. More details of these and other State works on Murray tributaries will be found in the sections dealing with State systems. No storages exist on the Murray in South Australia.

3. New South Wales-Queensland Border Rivers Agreement.—The New South Wales-Queensland Border Rivers Agreement came into effect on 1st July, 1947. The Agreement provides for the construction of certain works on parts of those portions of the Severn, Dumaresq, Macintyre and Barwon Rivers which constitute part of the boundary between New South Wales and Queensland, for the furtherance of water conservation, water supply and irrigation in those States.

The works to be constructed comprise a dam on the Dumaresq River at a site to be selected by the Commission to give a storage basin with a capacity as large as is reasonably practicable and not less than six nor more than twelve weirs as may be found necessary to meet the requirements of irrigation along the rivers. Provision is also made for the construction of not more than four regulators in the effluents from the barrier rivers and for the taking over of the existing weir in the Macintyre River at Goondiwindi and the existing weir in the Barwon River at Mungindi. The costs of these works and of administration are to be borne by the States in equal shares. The agreement further provides that the water discharged from the Dumaresq storage, whether by regulated or unregulated flow, shall be available to the two States in equal shares.

The Water Conservation and Irrigation Commission of New South Wales, which is the constructing authority for the dam, has for some time past been carrying out investigations of alternate dam sites on the Dumaresq River near Mingoola Station Homestead which is approximately 39 miles from Tenterfield. Foundation drilling supplemented by a geophysical survey carried out by the Commonwealth Bureau of Mineral Resources disclosed unfavourable foundation conditions at all sites, the depth of alluvium overlying sound rock exceeding 150 feet in all cases. In an endeavour to obtain more economical storages, investigations have now been extended to tributary streams and superficially suitable sites have been located on Pike's Creek and the Mole River. A geophysical survey has recently been made at each of these sites and comparative estimates are in course of preparation to determine the relative economy of providing one large storage at Mingoola or two smaller storages on the tributaries.

The Irrigation and Water Supply Commission of Queensland, which is the constructing authority for the new weirs and regulators, has carried out detailed investigations as to sites for such works. The construction of Bonshaw and Cunningham Weirs on the Dumaresq River was completed in January, 1953 and June, 1954 respectively.

Investigations are proceeding and designs are being prepared for a weir and regulator on the Barwon River at the offtake of the Boomi River and for a low level weir to establish a pumping pool at a location 35.3 miles on the Dumaresq River. The existing Goondiwindi and Mungindi Weirs are being maintained, operated and controlled by the Queensland Irrigation and Water Supply Commission.

The catchments for the border streams (2,000 square miles) extend to the granite areas in the vicinity of Tenterfield (New South Wales) and Stanthorpe (Queensland) and elevation rises to 3,000 feet. Average rainfall is 30 inches. The catchments and the areas suitable for irrigation are approximately equal in each State. Climatic conditions are such that it is necessary to supplement rainfall from April to October by irrigation to stabilize and increase production. The capacity of the area to grow lucerne and tobacco under irrigation has already been demonstrated. Irrigation of cotton, root crops, cereals, and citrus fruit, and expansion of the fat stock industry, is being examined.

4. *Snowy Mountains Hydro-electric Scheme.**—(i) *General.* Following a comprehensive investigation into both the water and power potential of the Snowy River waters by a Technical Committee representative of the Commonwealth and the States of New South Wales and Victoria in 1947 and 1948, and the submission by the committee of reports in 1948 and 1949, the Commonwealth Parliament in July, 1949 passed the Snowy Mountains Hydro-electric Power Act setting up an Authority to implement the proposals agreed upon.

The basis of the proposals is to impound the Snowy River waters at high elevations and, by diverting them into tunnels passing under the Alps, to use their potential power for the generation of electricity and then to discharge them into the Murray and Murrumbidgee River systems for use in the irrigation areas.

The scheme will be constructed in two parts, the first being known as the Snowy-Murray Development where the water is to be diverted by tunnel from a large dam across the Snowy River at Jindabyne to the Swampy Plains River in the Murray Valley; and the second as the Tumut Development, in which water will be diverted by tunnel from a dam at Adaminaby on the Eucumbene River, a tributary of the Snowy, to the Tumut River, a tributary of the Murrumbidgee. The whole scheme will involve the construction of seven major dams (with a total storage capacity of approximately 7 million acre feet), fifteen power stations, more than 80 miles of large diameter tunnels, and over 330 miles of racelines at high elevations.

Latest estimates indicate that the total cost will be approximately £419 million. The scheme is the greatest engineering and developmental work ever undertaken in Australia and one of the major engineering projects of the world.

(ii) *Snowy Mountains Hydro-electric Power Act 1949.* The Snowy Mountains Hydro-electric Authority is constituted by a Commissioner, who is assisted by two Associate Commissioners. The functions of the Authority are defined in the Act as follows:—(a) to generate electricity by means of hydro-electric works in the Snowy Mountains area and (b) to supply electricity so generated to the Commonwealth for defence purposes and for consumption in the Australian Capital Territory. The general powers of the Authority as defined in the Act are as follows:—For the purpose of performing its functions the Authority shall have power to construct, maintain, operate, protect, manage and control works—(a) for the collection, diversion and storage of water in the Snowy Mountains Area; (b) for the generation of electricity in that area; (c) for the transmission of electricity generated by the Authority; and (d) incidental or related to the construction, maintenance, operation, protection, management or control of any of the works specified above. The Act provides that the Authority may sell to a State, or to an authority of a State, electricity generated by the Authority which is not immediately required by the Commonwealth for defence purposes or for consumption in the Australian Capital Territory.

* See also Chapter VIII.—Electric Power Generation and Distribution, p. 266. For more detailed information see special article by the Commissioner, Snowy Mountains Hydro-electric Authority (Sir William Hudson) which appeared in Chapter XXIX.—Miscellaneous, of Official Year Book No. 42.

(iii) *The Authority's Objectives and Programme.* The two basic objectives are the production of electricity and the diversion of water inland.

The first power station, at Guthega, came into service in April, 1955. Additional generating capacity is scheduled to become available progressively.

By the end of 1959, the Snowy Scheme will supply the Murrumbidgee River with approximately 530,000 acre feet per annum of additional water, by diversions from the Eucumbene and the Upper Tooma Rivers. Ultimately the scheme will provide approximately 1,818,000 acre feet per annum of additional regulated water of which 1,020,000 acre feet will go to the Murrumbidgee and 798,000 acre feet per annum to the Murray.

The New South Wales Department of Public Works, on behalf of the Authority, is supervising the construction of the Adaminaby Dam, for which a contract was let in May, 1956. The Department of Main Roads and the Snowy River Shire are reconstructing over 90 miles of existing roads. Construction is now in progress on the 14 mile Eucumbene-Tumut Tunnel, Tumut Pond Dam, the 8,000 feet pressure tunnel leading to Station T1, and on Station T1 itself. Designs are in progress for the Tooma-Tumut Diversion, tenders for the construction of which will be called about the end of 1956, and also for the T2 Project, construction of which will commence about one year later.

B. STATES AND TERRITORIES.

§ 1. Australian Local Pattern of Water Conservation and Use.

The foregoing sections deal with water conservation and irrigation in Australia generally and with national and interstate projects. The following survey indicates the local pattern of water resources and the steps taken by the State Governments to bring about their development. It will be seen that water policies in the various States tend to assume a distinctive and characteristic pattern closely allied with climatic conditions and specific local needs.

In Victoria, almost every form of water scheme is in operation. In New South Wales, major emphasis at present is on irrigation and stock development in the dry areas along the Murray and Murrumbidgee Rivers, though a substantial scheme of intensive irrigation is being conducted in the Murrumbidgee Irrigation Areas. In Queensland, up to the present, the predominant emphasis has fallen on water (mainly underground sources) for the stock industries, and the development of small irrigation schemes in sub-humid and humid areas, especially to stabilize sugar production.

Apart from regular irrigation practices along the Murray River, South Australian authorities are vitally concerned with reticulated supplies for rural areas and towns. Western Australia has developed unique rock catchments and piped supplies for agricultural areas and towns in dry districts. Tasmanian interest appertains to hydro-electric generation almost exclusively. The Northern Territory is primarily concerned with stock supplies and the safeguarding of long stock routes.

§ 2. New South Wales.

1. *General.*—(i) *Rainfall and History.* In issue No. 37 of this publication (p. 1110) information on the pattern of rainfall and the history of irrigation in New South Wales preceded the description of water conservation and use in that State, but it has now been omitted. (*See also* Chapter II.—Physiography, p. 45 of this issue.)

(ii) *Administration.* The Water Conservation and Irrigation Commission of New South Wales consists of three members appointed by the Governor. The operations of the Commission cover water conservation, control of irrigation areas, establishment, operation and maintenance of works for domestic and stock water supply, irrigation districts, flood control districts, sub-soil drainage districts, constitution of water trusts, the issue of licences for private irrigation, artesian and shallow boring, assistance under the provisions of the farm water supplies scheme and river improvement works.

Under the Water Act, the right to the use and flow, and the control of water in all rivers and lakes which flow through, or past, or are situated within, the land of two or more occupiers, is vested in the Commission for the benefit of the Crown. A system of licences operates for the protection of private works of water conservation, irrigation, water supply, drainage, and prevention of inundation.

For particulars of the New South Wales-Queensland Border Rivers Agreement ratified by Acts of both States in 1947, see page 296 of this Chapter.

2. Schemes Summarized.—(i) *Location and Type.* The bulk of irrigated land is along the Murray and its tributary the Murrumbidgee. Smaller areas are served by the Wyangala Dam and Lake Brewster on the Lachlan, a tributary of the Murrumbidgee. None of the other rivers is regulated by large head storages, though weirs and dams have been provided for town supplies, etc., in many places, and head storages have been commenced on the Macquarie, Namoi and Hunter Rivers. Substantial use is made of artesian and sub-artesian water in pastoral areas.

New South Wales legislation provides for the constitution and control of various schemes having different characteristics and including Irrigation Areas, Irrigation Districts, Water Trust Districts, Flood Control and Irrigation Districts and River Improvement Districts. There are five Irrigation Areas :—The Murrumbidgee Irrigation Areas consisting of 450,305 acres served with water through a channel system stemming from the river at Berembred Weir ; the Coomealla Irrigation Area of 35,062 acres, served by pumping from the Murray ; the Curlwaa Irrigation Area of 10,209 acres, supplied from the Murray by pumping ; the Hay Irrigation Area of 6,806 acres, supplied with water pumped from the Murrumbidgee ; and the Tullakool Irrigation Area of 16,305 acres supplied from the Edward River at Stevens Weir. All these areas are administered by the Commission, and details of the various schemes are given in sub-section (iii) below.

(ii) *Works.* The capacities of the main storages (in acre feet) are :—

Murray :—Half share of Hume Reservoir, weirs and locks to Wentworth (802,420) ; Stevens Weir, Edward River (7,165).

Murrumbidgee :—Burrinjuck Dam (837,000) ; Berembred Weir (10,000) ; Redbank Weir (7,360) ; Maude Weir (6,740).

Lachlan :—Wyangala Dam (303,900) ; Lake Brewster (123,900) ; Lake Cargelligo (29,435) ; Jemalong Weir (2,200).

Water from the Hume Reservoir is used for domestic and stock purposes, to provide bulk supplies for country towns, for the irrigation of vines, fruits and fodder in the Curlwaa and Coomealla areas, for rice and other cereals and for pastures in the Tullakool Irrigation Area, for domestic and stock supply and irrigation in the Berriquin, Wakool and Denimein Districts, and for water trusts for domestic and stock purposes and/or irrigation.

The Wyangala Dam is 30 miles upstream from Cowra in the Central West. It has a catchment of 3,200 square miles. Water from the dam, supplemented by the unregulated flow of the Belubula River, provides for domestic and stock purposes along the full length of the river (over 700 miles) and also for irrigation by land holders operating licensed pumps. The towns of Cowra, Forbes, Condobolin, Hillston and Booligal are supplied. Balance storages at Lake Cargelligo and at Lake Brewster conserve water during periods of high flow for release as required. Water from the Lachlan, diverted at Jemalong Weir, supplied the districts of Jemalong and Wylde's Plains, serving an area of 224,556 acres. Wyangala is now producing hydro-electric power. Proposals for future development include provision of a head storage on the Belubula River.

The approximate total length of channels (including main canals) in New South Wales is 2,890 miles. The approximate length of drains and escape channels is 983 miles, and the approximate total length of pipe lines is 68 miles, making a grand total of 3,941 miles of channels and pipe lines, etc.

(iii) *Extent of Systems and Nature of Irrigated Culture.* The following table shows the areas of the various irrigation systems and particulars of the areas under irrigated culture in New South Wales during 1955-56.

AREAS OF SYSTEMS AND OF LAND UNDER IRRIGATED CULTURE: NEW SOUTH WALES, 1955-56.

(Acres.)

System, etc.	Total Area.	Area under Irrigated Culture.									Total.	
		Rice.	Other Cereals Grown for Grain.	Lucerne. (a)	Other Fodder Crops.	Pastures.		Vineyards.	Orchards. (c)	Vegetables.		Fallow Land and Miscellaneous.
						Sown. (b)	Natural.					
Irrigation Areas—												
Murrumbidgee (within the Areas) ..	450,305	24,970	1,381	2,392	827	22,621	1,799	5,309	12,306	3,054	5,623	80,282
Lands adjacent supplied under agreement ..	(d)	117	600	82	2	370	10	3	81	13	..	1,278
Coomoalla ..	35,062	..	..	14	..	..	..	3,998	774	38	..	4,824
Curlewa ..	10,209	..	..	26	70	..	..	616	1,068	2	..	1,782
Hay ..	6,806	..	..	54	..	1,010	8	..	..	..	3	1,075
Tullakool ..	16,305	1,565	230	75	160	3,953	..	..	..	..	490	6,473
Total ..	e 518,687	26,652	2,211	2,643	1,059	27,954	1,817	9,926	14,229	3,107	6,116	95,714
Irrigation Districts—												
Benerambah ..	108,531	4,433	1,177	1,100	145	5,832	100	..	..	..	670	13,457
Tabbita ..	10,745	361	..	80	..	188	200	..	..	..	30	859
Wah Wah ..	570,470	..	130	720	290	546	..	..	..	..	370	2,056
Berriquin ..	779,564	..	1,283	29,810	..	118,176	531	..	..	10	1,298	151,108
Wakool ..	495,430	7,456	350	1,580	620	42,280	850	..	..	8	200	53,344
Denirnein ..	147,005	2,035	130	893	80	2,394	800	..	12	..	..	6,344
Jemalong and Wyldes Plains ..	224,556	900	342	3,781	195	450	275	..	..	..	..	5,043
Gumly ..	345	..	28	63	..	..	33	..	18	..	37	179
Deniboota(f) ..	306,907	..	150	..	310	1,041	100	..	..	..	..	2,501
Total ..	2,643,553	15,185	3,590	38,027	1,640	170,907	2,889	..	30	55	2,568	234,891
Flood Control Districts—												
Lowbidgee ..	375,000	..	..	..	..	..	(g)94,118	..	..	..	..	(g)94,118
Medgun ..	272,800	..	..	..	..	..	(g)61,760	..	..	..	..	(g)61,760
Total ..	647,800	..	..	..	..	..	g 155,878	..	..	..	..	g 155,878
Irrigation Trusts—												
Pomona ..	1,580	..	..	..	..	..	770	130	..	..	..	900
Blairmore ..	315	..	..	..	..	..	..	..	..	..	..	(d)
Bringan ..	4,933	..	..	..	..	..	..	..	..	..	..	(d)
Bungunyah-Koraleigh ..	1,810	..	..	..	20	..	1,060	72	60	..	..	1,212
Glenview ..	661	..	..	62	..	..	336	71	..	..	..	469
Goodnight ..	1,167	..	..	..	..	..	564	41	..	..	..	605
Bama ..	3,446	..	..	..	..	..	..	..	..	..	..	(d)
Total ..	13,912	..	..	62	20	..	336	2,394	314	60	..	(e) 3,186
Water Trusts—Domestic and stock supplies ..	2,914,831	..	..	..	..	..	..	..	..	..	..	..
Licensed Diversions(h)—To irrigate ..	(d)	..	..	8,625	3,119	12,679	3,389	640	3,569	13,436	(i) 363	45,820
Grand Total(e) ..	(d)	41,837	5,801	49,357	5,838	211,540	164,309	12,960	18,142	16,658	9,047	j 535,489

(a) Includes grazing and cutting.

(b) Perennial and annual self-seeding. Perennial amounted to 18,238 acres.

(c) Citrus and deciduous. Deciduous amounted to 7,308 acres of which 6,704 acres were in the Murrumbidgee Irrigation Area.

(d) Not available.

(e) Incomplete.

(f) Works incomplete.

(g) Area irrigable; details of area actually irrigated are not available.

(h) Excludes domestic and stock supplies for which particulars are not available.

(i) Tobacco.

(j) Includes Flood Control Districts; but excludes some Irrigation Trusts for which information is not available.

3. **Murrumbidgee Irrigation Areas.**—(i) *Description.* These areas comprise about a third of the State's irrigated acreage and in 1955-56, together with lands adjacent supplied under agreement, received 195,468 acre feet of the total water allocated within the State for stock, domestic supply and irrigation (625,067 acre feet). They are served by the Burrinjuck Dam (capacity 837,000 acre feet), 40 miles north-west of Canberra, on the Murrumbidgee. The catchment above the dam is 5,000 square miles. The river rises on the high plateau north of Mount Kosciusko where the average annual rainfall exceeds 60 inches. Flow for the irrigation districts is supplemented by unregulated flow below the dam from the Tumut River. The dam also provides town supplies for Gundagai, Wagga, Narrandera, Hay, Balranald, and for towns served by the South-West Tablelands scheme.

Domestic and stock water and water for irrigation are supplied for the Irrigation Districts of Tabbita, Benerambah and Wah Wah and the Flood Control and Irrigation District of Lowbidgee. Flood flows are relied on to serve the Lowbidgee district and water is not released from the dam for that purpose. For the other undertakings, however, water is stored during the winter and spring freshets, fed by melting snows, and is released during the September-April irrigation season. It passes along the river channel to Berembed Weir, 240 miles westward, where it is diverted to the main canal with an off-take capacity of 1,600 cubic feet per second. The main canal has been completed to beyond Griffith, 96½ miles from the off-take. Reticulation channels aggregate approximately 834 miles and drainage channels 765 miles. In addition, approximately 374 miles of supply channels run through adjacent irrigation districts in which the water supply is operated and maintained by the Commission, but land transactions are not under its control.

The land on which the Murrumbidgee Irrigation Areas are situated originally comprised large sheep stations and was sparsely populated. Population was 12,000 in 1923, 15,000 in 1929, 20,000 at the 1947 Census and 24,000 at the 1954 Census. At the 1954 Census the population of the Yanco district (with Leeton as the centre) was 10,000; and the population of the Mirrool Area (with Griffith as the centre) was 14,000.

(ii) *Administration.* The Water Conservation and Irrigation Commission controls land transactions and water supplies for the Murrumbidgee Irrigation Areas, also the distribution of electricity throughout those areas. Other local government services, including town water supply, are provided by Shire Councils. Land is disposed of by the Commission under freehold or perpetual lease tenure or leased for short terms for grazing or cultivation. The area under occupation at 30th June, 1956, was 350,811 acres, including 35,445 held for short lease grazing, agriculture, etc.

(iii) *Production.* Since the inauguration of the scheme in 1911 the volume of production from the area has greatly increased. Numbers of new crops are grown while the volume of the major products of the area prior to the scheme, such as wool and livestock for slaughtering, has expanded considerably. The principal products to-day are: wool, livestock for slaughtering, rice, citrus fruits, peaches and nectarines, grapes, tomatoes, peas, beans and root vegetables.

Rice growing was initiated on the Murrumbidgee Irrigation Area in 1924 and has since become the most important crop grown in the area. In 1955-56, the total area sown in the Murrumbidgee Irrigation Area (and adjacent lands supplied under agreement) was 25,087 acres and the total quantity of water delivered for the rice crops was 122,428 acre feet.

In a normal season, the water supplied for rice represents about one-half of the total delivered on the Murrumbidgee Irrigation Area although in the 1955-56 season the proportion was considerably greater.

Co-operation is a prominent feature in the Murrumbidgee Areas. Co-operative organizations in the Mirrool section handle about 300,000 bushels of fruit per year (compared with 54,600 in 1927-28). The annual sales turnover of the Leeton cannery in recent years has been approximately £2,000,000. Settlers and government agencies co-operate extensively in all matters relating to irrigation practice.

4. **Other Irrigation Areas.**—The Curlwaa, Coomealla, Hay and Tullakool Irrigation Areas follow the same administrative pattern as the Murrumbidgee Areas—that is, land transactions are administered by the Water Conservation and Irrigation Commission which also is responsible for the operation and maintenance of works to supply water at rates determined by the Commission.

Curlwaa Area, on the Murray near Wentworth, consists of 10,209 acres of which 8,372 acres were occupied at 30th June, 1956. Production consists of dried vine fruits, deciduous fruits and fodder crops.

Coomealla Area, 9 miles upstream from Curlwaa, comprises 35,062 acres of which 31,353 acres were occupied at 30th June, 1956. Production consists of vine and citrus fruits. An extension of the Coomealla Irrigation Area has been completed in recent years to provide irrigation farms for ex-servicemen and 100 ex-servicemen have been placed on the new farms.

Tullakool Area, formerly part of the Wakool Irrigation District, comprises 16,305 acres of which 15,808 acres are occupied. Production consists of fat lambs, wheat and rice.

Hay Area, on the lower Murrumbidgee, consists of 6,806 acres, of which, 6,240 acres are occupied. Production comprises dairy products, fat lambs, sheep, wool and fodders.

5. Irrigation Districts.—These Districts are set up under the Water Act for (a) domestic and stock water supply and (b) irrigation. They differ from water trusts in that the cost of the works is not required to be repaid over a period, but annual charges are made by the State for water supplied to landholders. The following are the districts or provisional districts constituted and the areas of land benefited :—*Murray River*—Wakool District (completed) 495,430 acres, Berriquin Provisional District (completed) 779,564 acres, Deniboota Provisional District (first section completed) 306,907 acres, Denimein Provisional District (completed) 147,005 acres, Jernargo Provisional District (certain portions of which have been included in Berriquin District) 4,505 acres, Barramein Provisional District (domestic and stock supply only—works not yet commenced) 88,651 acres ; *Murrumbidgee River* (completed)—Benerembah District 108,531 acres, Tabbita District 10,745 acres, Wah Wah Provisional District 570,470 acres, Gumly Provisional District 345 acres ; *Lachlan River* (completed)—Jemalong and Wyldes Plains District 224,556 acres.

Since the completion of the Hume Reservoir, several such districts have been established along the Murray to utilize the New South Wales share of the storage. Water is not available for the whole of the 5,000,000 acres adjacent to the Murray in New South Wales, and therefore the schemes are based on "extensive" irrigation—that is, water rights are allotted to holdings on the basis that only a portion of each holding (one acre in three, five or ten, according to the district, etc.) will be irrigated, but additional water, when available, may be obtained by landholders. "Water right" means right to such a quantity annually of water, 12 inches deep, as will cover an area of one acre.

Water to serve Berriquin and Wakool Districts is diverted through a main canal which will be 100 miles long when completed. At 30th June, 1956, the total length of completed canal and channels was 851 miles, including Mulwala Canal 75 miles, Berrigan channel 22 miles, subsidiary channels 712 miles, escape channels 33 miles and cross drainage channels 9 miles. Off-take capacity of the Mulwala Canal is 5,000 acre feet per day. Ultimately the water will serve Deniboota and other districts for which works have yet to be completed.

Wakool, with 384 miles of channel, contains 292 holdings and it is expected that the area developed by irrigation will comprise about one acre in 10 of the total area. The total area irrigated in 1955-56 was 53,344 acres and water supplied was 61,428 acre feet. Crops comprised fodders, pastures, rice, cereals and vegetables, but sheep raising is the main industry.

Considerable subdivision has occurred within the Berriquin District and the proportion of the total area developed for irrigation is higher than in the case of Wakool. Total irrigated acreage was 151,108 at 30th June, 1956. Sheep and wheat growing are the main industries. The fat lamb industry is well developed and expanding. Dairying is making headway, and a butter factory has been established at Finley.

In the Benerembah, Tabbita and Wah Wah Districts, supplied from the channels of the Murrumbidgee Irrigation Areas, the quantity of water supplied during the 1955-56 season for irrigation, etc. was 48,907 acre feet, and the area irrigated was 16,372 acres, including rice and other cereals, pastures, and fodder crops.

For the same season, 3,502 acre feet of water were supplied from the Lachlan River to irrigate a total area of 5,043 acres within the Jemalong and Wyldes Plains Districts.

In 1955-56, which was a year of abnormally heavy rainfall, the areas irrigated and the quantity of water supplied were considerably lower than those for normal seasons in recent years.

6. Water Trust Districts, Irrigation Trusts and Flood Control and Irrigation Districts.—The Water Act provides for the constitution of Trust Districts for domestic and stock water and irrigation and empowers the Commission to construct, acquire or utilize necessary works. When the works are completed, they are handed over to trustees to administer.

The trustees are elected by the occupiers of the land and act with a representative of the Commission. They are empowered to levy and collect rates covering the cost of the works repayable to the Crown by instalments and also the cost of operation and maintenance of the works. The rates are struck according to the area of land which benefits. The following water trusts—other than irrigation—have been constituted (the area in acres of each district is shown in parentheses)—*Murray River*—Tuppall Creek (78,080), Bullatale Creek (68,320), Little Merran Creek (157,440), Poon Boon (32,980), Minnie Bend Flood Prevention (2,190); *Murrumbidgee River*—Yanco, Colombo and Billabong Creeks (1,001,210); *Lachlan River*—Torrigan, Muggabah and Merrimajeel Creeks (170,240) Condobolin West Weir (4,480), Marrowie Creek (292,640), Ulonga (71,655), Micabil Weir (11,500); *Miscellaneous*—Algudgerie Creek (9,760), Nidgerly Weir (46,880), Great Ana Branch of Darling River (967,339), Collarenebri town water supply (117)—making in all a total area of 2,914,831 acres. Thirteen of these trusts have been formed for the provision of water for domestic and stock purposes, one for a town supply and one for flood prevention.

Irrigation Trusts are established under the same Act and are administered by trustees in a similar way. The following are the Trust Districts (area in acres is shown in parentheses):—*Hunter River*—Blairmore (315); *Murray River*—Bama (3,446), Goodnight (1,167), Bungunyak—Koraleigh (1,810), Glenview (661), Bringan (4,933); *Darling River*—Pomona (1,580)—making in all a total area of 13,912 acres.

The Lowbidgee Provisional Flood Control and Irrigation District (375,000 acres), the first of its kind, was constituted in 1945. Its purpose is to provide flood irrigation for pasture lands on the lower Murrumbidgee by water diverted from the Maude and Redbank Weirs. There are 48 holdings. Another district, Medgun (272,800 acres) near Moree in the North-West is also in operation. There are 20 holdings in the district and the area benefited by controlled floodings is approximately 61,800 acres.

7. **River and Lake, and Farm Water Supplies.**—During recent years, the numbers of licences and permits issued to individuals to draw water from rivers and lakes for irrigation have increased substantially, especially along the coastal streams in sub-humid districts where the value of supplementary irrigation is becoming more recognized as a means of stabilizing production in lean months. There has also been a considerable increase along the Murrumbidgee and Lachlan.

The Farm Water Supplies Act was passed in 1946. Technical advice and assistance, and also financial assistance, are made available to aid individual farmers and groups of farmers to provide and improve water supplies for domestic, stock and irrigation purposes by means of wells, bores, excavated tanks, weirs or dams.

8. **Underground Water.**—Extensive use is made of artesian, sub-artesian, and shallow underground water. Fractured palaeozoic rocks in the South-east corner of the State provide useful supplies of ground water usually at depths of 50–250 feet. Eighty thousand square miles in the northern and western portions are covered by the Great Artesian Basin. Eighty-one Bore Water Trusts and twelve Artesian Wells Districts have been constituted. The Bore Trusts are administered in the same way as Water Trusts, but in Artesian Wells Districts settlers maintain the drains. Bore Trusts and Artesian Districts cover about 5 million acres and water is distributed through 3,368 miles of open earth drains. The number of artesian bores giving a flowing or pumping supply at 30th June, 1956, was 1,031 and the estimated total daily flow from 586 flowing bores was 60 million gallons. The estimated flow in 1914–15 was 99 million gallons per day for 372 bores. The deepest bore is Boronga No. 2 (4,570 feet), which also has the greatest flow, namely 1,115,000 gallons per day. Of the total number of bores sunk, 234 have been installed by the Government in connexion with public watering places. Bore Water Trusts or Artesian Wells Districts.

Since 1912, the Government has assisted settlers in shallow boring operations for which repayments are required over a period. To 30th June, 1956, the total constructed by the Commission's plants was 4,591 and their average depth was 304 feet.

9. **Future Programme.**—The programme of post-war development already in hand includes the provision of eighteen dams and storages, eight diversion weirs, and flood mitigation and river protection works in various parts of the State. Construction has been commenced on head storages at Keepit on the Namoi, Glenbawn on the Hunter and Burrendong on the Macquarie, while legislation has been passed authorizing the construction of a flood control dam at Warkworth in the Hunter Valley and a storage dam at Blowering on the Tumut River. In the case of Burrendong Dam, work has been

temporarily suspended in order to enable the Water Conservation and Irrigation Commission to concentrate its available resources on the speedy completion of works having higher priority. The Menindee Lakes storage project—part of the scheme for conserving the waters of the Darling River has been commenced, but as in the case of Burrendong Dam, work has been temporarily suspended. The Hunter River development concerns an exceptionally fertile coastal valley, forming the hinterland to Newcastle, where the annual rainfall is not heavy and variations from month to month are considerable. This is the first coastal scheme initiated in New South Wales. The total estimated capacity of all proposed new storages is 5,500,000 acre feet.

10. **Hydro-electricity.**—A survey of the use of water for power generation in New South Wales may be found in the previous chapter (*see* page 271).

§ 3. Victoria.

1. **General.**—(i) *Rainfall.* Particulars of the rainfall pattern of Victoria were given on page 1117 of Official Year Book No. 37. (*See also* Chapter II.—Physiography, p. 45 of this issue.)

(ii) *Administration.* The passage of the Irrigation Act of 1886 put the control of surface waters under the Crown, provided for the establishment of Irrigation Trusts and marked the beginning of irrigation development. In 1905, the Water Act established the State Rivers and Water Supply Commission and gave it control of all irrigation, rural domestic and stock supplies, town water supplies and flood protection and drainage undertakings outside the Metropolitan area, with the exception of the irrigation area operated by the First Mildura Irrigation Trust and the town water supplies operated by locally constituted Waterworks Trusts or local governing bodies.

The operations of the First Mildura Irrigation Trust and the various Waterworks Trusts and local governing bodies, as well as the various Sewerage Authorities which control sewerage undertakings in country towns, are also subject to general supervision by the Commission.

2. **Systems Summarized.**—(i) *Works.* Since 1902, when a great drought emphasized the need for a concerted attack on water problems, the total capacity of water storages has increased from 172,000 to 4,929,550 acre feet (including Victoria's share of the Hume Reservoir). By means of channels, bores, etc., one-fourth of the State is artificially supplied for stock and domestic purposes. Large areas, which would be largely unproductive without water, are now contributing to the State's wealth. The area actually irrigated has increased from 105,000 acres in 1906 to 634,000 acres in 1955–56 and irrigation channels command 2,150,000 acres. However, owing to record or near-record rainfall, particularly in the northern districts the area irrigated in 1955–56 was some 25 per cent. below what could normally be expected.

The Commission controls 38 large reservoirs and 240 subsidiary storages. The capacities of the principal storages in acre feet within the various systems at 30th June, 1956 were as follows :—

Goulburn System :—Eildon Reservoir, 2,750,000 ; Goulburn Weir, 20,700 ; Waranga Basin, 333,400 ; Total, 3,104,100 ; *Murray-Loddon System* :—Half share of River Murray Commission storages including Hume, Yarrowonga, Torrumbarry, Euston, Mildura and Wentworth, 802,420 ; Cairn Curran, 120,600 ; Kow Swamp, Laanecoorie, Kerang—North-West Lakes, Lake Boga and Lake Cullulleraine, 148,210 ; Total, 1,071,230 ; *Wimmera-Mallee* :—Rocklands, 272,000 ; Total, 538,900 ; *Maffra-Sale* :—Glenmaggie, 106,040 ; *Coliban* :—62,730 ; *Werribee* :—34,900 ; *Mornington Peninsula* :—5,800 ; *Otway* :—1,080 ; *Miscellaneous* :—4,770 ; Total :—4,929,550.

Irrigation channels extend 5,000 miles, domestic and stock channels 9,500 miles and drainage and flood protection channels 2,000 miles, a total of 16,500 miles. In addition, the Commission controls 1,200 miles of piping, comprising 250 miles of mains and 950 miles of reticulation. Farm holdings served with water total 44,000. Urban districts with a reticulated water supply number 276, of which 130 are served by the Commission's channels and pipelines and 146 are supplied by Trusts under the supervision of the Commission. The total number of persons served by a reticulated water supply is 657,000 or 70 per cent. of the State's population outside Greater Melbourne.

To 30th June, 1956, the net capital expenditure on irrigation, rural water supply, country town water supply, and flood protection and drainage works amounted to £90,483,000, two-thirds of which was in respect of irrigation.

Of this net capital liability, at 30th June, 1956, £79,365,000 was borne by the State and £11,118,000 was borne by the water users. Waterworks Trusts and local governing bodies had a net capital liability of £8,422,000 at 30th June, 1956, of which £3,824,000 was borne by the State and £4,598,000 by the Authorities.

(ii) *Extent of Systems and Nature of Irrigated Culture.* Although the area irrigated is less than 2 per cent. of the State, it yields approximately 15 per cent. of Victoria's rural production. The following table shows the areas of the various irrigation systems and the areas under irrigated culture during 1955-56.

AREAS OF SYSTEMS AND OF LAND UNDER IRRIGATED CULTURE : VICTORIA,
1955-56.
(Acres.)

System.	Total Area.	Area under Irrigated Culture.									Total.
		Cereals.	Lucerne. (a)	Other Fodder Crops.	Pastures.		Vineyards.	Orchards.	Market Gardens.	Fallow and Miscellaneous.	
					Sown.	Natural.					
<i>Goulburn</i>	1,257,916	757	15,878	5,541	183,115	13,507	237	17,813	3,462	5,224	245,534
<i>Murray—</i>											
<i>Torrumbarry Weir</i> ..	377,596	2,411	4,540	2,282	114,985	18,564	5,637	1,678	1,674	1,898	153,669
<i>Yarrowonga Weir</i> ..	267,209	39	15,782	168	31,536	114	33	3,465	416	9	51,562
<i>By Pumping</i>	35,373	90	249	91	404	70	23,884	1,651	211	..	26,650
<i>Total</i>	680,178	2,540	20,571	2,541	146,925	18,748	29,554	6,794	2,301	1,907	231,881
<i>Loddon and other Northern Systems</i> ..	(b) 19,736	146	1,099	267	10,760	1,786	7	3,940	990	1,014	20,009
<i>Southern Systems</i> ..	147,914	16	1,774	221	34,061	858	..	557	4,890	1,095	43,472
<i>Mildura and Private Diversions</i>	(c) 45,000	3,211	6,010	2,243	41,996	9,055	15,720	6,348	4,687	4,168	93,438
<i>Grand Total</i>	2,150,744	6,670	45,332	10,813	416,857	43,954	45,518	35,452	16,330	13,408	634,334

(a) Includes lucerne for both hay and pasture. Mildura Irrigation Trust only.

(b) Area of Campaspe District only.

(c) Area of First

(iii) *Production.* The influence of irrigation on Victorian production has been considerable, the value of production from irrigation districts as estimated by the Commission having risen from £500,000 in 1905-6 to about £41 million in 1954-55. The major products of irrigated farms are : livestock for slaughtering, dairy products, wool, vine fruits, fresh and canning orchard fruits and vegetables.

3. *Goulburn System.*—This comprises the Eildon and Waranga Reservoirs, the Goulburn Weir and over 2,570 miles of distributory channels. The total capacity of these storages was 3,104,100 acre feet at 30th June, 1956. The Eildon Reservoir (capacity 2,750,000 acre feet) which was completed in June, 1955, is the largest dam in Australia and the largest earthen dam in the Southern Hemisphere. The enlargement of Eildon means that when the necessary distributory works are completed, the area at present irrigated from the Goulburn River can be practically doubled to 600,000 acres.

Water from Eildon Reservoir flows down the Goulburn for 150 miles to the Goulburn Weir, which raises the summer level of the river about 45 feet to 408 feet above sea level, and where water is diverted to two main channels. The eastern main channel conveys water to four irrigation districts surrounding Shepparton and the western main channel fills Waranga Basin in addition to supplying the eastern portion of the Rodney Irrigation District. Following completion of Eildon Reservoir, the latter channel has been duplicated to Waranga Basin.

Two main outlet channels issue from the Waranga Reservoir ; one serves the Western part of the Rodney district, while the other serves districts as far west as Boort, and continuing to Beulah East, about 230 miles by channel from Waranga Basin or some 400 miles from Eildon, supplements the Wimmera-Mallee system.

Districts served comprise 196,000 acres east of the Goulburn ; 602,000 acres between the Goulburn and Campaspe ; 380,000 acres between the Campaspe and Loddon ; and 80,000 acres west of the Loddon—a total of 1,258,000 acres.

The main products of the Goulburn districts are dairy products, fruit and wool and fat lambs. The development of the fruit canning industries is an index of the results of irrigation policy. Annual production from the Shepparton, Kyabram and Mooroopna canneries, together with that of city canneries—from Goulburn Valley fruit—amounts to an aggregate which normally represents about two-thirds of Australia's total production of canned peaches, pears and apricots.

4. **Murray River System.**—The waters of the River Murray are used to supply an area of more than 700,000 acres between Yarrowonga and Merbein, and channels totalling 1,450 miles are in service. The districts between Yarrowonga and Swan Hill, except Tresco, are supplied by gravitation and those down the river (Red Cliffs, Merbein, Nyah and Mildura) are supplied by pumping.

The Murray Valley Irrigation District, which is served from Yarrowonga Weir, comprises 267,000 acres with 550 miles of distributory channels. This district lies west of Yarrowonga between the River Murray and Broken Creek, its main products being dairying, fat lambs and deciduous fruit. A major post-war development has been a Soldier Settlement Scheme involving 60,000 acres. With the exception of the necessary drainage works, which are under construction, this project is complete.

Robinvale Irrigation District, between Swan Hill and Mildura is a soldier settlement project established after the 1939–45 War. Set up on modern lines, the 3,000 acres irrigated annually are showing good yields of fruit. About ninety per cent. of the area is devoted to dried vine fruits, and the remainder to orchards.

The gravitation system based on Torrumbarry Weir (52 miles downstream from Echuca) serves an area of 377,600 acres with 846 miles of supply channels. The weir raises the level of the river some 16 feet and enables water to be diverted throughout the year.

Red Cliffs Irrigation District comprising 13,600 acres, of which, at present, 11,650 acres are irrigated, ranks first in importance among Victoria's pumping schemes. A system of main and distributory channels commands every holding in the district. The district, originally for soldier settlement, has been subdivided into 700 blocks. The area is planted mainly with vines and citrus. The average harvest is now 18,000 tons of raisins, currants and sultanas as well as large quantities of grapes for dessert and distillation.

Merbein Irrigation District comprises 9,200 acres and contains over 300 holdings averaging about 30 acres each. A reticulated pipe system supplies the town of Merbein, and the pumps also supply 51,200 acres forming part of the Millewa Waterworks District.

Nyah Irrigation District is supplied with water diverted from the Murray by a high-lift pumping plant, serving 3,840 acres in about 200 holdings devoted mainly to vineyards.

5. **First Mildura Trust District.**—The First Mildura Irrigation Trust—the only Irrigation Trust operating in Victoria—controls an area of 45,000 acres, of which 15,000 acres are irrigated. Of this area, some 80 per cent. is used for the production of vine fruit and the bulk of the remainder for citrus and other fruit. The Trust area produces approximately 15,000 tons of raisins, currants and sultanas each year. The irrigation water is pumped from the River Murray and distributed through 168 miles of channels.

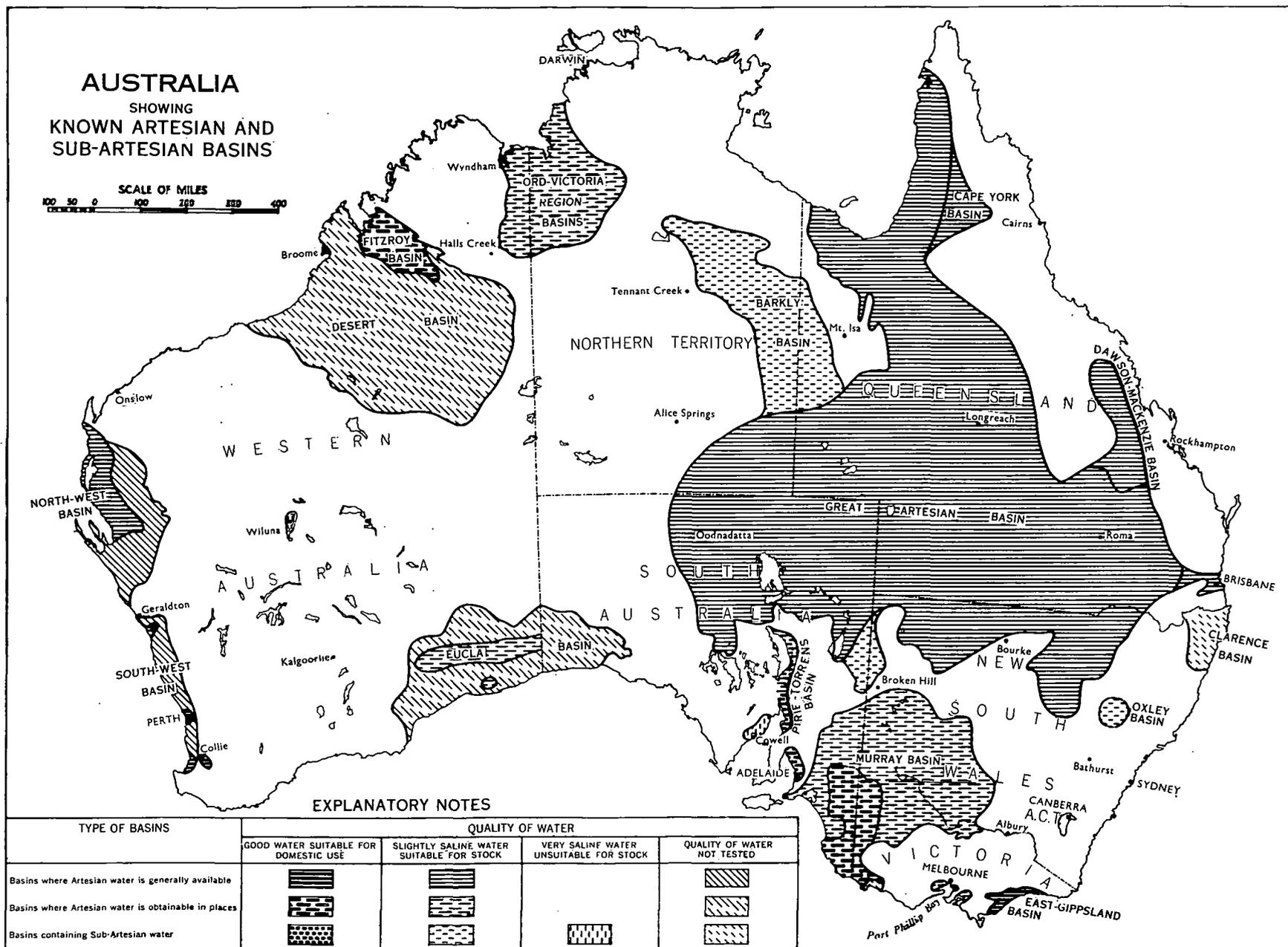
6. **Wimmera-Mallee System.**—The Wimmera-Mallee scheme is regarded as the most extensive domestic and stock supply system in the world. The main supply is drawn from the Grampians storages with a capacity of 538,900 acre feet. Supplementary water is drawn from the Goulburn channels and the Loddon River. The system serves an area of 11,000 square miles or nearly one-eighth of the State, which is largely devoted to wheat and pastoral industries. Without the artificial supply of water, development would be meagre.

Once a year, in the winter or spring, a volume of 72,000 acre feet of water is distributed through 6,500 miles of open channels and some 3,000 miles of farm channels. It is the responsibility of farmers to provide storages sufficient in size to meet their stock and domestic requirements for the ensuing year. About 10,000 farmers' tanks are served. In addition,

AUSTRALIA

SHOWING
KNOWN ARTESIAN AND
SUB-ARTESIAN BASINS

SCALE OF MILES
0 50 100 150 200 250 300 400



EXPLANATORY NOTES

TYPE OF BASINS	QUALITY OF WATER			
	GOOD WATER SUITABLE FOR DOMESTIC USE	SLIGHTLY SALINE WATER SUITABLE FOR STOCK	VERY SALINE WATER UNSUITABLE FOR STOCK	QUALITY OF WATER NOT TESTED
Basins where Artesian water is generally available				
Basins where Artesian water is obtainable in places				
Basins containing Sub-Artesian water				

Adapted from the map "Underground Water" Atlas of Australian Resources : Published by the Department of National Development : 1953

forty-seven towns with a total population of 40,000 obtain their water from the system. A total population of 80,000 depends upon the scheme. In the vicinity of Horsham and Murtoa, near the main storage, 3,500 acres are irrigated for soft fruits and pastures. With the completion of the Rocklands Reservoir, this irrigation area is being extended to 7,000 acres.

The northern part of the system is affected by sand drifting into the channels, particularly in years of dry weather conditions, and the Commission is involved in substantial annual expenditure to remove this sand drift before the annual water distribution can be made. This expenditure can be reduced by better farming methods, and efforts in this direction such as the sowing of rye-corn, and including the use of compulsory powers to prohibit the fallowing of land or burning of stubble within three chains of channels in light sandy country have resulted in marked savings in maintenance costs.

7. Private Water Supplies.—The Rural Finance Corporation Act 1949 gave farmers assistance in establishing or improving domestic and stock water supplies on their farms. Water may be obtained from underground sources, from catchment and gully dams by diversion from existing streams and channels, by storage of sufficient water to meet a year's requirements and by installation of windmills or hydraulic rams.

The control of private diversions from the streams is an important function of the State Rivers and Water Supply Commission. About 10 per cent. of irrigation production in the State comes from private diverters, mainly around the River Murray. In recent years, there have been substantial increases in the areas licensed, the total increase over the past ten years being approximately 50 per cent.

A Farm Water Supplies Branch set up by the State Rivers and Water Supply Commission advises farmers on farm water supply matters even if finance is not required. Comprehensive booklets prepared by this Branch have been widely circulated to landholders.

8. River Improvement, Flood Protection and Drainage.—The largest drainage work undertaken by the State Rivers and Water Supply Commission is Koo-wee-rup-Cardinia Flood Protection District embracing 80,000 acres of a continuous depression along the seaboard of Westernport. Once useless, indeed a hindrance to communication, this area now yields primary products of considerable value.

The Rivers and Streams Fund, established in 1931 from the rentals on river frontage reserves, gave an impetus to river improvement, but development accelerated rapidly after the 1948 River Improvement Act.

Under this Act, the formation of River Improvement Trusts is facilitated, assistance being granted by the State Government to supplement funds raised locally, and the importance of river improvement work is expected to continue to grow.

9. Underground Resources.—Due to inadequate information as to their extent, the underground waters of Victoria as yet have not been greatly utilized. The first stage of a comprehensive survey of these resources by the Victorian State Rivers and Water Supply Commission, which is responsible for the location, investigation and development of subterranean waters, has been completed and published recently. It provides records of bores in the Mallee, Wimmera and Glenelg regions, and a description of the Murray Artesian Basin. Investigations have also been made into the underground water resources of local areas such as Orbost Flats, Llowalong Estate on the Avon River and elsewhere.

The Murray Artesian Basin underlies an area of 107,250 square miles, of which 26,808 square miles are in Victoria, 28,269 square miles in South Australia and 52,173 square miles in New South Wales. The quality of the water varies from suitable for domestic purposes in much of the South-western part of the basin to saline and suitable for stock in the rest of the basin. Over 300 bores exist in Victoria, with an average daily flow of 3,000,000 gallons. Bores range in depth from 50 to 3,000 feet.

10. Future Programme.—With the completion of the Eildon and Cairn Curran Reservoirs, storage capacity in Victoria has risen from 172,000 acre feet in 1902 to nearly 5,000,000 acre feet in 1956. In the near future, as a result of the enlargement of the Glenmaggie and Hume Reservoirs, a further increase of 600,000 acre feet of storage capacity will become available.

The most important work at present facing the Commission is the enlargement of the Goulburn Channel System to enable full advantage to be taken of the additional water now available from Eildon Reservoir. The total cost of the work to be carried out is estimated at £10 million. Major works involve the enlargement of the Waranga Western

and East Goulburn Main Channels. However, it will be possible to develop the present districts progressively before the whole operation is completed and in the meantime, the water already stored in the Eildon Reservoir will provide a valuable safeguard against any possible drought.

11. **Hydro-electricity.**—Details of hydro-electricity potential and utilization in Victoria may be found in the previous chapter (*see page 276*).

§ 4. Queensland.

1. **General.**—(i) *Rainfall.* Particulars of the rainfall pattern of Queensland were given in Official Year Book No. 37, page 1122. (*See also Chapter II.—Physiography, page 45 of this issue.*)

(ii) *Administration.* The administration of irrigation and water supply in Queensland is under the control of a Commissioner of Irrigation and Water Supply. For a description of the development of the present administration *see Official Year Book No. 42 and earlier issues.*

(iii) *Water Utilization in Queensland.* Queensland's predominant interest in the field of water conservation is the provision of stock and domestic water supplies in its great pastoral areas which contain nearly half of the Commonwealth's cattle and a seventh of the sheep. But in addition to the stabilization of water supplies in the pastoral areas and the provision of water along stock routes for travelling stock, the development of irrigated pastures on the eastern seaboard for fattening stock adjacent to meat works and markets has received much attention in later years.

The State's agricultural crops differ from those of other States in that a large proportion are tropical. Sugar-cane is the greatest individual crop, representing in value approximately 50 per cent. of total agricultural production. Approximately 16 per cent. of the sugar-cane acreage is irrigated and represents some 43 per cent. of the total irrigated area in Queensland. Queensland is Australia's major tobacco-producing State, and plans are in hand to increase annual production of this crop greatly by means of development under irrigation. The area of tobacco irrigated during 1955–56 represented 88 per cent. of the total plantings of this crop in the State.

2. **Great Artesian Basin.**—(i) *General.* Western Queensland beyond the 20 inch rainfall belt is predominantly pastoral and is mainly dependent for water supplies on artesian and sub-artesian bores and, where surface storage is not readily available, on excavated tanks. The Great Artesian Basin in Queensland corresponds approximately with the area lying west and south of the Great Dividing Range, excluding the Cloncurry Mineral Field and the Barkly Tableland. It comprises 430,000 square miles or about two-thirds of the total State area of 670,500 square miles. Statistics of bores and flow as at 30th June, 1956, are :—Artesian bores drilled, 2,482 ; artesian bores still flowing, 1,579 ; total depth drilled, 3,537,000 feet ; deepest bore, 7,009 feet ; total estimated flow, 212 million gallons per day. The average depth of artesian bores is 1,440 feet. Some 9,000 sub-artesian bores, within the Great Artesian Basin, have been registered in Queensland. Artesian pressure and flow are both steadily diminishing despite new bores drilled. The rate of diminution varies widely throughout the basin. Present general average rates of diminution are :—pressure, 1–2 feet/head, total flow, 1½–2 per cent. per annum.

The greater part of the artesian discharge is distributed by open earth channels totalling some 16,000 miles in length. Most of the water flowing along these channels is lost by soakage and evaporation and less than 10 per cent. is actually used by stock. The amount of soakage depends largely on the permeability of the earth and the rate of evaporation varies from season to season, but the shape and maintenance of the drains constitute further factors. The effective utilization of this water could be increased by the use of piping to overcome the loss by soakage and evaporation occurring in open earth channels.

Although artesian beds underlie such a large area of the State, only 80,000 square miles are primarily watered by bore drains. The remaining area is watered by artesian bores (with small or no flow and limited drains), sub-artesian bores, excavated tanks, dams and natural waterholes. In many districts, artesian bores are not economical watering facilities, because of depth, limited area to be watered, and difficult terrain for distribution of water by drains. High costs have restricted deep drilling. Very few new bores exceed 2,000 feet in depth, and a new bore greater than 3,000 feet in depth is exceptional.

Shallow sub-artesian supplies, of variable quality and volume, are available at depths less than 1,000 feet over a large area of the basin. These beds are not connected with the artesian beds. An essential practical consideration is that the main artesian beds are continuous and the sub-artesian beds are not continuous.

Though the number of bores has gradually increased over the years, the total flow of all bores has declined since the peak flow of 351 million gallons per day was recorded in 1914. By 1938, the flow was only 230 million gallons per day. The decline gave rise to the fear that supplies were giving out and that the basin was seriously threatened. In 1939, the Queensland Government appointed a committee to ascertain the nature and structure of the Great Artesian Basin with particular reference to the problem of diminishing supply. In its final report, presented in 1954, the majority of the Committee found that the output will continue to decline during the next sixty years when the flow from the remaining flowing bores will be of the order of 110 million gallons per day. At this stage the discharge from windmills, springs and other leakages and the underflow past the Queensland borders will be of the order of 20 million gallons per day. The total discharge of the order of 130 million gallons per day will be in equilibrium with the recharge of the basin. Numbers of bores on higher ground will cease to flow during the next sixty years and the area served by flowing bores will contract by perhaps 20 per cent.

A programme of strict conservation, involving the restriction of bore flows and improved bore drains, would result in smaller shrinkage of the area served by flowing bores and would actually cost less than the installation and maintenance of pumps or other watering facilities which would be required to provide alternative water supply as additional bores ceased to flow as a consequence of a policy of non-restriction. On the other hand, strict conservation would not increase the amount of water ultimately available as perennial flowing supply and would in fact decrease the amount of water passed from intake beds to aquifers within the basin by flattening the hydraulic gradient. The benefit from strict conservation was not considered sufficiently great, nor sufficiently concrete to warrant implementation.

The quality of artesian water from the greater part of the basin is such that it is not suited for prolonged use for irrigation on most soils. Moreover, artesian supplies are not sufficient for both large scale irrigation and stock-watering. Practically the whole of the final steady-rate discharge from flowing bores will be needed for the watering of stock.

In the past, many excavated tanks failed in dry seasons, because of insufficient original depth and capacity, and subsequent silting. Mechanical plant is now almost exclusively in use and much larger tanks are being excavated, even in areas where artesian water may be obtained at a reasonable depth. New tanks with capacities of 20,000 cubic yards and depths of 25 feet are not uncommon. Two tanks with capacities of 65,000 cubic yards each, and depths of 42 feet and 46 feet respectively have been completed for watering stock in an area where a good artesian flow may be obtained at a depth less than 2,000 feet.

(ii) *Bore Water Areas.* The constitution of Bore Water Areas was inaugurated in 1913 to aid pastoral settlement in districts where large flows were available at a cost beyond individual capacity and to conserve artesian supplies by fully utilizing the flows from the existing bores on the land resumed for closer settlement. Bores and drains are constructed from loan funds repayable over a period of years. The areas are administered by Local Boards or by the Commissioner of Irrigation and Water Supply, acting as a Board. Rates are levied to meet interest, redemption, maintenance and administration costs. Statistics for the year 1955-56 are:—Areas constituted, 63; administered by Commissioner, 56; administered by Local Boards, 7; area benefited, 4,572,162 acres; average rate per acre, 1.16d.; number of flowing bores, 56; total flow, 24,943,000 gallons per day; drains served, 2,822 miles.

3. *Other Basins.*—Two major areas marginal to the Great Artesian Basin in Queensland carry artesian water. One occurs on the western slopes of Cape York Peninsula and the other in the Dawson-Mackenzie River Basin (*see* Map, page 307). A small area in which flowing wells occur (*the Gatton Basin*) extends from Gatton to the coast.

Sub-artesian water supply from the Barkly Basin which extends into western Queensland from the Northern Territory, is referred to in the section dealing with the Northern Territory.

4. *Stock Route Watering.*—During 1935, a scheme was inaugurated to water stock routes adequately in the western portion of the State including main trunk routes connecting Eromanga to Burketown, Charleville to Normanton, and Clermont to Einasleigh, with branches to railheads, a total distance of 3,117 miles. Watering facilities were also

provided on subsidiary routes. Under the Stock Routes and Rural Lands Protection Act of 1944, a co-ordinating board was constituted, representative of Government departments and pastoral interests, under the direction of the Minister for Lands, and with an officer of that Department as superintendent, whose duty was, *inter alia*, to investigate and implement a long-range, co-ordinated plan for adequate watering of all stock routes throughout the State. Natural waters are being supplemented by artificial facilities at intervals of about 9 miles. Construction is supervised by the Irrigation and Water Supply Commission and by local authorities. Completed facilities are vested in local authorities for control and maintenance. From 1935 to 30th June, 1956, 380 facilities had been completed and at 30th June, 1956, 113 facilities were under construction or investigation.

5. **Irrigation.**—(i) *General.* Irrigation as a means of stabilizing and increasing agricultural production is receiving growing attention in Queensland. In addition to the Theodore Irrigation Area on the Dawson River, orthodox projects served by a channel system are being developed at Clare, Millaroo and Dalbeg, all on the Burdekin River, Gibber Gonyah on the Dawson River and St. George on the Balonne River. Construction of the Clare and Millaroo Irrigation Areas is nearing completion whilst at Dalbeg, Gibber Gonyah and St. George construction is well advanced. A start has been made on construction of part of the main channel system within the Mareeba-Dimbulah Irrigation Area. Because of the large variations in both monthly and annual river flows, major developments cannot be undertaken until large storage works are provided. Most irrigation in Queensland is performed by private farmers operating under licence, and obtaining water by pumping from streams or from natural underground storages. Where available, electricity is the most popular source of power for pumping; the principal areas supplied with electricity comprise the Burdekin Delta and the Lockyer Valley.

Furrow irrigation is used for cotton, sugar cane, most tobacco and some other crops. Spray irrigation is adopted to a considerable extent for fruit, vegetables, fodder crops and a small part of the tobacco. Spraying is well suited to the application of water on deep soils by small pumping plants, particularly when the quantity of water available is limited. Experimental use of the border check method in the irrigation of pasture and fodder crops has proved successful and may supersede other methods.

The following table shows for each division of the State the number of irrigators and the areas under irrigated culture for the year ended 31st March, 1956.

AREA OF LAND UNDER IRRIGATED CULTURE : QUEENSLAND, 1955-56.(a)

Division.	No. of Irrigators.	Area under Irrigated Culture (Acres).							
		Vegetables.	Fruit.	Sugar-cane.	To-bacco.	Cot-ton.	Other Crops.	Pas-tures.	Total.
Southern Queensland ..	3,831	15,420	2,806	9,943	1,626	31	20,470	22,507	72,803
Central Queensland ..	341	668	140			568	2,946	508	4,831
Northern Queensland ..	1,529	3,740	725	48,819	3,918	86	550	547	58,385
Total	5,701	19,828	3,671	58,762	5,545	685	23,966	23,562	136,019

(a) Year ended 31st March, 1956.

The growth of irrigation is illustrated by the following figures for the total area of irrigated land :—1906, 9,922 acres; 1916, 10,886 acres; 1926, 24,250 acres; 1935-36, 44,283 acres; 1945-46, 68,347 acres; 1955-56, 136,019 acres.

The pattern of irrigation in Queensland is unlike that in southern States; the more important developments in tropical and sub-tropical areas are therefore discussed briefly in the sub-sections following. It should be noted that the spring to autumn "irrigation season" of the temperate southern irrigated lands is not applicable, and that round-the-year irrigation is required throughout most of the State, the timing and duration of the summer "wet" season being too variable to enable a definite non-irrigation season to be fixed.

(ii) *Lockyer Valley.* West of Brisbane and within 30 miles of that metropolitan market is the Lockyer Valley, which is portion of the Brisbane River Basin. The Valley comprises an extensive flood plain where heavy black alluvial soil thickly overlies gravels and sands carrying water suitable for irrigation. Despite a mean annual rainfall of 30

inches the variation is great, and irrigation is necessary for continuous agricultural production. Surveys suggest that some 60,000 acres of land highly suitable for irrigation are available. Of this area, only about 30 per cent. is under irrigation, the number of pumps operating from wells and open water exceeding 550 and 600 respectively. Over 60 per cent. of the farmers operate electric pumps for irrigation purposes and a special policy designed to encourage such development is fostered by the Southern Electric Authority of Queensland. The Irrigation and Water Supply Commission has constructed a number of small weirs on Lockyer Creek with a total storage of 1,370 acre feet. These also tend to augment and conserve underground supplies. To study local problems, an Irrigation Research Station was established at Gatton in 1946 by the Bureau of Investigation.

The Lockyer Valley produces a substantial proportion of Queensland's onions, potatoes, pumpkins, lucerne, hay, green fodder, maize and dairy products.

(iii) *Burdekin River.* The Burdekin River, which joins the sea between Townsville and Bowen, is a major factor in the life of North Queensland. In most years heavy floods from a catchment twice the size of Tasmania cause extensive damage and traffic disabilities. On the other hand, the fertile Delta Area with its underground water supplies at shallow depth has contributed greatly to the agricultural prosperity of North Queensland. Present development is confined to the Delta Area. The average annual rainfall of this area is some 41 inches, but the major part falls in the months December to March. Consequently sugar growers and other farmers have tapped the underground water resources of the Delta to obtain supplies in the dry periods. Sugar is the main irrigated crop, though citrus, pine-apples, vegetables and tobacco are also irrigated. The irrigated area is in excess of 30,000 acres, up to 1,000 acre feet of water being drawn daily from underground sources.

In the Home Hill-Inkerman areas on the south side of the Burdekin, water is obtained from shallow wells by electric pumps supplied from a local power station controlled by the Townsville Regional Electricity Board. Around Ayr, on the north side of the river, electric power from the mains of the Townsville Regional Electricity Board is now being adopted in place of the individual internal combustion engines previously used. At both Home Hill and Ayr, water for domestic supply is raised by a windmill on each property.

In 1940, the Burdekin River Trust was formed to safeguard the sugar areas of the Delta from erosion and floods. An Irrigation Research Station has recently been established to study the development of pastures and irrigated crops under local conditions.

A major multi-purpose scheme, involving irrigation, flood control and hydro-electric power generation, is being investigated by the various interested Government Departments under the general supervision of the Burdekin River Authority. The development envisaged includes a dam storing 6,584,000 acre feet, which would make water available for the irrigation of at least 250,000 acres. The principal industries anticipated are tobacco-growing, dairying and cattle fattening, with sorghum, sunflowers, peanuts, cotton and sugarcane as other possible forms of production. The projected scheme, together with the high-level railway bridge at present under construction, will change the Burdekin from a mixed blessing to one of the Commonwealth's greatest resources for agricultural and industrial production.

The Clare Irrigation Area, constituted in 1949, the Millaroo Irrigation Area, constituted in 1952, and the Dalbeg Irrigation Area, constituted in 1953, are at present being developed for tobacco production. Located from 25 to 65 miles upstream from the mouth of the Burdekin, these areas comprise 12,000 acres and obtain irrigation waters from central pumping stations drawing initially on the unregulated flow of the Burdekin. A temporary storage of 6,700 acre feet capacity has been constructed about 79 miles upstream from the mouth of the Burdekin. To 30th June, 1955, 71 farms had been opened for selection in the Clare Area, 58 in the Millaroo Area and 37 in the Dalbeg Area.

(iv) *Dawson Valley.* The Dawson River, a 392-mile long tributary of the Fitzroy River, rises in the Carnarvon Range and joins the Mackenzie River to form the Fitzroy 50 miles west of Rockhampton. Lands bordering the river in its northerly course of about 170 miles before its confluence with the Mackenzie River are commonly termed the Dawson Valley. A scheme for the development of the Dawson Valley under irrigation was inaugurated in 1923, providing for the irrigation of 70,000 acres. Storage for the scheme was to be provided by a dam of 2,000,000 acre feet capacity at Nathan Gorge. Much investigational and survey work on the scheme was carried out, but the general financial depression and limited loan funds brought about the cessation of this work. However, the initial step in construction had been completed, comprising a weir on the river at Theodore and irrigation works to serve an area of 3,500 acres supplied from a central

pumping station. Two additional weirs have since been built, giving a total storage of 9,000 acre feet. Pasture, vegetables, cotton, fruit and dairy products are the principal produce. Attention has recently been given to the former plans for the Valley and earlier work is now under close scrutiny as a prelude to future development. Construction of works to serve some 2,400 acres at Gibber Gonyah, adjacent to the existing Theodore Area, is in progress.

(v) *Mareeba-Dimbulah Area.* The existence of large areas of sandy soils suitable for tobacco production in the valleys of the Walsh and Barron Rivers in the neighbourhood of Mareeba and Dimbulah has led to large-scale investigations into possible irrigation development in the area. Surveys indicate that 40,000 acres of land suitable for irrigated culture, including 32,000 acres suitable for tobacco, are available. In 1955-56, some 3,026 acres of high-grade tobacco were grown. Seven weirs of combined capacity of 2,600 acre feet have been completed on a number of streams to store water for irrigation.

During 1952, a report on the utilization of waters of the Barron and Walsh Rivers was prepared and the establishment of an irrigation undertaking approved by the Queensland Government. The projected undertaking provides for construction of a major storage at Tinaroo Falls on the Barron River to store 320,000 acre feet, and construction of irrigation works to serve 78,000 acres commanded by this storage. In each case, construction has commenced. Further development by construction of a second storage at Nullinga on the Walsh River has been deferred for the present. Tobacco will be the basic crop while peanuts, vegetables, maize, cotton and stock fattening also appear suitable.

(vi) *Border Rivers Project.* The development of the rivers constituting portion of the border between Queensland and New South Wales is under the authority of the Dumaresq-Barwon Border Rivers Commission on which each State is represented. For information on the project see page 296.

(vii) *Balonne River.* The St. George Irrigation Area has been constituted and construction of works to serve some 11,000 acres is in progress. Water supply for the area will be obtained by pumping from the combined weir and road bridge on the Balonne River at St. George.

6. **Bureau of Investigation.**—Under the Land and Water Resources Development Act of 1943, a Bureau of Investigation has been set up for the co-ordinated investigation of land and water resources development.

The Bureau consists of representatives from the authorities controlling water resources, lands and agriculture, under the chairmanship of the Co-ordinator-General of Public Works. Among notable works carried out by the Bureau of Investigation since its inception has been the trial planting of irrigated pastures with a view to developing mixtures suited to the special conditions of each part of the State. Other valuable work has included the mapping of the ultimate land uses of the State and the detailed investigation of the agricultural and pastoral potentialities of many regions.

7. **Channel Country.**—Extensive investigations of the Channel Country fed by inland rivers in the south-western corner of the State have been made by the Bureau of Investigation. This country is intersected by shallow and irregular flood channels through which huge volumes of flood waters pass in favourable seasons; consequent on the flooding, a heavy growth of natural pastures is produced on the flooded lands, providing feed in quantities far in excess of that required for the normal stock population of the area. If the occurrence of flooding could be made more reliable by means of storages to create artificial floods, the pastoral resources of the area would be enormous. However, inquiries directed on these lines have revealed that little can be done to increase or stabilize the turn-off of fat cattle by artificial storage.

At 30th June, 1952, 41 watering facilities, at an estimated cost of £277,000, had been proposed under a Federal-State agreement for stock routes through, and in the approaches to, the Channel Country. By 30th June, 1956, twenty-five had been completed. In addition, nine large excavated tanks and two bores were finished, but still required equipping with windmills, tanks and troughs.

8. **Hydro-electricity.**—An outline of Hydro-electricity Schemes operating in Queensland is given in the previous chapter (see page 279).

§ 5. South Australia.

1. **General.**—(i) *Rainfall.* Brief particulars of the climatic conditions in South Australia were given on page 1129 of Official Year Book No. 37. (See also Chapter II.—Physiography, p. 45 of this issue.)

(ii) *Administration.* Water supplies, other than irrigation works, are under the control of the Engineering and Water Supply Department, which administers the Waterworks Act governing the supply of water through mains in water districts for townships and farm lands. The Water Conservation Act provides for the construction of storages in non-reticulated areas and authorizes the Minister to “divert and impound the water from any streams or springs or alter their courses, and take water therefrom, or any other waters as may be found in, under, or on, any land entered upon for the purpose of supplying water to the inhabitants of any water district”.

(iii) *Methods of Catchment and Conservation.* Early steps were taken to vest all running streams, springs and “soaks” in the Crown. Since the Water Conservation Act was passed in 1886 more than 550 dams, tanks and “rainsheds” have been built or acquired by the State, in addition to 460 wells and 340 bores, at a total cost of £1,653,468. The rainsheds comprise timber frameworks roofed with galvanized iron to catch precipitation which is delivered to storage tanks. Rainshed catchments vary from a few hundred square feet to four acres, discharging water into tanks ranging in capacity from 2,000 to 500,000 gallons. Over most of the State extraordinary precautions are taken to counteract evaporation. Pipelines in preference to open channels are used to reduce seepage and evaporation. Meters are attached to practically all services to check usage by individual consumers.

2. **Irrigation.**—In South Australia, irrigation is almost exclusively confined to the Murray Valley. Except for that held in various lock pools, no water from the Murray is stored in South Australia. Water is either pumped on to the land or gravitated from the river. The upper Murray of South Australia and the Mildura area of Victoria formed the cradle of Australian irrigation. South Australian irrigation commenced with an agreement between the Government and the Chaffey brothers in 1887 whereby an area of land at Renmark was made available for the establishment of certain irrigation works. Including land allotted for War Service Land Settlement purposes, the Department of Lands administers in the Murray Valley an area of 32,659 acres of irrigable high land together with 9,432 acres of reclaimed swamp and 167,090 acres of non-irrigable land in the irrigation areas and 29,898 acres of land temporarily leased and reserved for commonage or other purposes, amounting in all to 239,079 acres. In addition, the Renmark Irrigation Trust controls 20,557 acres, of which more than 9,000 are irrigated. Water used for irrigation purposes in 1955–56 in the high land irrigation areas controlled by the Department of Lands, excluding War Service Land Settlement areas in course of development, was approximately 100,000 acre feet, in addition to which approximately 60,000 acre feet were used on reclaimed areas by gravitational watering. In the Renmark area, 29,600 acre feet of water were used for irrigation in 1955–56. The production of the upper Murray areas is almost exclusively fruit and vines. Principal crops are sultanas, currants, lexiás, apricots, peaches, nectarines, pears and figs (mainly for dried fruit), wine grapes, and citrus fruits. Before irrigation, these semi-arid lands were of little productive value.

Renmark Irrigation Trust is administered by a local board of management consisting of seven members. This area differs from other South Australian irrigation areas in that the land is freehold instead of leasehold, self-contained and self-controlled. Every settler is entitled to vote for the election of Trust members. The Trust maintains 100 miles of channel for reticulation to 9,310 acres.

The following tables show the acreage devoted to various crops in the government-controlled and Renmark Irrigation Trust areas on the upper Murray, and in the government-controlled reclaimed swamp districts near the mouth of the Murray, which are devoted to dairying.

AREA OF LAND UNDER IRRIGATED CULTURE 1955-56.
IRRIGATION AREAS ADMINISTERED BY THE DEPARTMENT OF LANDS AND
THE RENMARK IRRIGATION TRUST.
 (Acres.)

Area.	Vine Fruits.	Tree Fruits.	Citrus Fruits.	Lucerne.	Sown Pastures.	Total.
<i>Areas Administered by the Department of Lands.</i>						
<i>Orchard Land—</i>						
Berri	5,346	938	1,252	..	..	7,536
Cadell	595	142	109	..	..	846
Waikerie	1,986	497	1,201	..	..	3,684
Cobdogla	3,897	127	148	..	..	4,172
Moorook	385	131	189	..	..	705
Kingston	246	63	202	..	..	511
Mypolonga .. ..	..	347	490	..	..	837
Chaffey—Ral Ral Division	792	55	11	..	..	858
<i>Total</i>	<i>13,247</i>	<i>2,300</i>	<i>3,602</i>	<i>..</i>	<i>..</i>	<i>19,149</i>
<i>War Service Land Settlement—</i>						
Cooltong Division	383	241	483	..	..	1,107
Loxton area	3,045	1,021	1,982	..	..	6,048
Loveday Division	235	47	22	..	..	304
<i>Total</i>	<i>3,663</i>	<i>1,309</i>	<i>2,487</i>	<i>..</i>	<i>..</i>	<i>7,459</i>
<i>Reclaimed Swamp Land—</i>						
Monteith .. ..	..	..	..	56	1,000	1,056
Mypolonga .. ..	..	..	..	79	1,312	1,391
Wall .. ..	..	..	..	26	478	504
Burdett .. ..	..	..	..	8	104	112
Mobilong .. ..	..	..	..	23	364	387
Long Flat .. ..	..	..	..	82	332	414
Neeta .. ..	..	..	..	7	683	690
Pompoota .. ..	..	..	..	..	418	418
Cowirra .. ..	..	..	..	18	423	441
Jervois .. ..	..	..	..	83	3,543	3,626
<i>Total</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>382</i>	<i>8,657</i>	<i>9,039</i>
<i>Renmark Irrigation Trust.</i>						
<i>Renmark Irrigation Trust</i>	<i>7,330</i>	<i>780</i>	<i>1,200</i>	<i>..</i>	<i>..</i>	<i>9,310</i>

3. **Water Supply Schemes.**—(i) *Summary.* Water conservation and distribution works in South Australia have cost £47,006,967 (exclusive of river control and irrigation works on the River Murray which are dealt with above). A summary of statistical information concerning country supplies in 1955-56 is as follows :—Length of water mains, 5,857 miles ; capacity of storages, 35,092 acre feet ; approximate population served, 289,000 ; area served, approximately 4,500,000 acres ; total capital cost, £25,842,611.

Areas extending for a distance of 90 miles north of Adelaide are supplied from the Warren and Barossa Reservoirs in the Barossa Ranges. Further developments currently being undertaken include the construction of a main pipeline and pumping stations for pumping water from the River Murray to Adelaide and, by means of a branch pipeline, to Warren Reservoir. Another reservoir (South Para Reservoir), to supplement the Warren and Barossa Reservoirs, is also being constructed on the South Para River. Agricultural towns and areas further north are supplied from Beetaloo, Bundalcer and Baroota Reservoirs, with a connexion to the Warren system. Eyre Peninsula has, up to the present, been supplied from the Tod River Reservoir (9,167 acre feet) and three small reservoirs near the Franklin Harbour District, but demands have increased to such an extent in recent years that further sources of supply are necessary, and with this end in view a water-bearing area known as the Uley-Wanilla Basin has been developed, and water from it is now being used in the Tod River system.

(ii) *Morgan-Whyalla Water Supply Scheme.* For particulars of the construction and works of the main 223-mile pipe line bringing water from the Murray at Morgan to Whyalla on Spencer Gulf see Official Year Book No. 37, page 1132. A 19-mile branch-line has also been constructed to Jamestown. The Morgan-Whyalla Water Supply Scheme forms part of the South Australian Country Water Supply system referred to above.

4. **Underground Water.**—The occupied portion of South Australia is, on the whole, well endowed with underground water and the extent of the several artesian basins is reasonably well known. There are also considerable areas, notably in the south-east of the State, in which ground water occurs. Quality varies widely, but a great deal is at least useful for watering stock, the major use to which it is put.

The deepest portion of the Great Artesian Basin (in the north-east) is not extensively developed because development costs are large in proportion to the carrying capacity of the arid land. However, deep boreholes have been drilled by the Government to provide watering places along stock routes, and pastoralists rely largely on supplies from non-pressure aquifers at shallower depths.

The use of the waters of the Murray Basin is essential to settlement in the Murray Mallee country and in the south-east of the State, especially for farms, but also for township supplies to Mount Gambier, Naracoorte, Bordertown, Pinnaroo and Penola. The deepest township borehole is 357 feet.

Pastoralists, farmers, market gardeners and others have been assisted with expert advice on drilling, for which the Government maintains about 30 drills. The whole of the Murray River Basin has been examined critically to ascertain the extent of land which could be used for lucerne and considerable tracts of previously undeveloped country in the Upper South-east, Kangaroo Island and Yorke Peninsula have been found to have usable water and are now being opened up.

Ground water resources surveys are undertaken continuously by Departmental geologists, the results being published in various bulletins, reports and investigations issued from time to time.

5. **Farm Water Schemes.**—While the Department of Mines and Engineering and Water Supply Department give assistance to individual farmers in the provision of supplies from underground sources, a great part of the farming areas derive water supply under pressure from the extensive distribution systems connected to various reservoirs on the Murray River.

6. **South-Eastern Drainage.**—For some information on the drainage schemes necessary for the disposal of surplus water in areas in the south-east of South Australia see Official Year Book No. 37, page 1133.

§ 6. Western Australia.

1. **General.**—(i) *Rainfall.* Brief particulars of the climatic conditions in Western Australia were given on page 1133 of Official Year Book No. 37. (See also Chapter II.—Physiography, p. 45 of this issue.)

(ii) *Administration.* Irrigation districts are administered under the Rights in Water and Irrigation Act 1914–1951 and the Government is advised by an Irrigation Commission representing the local irrigators and government technical and financial branches. The Goldfields Water Supply is administered by a branch of the Public Works Water Supply Department and its responsibilities include control of water from this scheme for country

towns, mining and agricultural purposes. The metropolitan water supply is controlled by a separate department under the control of the Minister for Water Supply, Sewerage and Drainage. Under the Water Boards Act 1904–1953, twelve towns are administered by local water boards and 45 are under direct Ministerial control. The Minister also controls three District Farming Schemes. Water rights over water flowing in streams and water courses are vested in the Crown unless specifically appropriated for irrigation purposes under the irrigation legislation.

2. **Irrigation.**—The main irrigation districts—Harvey, Waroona and Collie—are along the south-west railway line between Waroona (70 miles from Perth) and Dardanup (116 miles from Perth). The total area irrigated in these districts during 1955–56 was 24,329 acres and the total water used was approximately 75,000 acre feet. The total acre waterings (i.e., the number of acres watered multiplied by the average number of waterings) were 118,426. Investigations are being carried out with a view to irrigating a further 30,000 acres south of the existing Collie Irrigation District.

Harvey Districts (Nos. 1 and 2—36,823 acres) are supplied from the Harvey Weir (8,300 acre feet) and Stirling Dam (44,344 acre feet), Waroona District (10,302 acres) from Drakesbrook Dam (1,855 acre feet) and Samson Brook Dam (6,540 acre feet), and Collie District (36,020 acres) from Wellington Dam (31,800 acre feet).

The following table, which shows acre waterings supplied to crops in the irrigation districts of Harvey, Waroona and Collie during the seasons 1950–51 to 1955–56 illustrate the growth of these irrigation schemes.

IRRIGATION, WESTERN AUSTRALIA : ACRE WATERINGS^(a).

Year.	Pasture.	Fodder.	Potatoes.	Vege- tables.	Orchard.	Flax, Broom Millet, and Preparation of Ground.	All Crops.
1950–51	76,431	793	2,946	4,090	1,180	..	85,440
1951–52	88,091	1,417	2,793	2,442	1,088	..	95,831
1952–53	95,491	2,235	4,185	2,588	1,070	536	106,105
1953–54	98,645	3,435	4,405	3,003	1,072	115	110,675
1954–55	112,659	3,268	2,363	3,294	845	121	122,550
1955–56	108,468	3,599	1,834	3,452	946	127	118,426

(a) Number of acres watered multiplied by average number of waterings.

In 1955–56 the total area irrigated in Western Australia was 37,164 acres made up of vegetables (6,880 acres), fruit (4,768 acres), vineyards (463 acres), pastures (23,328 acres) and other crops (1,725 acres).

3. **Water Supply Schemes.**—(i) *Goldfields Scheme.* Western Australia has one of Australia's most spectacular water supply schemes, and a brief account of its development will be found on page 1134 of Official Year Book No. 37, and an account in greater detail on page 576 of Official Year Book No. 6. Mundaring reservoir on the Helena River, 26 miles from Perth, is the source of water supplied to the goldfields, and has a capacity of 55,460 acre feet and a catchment of 569 square miles. The water now passes through 350 miles of main, mostly steel and 30 inches in diameter, aided by seven pumping stations and one booster station, involving a total net lift of 1,280 feet.

Maximum pumping capacity from No. 1 Pumping Station at Mundaring is now 12.2 million gallons per day. The total capacity of all receiving and regulating tanks, etc., along the pipe line is 154 million gallons, which includes three standby reservoirs at Kalgoorlie having a combined capacity of 60 million gallons.

Hundreds of miles of branch mains and pipes have been laid to mining districts, towns and farming districts, the most important being the Norseman extension of 101 miles. The system serves 54 towns and water is reticulated to 1,800,000 acres of farming lands. Total length of mains is 1,850 miles and the population served is 70,000. Total quantity of water pumped from Mundaring in 1955–56 was 3,044 million gallons. Total cost of the system to the end of 1955–56 was £10,007,050.

(ii) *South-West Scheme (Comprehensive).* The Commonwealth Government has agreed to assist a scheme which will be administered by the State Government, to extend water for agricultural areas and towns in the south-west of Western Australia. Twenty-three towns and over 4 million acres of agricultural country will benefit. The original

estimated cost of this scheme was £4,300,000 of which the Commonwealth Government agreed to contribute 50 per cent. The revised estimate in 1955 was £10 million. These estimates exclude the cost of the raising of Mundaring and Wellington Dams, the works of which form the headworks of the scheme and are financed solely by the State Government. The laying of 80 miles of 30-inch pipe between Wellington Dam and Narrogin was completed early in 1956, together with two electric pumping stations.

Output from these stations is approximately 2½ million gallons per day, but provision has been made in the stations to add further units bringing the maximum pumping capacity up to nearly 7 million gallons per day.

A new pumping station at Narrogin Dam is to be built soon and the 24 inch rising main from this station to Cuballing Service Tank of 2 million gallons capacity and approximately 6 miles long is now in course of construction.

The work of raising Mundaring Weir 32 feet in height, giving a total capacity of 55,460 acre feet, was completed in 1951 and preparations are well in hand for commencing work in the raising of Wellington Dam 50 feet in height, increasing storage to 149,860 acre feet capacity. The new electric pumping station at Mundaring, having an ultimate capacity of 16 million gallons per day, was opened in December, 1953.

(iii) *Rock Catchments.* An interesting feature of the State's conservation system is found in the Barbalin, Naremben and Kondinin District Farming Land Schemes in the wheat belt, where extensive granite outcrops have been used as catchments. The rain is caught at the foot of the rocks, and pumped to tanks from which the water is reticulated to farms and to a number of small towns. For further particulars see Official Year Book No. 37, page 1135.

4. *Underground Water.*—Individual farmers, orchardists, market gardeners and others derive water from wells using windmills or, where power is available, pumps and motors are used to tap such supplies. The Department of Public Works has twelve hand-boring plants which are lent out to farmers to facilitate boring operations to an average depth of 150 feet, also eight power-boring plants which are hired to local authorities. The Department also contracts with private firms to bore for communal farm supplies. During the past 62 years 341 artesian and sub-artesian bores have been sunk, in 290 of which fresh or stock water was struck. The total daily flow of all recorded bores in Western Australia is 90,872,000 gallons, and the average depth at which water is struck is 791 feet. Maximum depth of any bore is 4,006 feet and minimum 21 feet. Outside the artesian and sub-artesian basins over 5,000 bores have been sunk for water supplies.

5. *Ord River Scheme.*—The Ord River in the north-west of Western Australia traverses a tropical area served with monsoonal rains of irregular incidence and quantity, varying from 20 inches in the south to 30 in the north. The hottest months (December to March) are also the months of highest rainfall. Communications and population are sparse. The Western Australian Government is considering a proposal to build a dam to conserve 2,000,000 acre feet of water, equipped with hydro-electric plant, which might supply irrigation water for an area of 100,000 acres, if investigations show that the climate and soil conditions are suitable for vegetables, tropical fruits and rice. The economic production of these and other crops, as well as the possible use of such irrigation areas for interim fattening of cattle, is being examined at the Kimberley Research Station on the Ord River.

§ 7. Tasmania.

1. *General.*—(i) *Rainfall.* Brief particulars of the rainfall pattern in Tasmania were given on page 1136 of Official Year Book No. 37. (See also Chapter II.—Physiography, p. 45 of this issue.)

(ii) *Main Purposes of Conservation and Utilization.* Owing to Tasmania's fortunate rainfall position, scarcity of water is not a serious problem in normal seasons. Conservation of water for hydro-electric generation is the predominant interest, and conservation for domestic and industrial purposes is more important than irrigation. Conservation of water on farms is not practised to the same extent as on the mainland, probably because running streams and good rainfall are on a more generous scale. Provision of artificial storages (apart from house tanks) is rare, but progressive landowners are beginning to take advantage of modern plant, such as bulldozers, to provide small excavated storages on their properties. Underground water is of poor quality, but a small quantity which has been exploited to a limited extent only by bores and windmills exists over an area in the Midlands. Geological conditions do not appear to favour the utilization of underground water except on a minor scale.

(iii) *Administration.* The State does not own all natural waters, and consequently the subject of water rights is a difficult one. The Mines Department has power to grant certain rights for mining operations, and the Hydro-Electric Commission must approve the abstraction of water from any stream or lake of potential value for power generation. Under the provisions of an Act passed in 1944, the Water, Sewerage and Drainage Board was constituted to consider the financial and technical practicability of all water supply schemes constructed by local authorities, other than the cities of Hobart and Launceston. Legislation was also enacted during 1952 empowering Local Authorities to take water from specific sources of supply and to construct waterworks. The Act does not cover irrigation, which is practised to a limited extent only by private interests. Provision has been made in the Act for the protection of riparian rights, but there is no general legislation for the control of water courses.

2. *Hydro-electricity.**—Tasmania depends entirely on water for power development. The Hydro Electric Commission, the authority controlling the generation of electricity in Tasmania, conducts a continuous survey of the water power resources of the State assisted by modern methods such as aerial photography and geophysical exploration.

Most of the water potential is located on the Central Plateau with an area of about 1,500 square miles at an altitude of from 2,000 to 4,000 feet and subject to rainfall of from 30 inches a year in the east to 80 inches on the western perimeter. On the plateau are a large number of lakes which provide the means for storage at low cost. These include Great Lake with an area of 58 square miles, Lake St. Clair and Lake Echo, each more than 12 square miles, and others of smaller area.

The Derwent River and its tributaries which flow south-easterly carry off by far the greater part of the water which falls on the plateau and these rivers are therefore the most abundant source of power. They have been the cheapest to develop to date and most of the existing generating stations are located on them.

The three main rivers running westerly from the plateau—the Arthur, Pieman and Gordon—have only a small portion of their catchment areas at high level, but they run through regions of high rainfall and their power potentials are considerable. However, because of inaccessibility and climate, development of these rivers may be rather expensive and has been deferred in favour of more convenient schemes.

Rivers draining from the plateau towards the north and north-west coast, including the Emu, Forth and Mersey, have small catchments at high levels and no natural storages.

Two other important water power sources, independent of the Central Plateau, are the South Esk River in the north and the Huon River in the south. A power station at Trevallyn, near Launceston, utilizes water from the South Esk. The Huon has a large low-level catchment in the high-rainfall area near the west coast. Storage could be provided on it at a reasonable cost and because of the proximity to Hobart of a future power station, it has considerable value for peak load development.

3. *Industrial.*—Three principal industrial schemes have been installed privately. Australian Newsprint Mills Ltd. pump approximately 6 million gallons a day from the Derwent River at Lawitta for the Boyer Mills. Associated Pulp and Paper Mills Ltd. pump several million gallons a day from the Emu River at Burnie, and Titan Products Pty. Ltd. reticulate water from Chasm Creek to their factory at Heybridge. In addition the State has constructed a regional water scheme to serve the Australian Aluminium Production Commission's plant at Bell Bay on the River Tamar and to supply several Municipalities with bulk water for domestic and industrial purposes.

A second regional water scheme draws water from the River Derwent at Lawitta to provide domestic and industrial supplies in five southern Municipalities. Potential sources capable of greater development without storage exist on the Derwent, South Esk, Huon, Lake, Mersey and Forth Rivers. There is also a great reserve of untapped permanent streams in the western half of the State which is largely unsettled. Diversion to the eastern side of the watersheds is not regarded as practicable.

4. *Irrigation.*—There are no State irrigation projects, but preliminary inquiries as to the possibility of establishing one in the Coal River Valley have been made. Legislation is contemplated to give a new Commission extensive powers for river control and for the design of irrigation projects. All systems operating are privately owned, and with one

* See also Chapter VIII.—Electric Power Generation and Distribution, p. 285.

exception (at Bushy Park) are single-farm units. At Bushy Park, a small system serves a group of properties. The larger proportion of the area under irrigation is watered by gravitational systems and the remainder comprises areas devoted to vegetables and served by municipal water supplies. Irrigation as practised in Tasmania, was applied in 1955-56 to 11,499 acres devoted to : hops (1,248 acres) ; fruit (605 acres) ; pastures (7,290 acres) ; green fodder, etc. (1,117 acres) ; and other crops (1,239 acres).

§ 8. Northern Territory.

1. **Climate and Topography.**—Some particulars of the climate and main topographical features of the Northern Territory were given on page 1138 of Official Year Book No. 37, and in this issue information on climatic conditions will be found in Chapter II.—Physiography, and a brief outline of contour and physical characteristics in Chapter V.—The Territories of Australia.

2. **Administration.**—Under the Control of Waters Ordinance 1938-1955 of the Northern Territory natural waters are vested in the Crown. Where a watercourse or lake forms a boundary of any land alienated by the Crown, the beds and banks are deemed to remain the property of the Crown (except in special cases) and diversion of water is prohibited except under conditions prescribed. There is a Water Use Branch in the Northern Territory Administration under the control of a Director. The functions of the Branch include systematic stream gauging, collection of data on surface and underground water supplies, planning of water use for irrigation and town water supplies, flood prevention and control.

3. **Underground Water.**—The marked seasonal rainfall over the whole of the Northern Territory is one of the basic factors affecting the pastoral industry which provides the bulk of the Territory's income. The inadequacy of surface water during the dry season underlines the importance of underground water supplies in the Territory where, most of the cattle population is dependent on underground supplies for three to five months each year.

Rainfall is one of the factors controlling cattle population but geological features, controlling both soils and the storage of underground water, are even more important. In the northern-most portion of the Territory, which receives from 25 to 60 inches of seasonal rainfall per year, surface water supplies are, in general, adequate for the pastoral industry. Despite this, however, this area has a comparatively low carrying capacity for cattle and the pastoral industry is concentrated more in inland areas where feed retains more nutritive value in the winter despite dry conditions.

South from this well-watered northern-most portion, the Territory becomes progressively drier, with annual average rainfall of only five inches at the margins of the Simpson Desert in the south-east corner. In the lighter rainfall areas, the search for potable underground water becomes exacting but, in general, the regions providing the best pastures—the Ord-Victoria Region, the Barkly Tablelands and smaller areas in the Alice Springs district—provide also sub-surface conditions suitable for the storage of water. This comes about largely because, in these areas, both pasture and water are related to flat lying or gently folded limestones or volcanics of Upper Preterozoic or Cambrian age, overlying the basement of older, more tightly folded, metamorphic rocks and granites which crop out over wide areas within the Territory.

In the Ord-Victoria Region, probably the best grass lands overlie volcanic rocks and extend over some 10,000 square miles. Ground water is obtained in shallow bores averaging 70 to 80 feet in depth and producing small supplies which range up to 1,500 gallons per hour. For the most part, water is stored in joints, faults or cracks in the rocks although in places sub-artesian conditions pertain and, on the whole, selection of bore sites is difficult. There are also small sedimentary basins in the region, some of which yield sub-artesian, and in places artesian water and provide areas of good pastures.

The Barkly Tablelands, which extend into Western Queensland, overlie flat-lying limestone, sandstone and shale of the Barkly Basin. In most places, underground water is under pressure (sub-artesian) but no flowing bores are known. Sandstones and beds of limestone with fractures and solution cavities provide a number of aquifers within the Basin. The hydraulic surface (to which pressure water will rise in bores) ranges between 500 and 600 feet above sea level and adequate supplies for the watering of stock are available at depths ranging from 150 to 400 feet from the surface. The water from over 90 per cent.

of the bores is suitable for stock and over 50 per cent. of it is suitable for human consumption. Investigations by the Commonwealth Bureau of Mineral Resources indicate that underground water supplies will be more than sufficient for the future development of the pastoral industry on the Tablelands.

In 1955-56, some 1,006 equipped bores were recorded, comprising 801 on pastoral properties (69 provided by the Government by way of assistance to pastoralists), 165 established by the Government on stock routes, 22 on Native Affairs Settlements, 11 on mining fields, six for town water supplies and one maintained by the Postmaster-General's Department. Latest details of bores on pastoral properties in the various districts relate to 1952 and understate the present position. They are :—Alice Springs, 357 ; Barkly Tableland, 288 ; Victoria River Downs, 87 ; Total, 732.

The number of stock route bores, watering some 2,500 miles of stock routes, has increased by approximately 56 per cent. in the period 1947-56, and the present figure of 165 bores represents on the average approximately one per 15 miles.

Regional surveys by the Bureau of Mineral Resources and the Commonwealth Scientific and Industrial Research Organization from 1947 to 1955 have established the existence of the valuable Barkly Basin of 57,000 square miles in the eastern part of the Territory and extensions of the Gulf Basin in the north-western part.

4. **Irrigation.**—There are no large-scale water conservation projects in the Territory with the exception of the Manton Dam (12,700 acre feet), which serves Darwin with a reticulated supply. Hydrological investigations are being carried out by the Administration and a public company to determine the supply of water and the best methods of control and use in the potential rice growing areas of the Territory. Agricultural activity in the Territory is not extensive.

The Katherine River appears to offer irrigation potentialities on the levee soil below the township. The river passes through a gorge upstream under conditions which appear suitable for dam construction. The Administration and the Commonwealth Scientific and Industrial Research Organization are investigating the potentialities of the area for agricultural production.

A small area (225 acres) was irrigated in the year ended 31st March, 1956, mainly for growing fruit and vegetables. For particulars of potentialities *see* p. 1138 of Official Year Book No. 37.

§ 9. Papua and New Guinea.

1. **Rainfall.**—Rainfall in Papua and New Guinea varies considerably from approximately 250 inches near Lindenhafen (New Britain) and 231 inches at Kikori (Papua) to about 70 inches near Marienburg (New Guinea) and 40 inches at Port Moresby (Papua).

2. **General.**—For a general description of these territories *see* Chapter V.—The Territories of Australia, page 121, of this Year Book. Irrigation has not been developed on any organized basis owing to the availability of high rainfall and the nature of agricultural development.

The Territory of Papua and New Guinea is well served with large rivers deriving their water from heavy tropical rains and high mountains which rise to over 14,000 feet. However, complete data regarding water resources are not available.

The largest rivers in the Territory include the Fly (a description of which is given in Chapter XXVI. of Year Book No. 40), the Sepik (700 miles), the Ramu (450 miles), the Purari (300 miles) and the Markham (110 miles).

The main water conservation interest in New Guinea at present is the hydro-electric potential which is extensive. An outline of schemes at present in operation is given in the previous chapter.

CHAPTER X.

TRADE.

§ 1. Introductory.

Constitutional Powers.—By the Commonwealth of Australia Constitution Act, section 51 (i.), the power to make laws with respect to trade and commerce with other countries was conferred on the Commonwealth Parliament. Under section 86 of the Constitution the collection and control of duties of customs and excise passed to the Executive Government of the Commonwealth on 1st January, 1901. Other references to trade and commerce are contained in sections 87 to 95 of the Constitution (*see pp. 18-19*).

§ 2. Commonwealth Legislation affecting Oversea Trade.

1. **General.**—The principal Acts affecting overseas trade at present in force are: The Customs Act 1901–1954; Customs Tariff 1933–1956; Customs Tariff (Canadian Preference) 1931 and Customs Tariff (Canadian Preference) 1934–1956; Customs Tariff (Industries Preservation) Act 1921–1956; Customs Tariff (New Zealand Preference) 1933–1954; Customs Tariff (Papua and New Guinea Preference) 1936–1956; Customs Tariff (Federation of Rhodesia and Nyasaland Preference) 1956; Customs Tariff (Primage Duties) 1934–1950; Trading with the Enemy Act 1939–1952.

The Customs Act represents the administrative Act under which the Department of Customs and Excise operates, while the Customs Tariffs provide the statutory authority for imposing the actual rates of duties operative from time to time.

2. **The Customs Tariff.**—(i) *General.* The first Commonwealth Customs Tariff was introduced by Resolution on 8th October, 1901, from which date uniform duties came into effect throughout Australia. The tariff has since been extensively amended. The Act at present in operation is the Customs Tariff 1933–1956.

The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries and of granting preferential treatment to imports from certain countries of the British Commonwealth. Duties are also imposed on some goods, generally of a luxury nature, for revenue purposes. Customs collections are a major source of revenue, but in its protective character the tariff has an important influence on the Australian economy.

Australia has three classes of tariff—the British Preferential Tariff, the Intermediate Tariff and the General Tariff.

(ii) *British Preference.* British Preferential Tariff rates of duty apply to goods the produce or manufacture of the United Kingdom, provided that such goods comply with the laws and statutory regulations for the time being in force affecting the grant of preference, and that the goods have been shipped in the United Kingdom to Australia and have not been transhipped, or, if transhipped, it is proved to the satisfaction of the Collector of Customs that

the intended destination of the goods, when originally shipped from the United Kingdom, was Australia. For the purpose of the preferential tariff the following goods are deemed by section 151A of the Customs Act 1901–1954 to be the produce or manufacture of the United Kingdom, provided the final process of their production or manufacture was performed in that country :—

- (a) Goods which are wholly produced or wholly manufactured in the United Kingdom from materials in one or more of the following classes—
 - (i) Materials wholly produced or wholly manufactured in the United Kingdom or in Australia ;
 - (ii) Imported unmanufactured raw materials ;
 - (iii) Imported manufactured raw materials as determined by the Minister.
- (b) Goods of the factory or works cost of which not less than seventy-five per cent. is represented—
 - (i) by labour or material of the United Kingdom ; or
 - (ii) by labour or material of the United Kingdom and labour or material of Australia.
- (c) Goods of a class or kind not commercially produced or manufactured in Australia and of the factory or works cost of which not less than twenty-five per cent. (or fifty per cent. if the Minister so determines) is represented—
 - (i) by labour or material of the United Kingdom ; or
 - (ii) by labour or material of the United Kingdom and labour or material of Australia.

With the exception of a relatively small number of commodities which carry special rates of duty, the British Preferential Tariff has also been extended, as a result of separate trade agreements, to Canada and New Zealand and by tariff legislation to the Territory of Papua and New Guinea, and the abovementioned preference conditions apply *mutatis mutandis* to each of those countries except that in respect of New Zealand the percentage content of goods under clause (b) of the said conditions is 50 per cent. of New Zealand and Australian labour and materials or 75 per cent. of New Zealand and United Kingdom or of New Zealand, Australian or United Kingdom labour and materials. In relation to specified goods, the British Preferential Tariff also applies to Ceylon and most of the British non-self-governing colonies, protectorates and trust territories.

(iii) *Intermediate Tariff.* The Intermediate Tariff has been a feature of the Australian Tariff for a considerable number of years, although its effective application dates only from 1st January, 1937, consequent upon the conclusion of trade agreements with Belgium, Czechoslovakia and France in 1936. The countries to which the Intermediate Tariff applies include those countries with which Australia has concluded trade agreements (including tariff negotiations pursuant to the General Agreement on Tariffs and Trade) and countries which accord Australia reciprocal most-favoured-nation tariff treatment by reason of agreements between those countries and the United Kingdom. The Intermediate Tariff has also been extended to some countries to which Australia has no formal obligation to accord most-favoured-nation treatment. The countries and the particular tariff items to which the Intermediate Tariff applies are specified by Customs Proclamation.

(iv) *General Tariff.* The General Tariff applies to goods other than those to which the British Preferential Tariff or Intermediate Tariff or special rates under trade agreements apply.

3. **Primage Duties.**—In addition to the duties imposed by the Customs Tariff, *ad valorem* primage duties at rates of 4 per cent., 5 per cent. or 10 per cent. are charged on some goods according to the type of goods and origin thereof under the Customs Tariff (Primage Duties) 1934–1950. Other goods are exempt from primage duty. Goods the produce or manufacture of New Zealand, Norfolk Island, Fiji and the Territory of Papua and New Guinea are exempt from primage duty.

4. **Tariff Board.**—The Tariff Board Act 1921–1953 provides for the appointment of a Tariff Board consisting of seven members, two of whom shall be administrative officers of the Department of Trade. Members of the Board are appointed for terms of not less than one year nor more than five years. The purpose of the Tariff Board is to assist the

Minister in the administration of matters relating to trade and customs. The more important matters which the Minister shall refer to the Board for inquiry and report include disputes arising out of the interpretation of any Customs or Excise Tariff ; the necessity for new increased or reduced duties ; the necessity for granting bounties ; any proposal for the application of the British Preferential Tariff to any part of the British Commonwealth or any foreign country ; and any complaint that a manufacturer is taking undue advantage of the protection afforded him by the Tariff by charging unnecessarily high prices for his goods or acting in restraint of trade. The Minister may refer to the Board for inquiry and report the following matters :—The classification of goods under items of the Tariff that provide for admission under by-laws ; the determination of the value of goods for duty ; the general effect of the working of the Customs Tariff and the Excise Tariff ; the fiscal and industrial effects of the Customs laws of the Commonwealth ; the incidence between the rates of duty on raw materials and on finished or partly finished products ; and any other matter affecting the encouragement of primary and secondary industries in relation to the Tariff.

Inquiries conducted by the Board relating to any revision of the Tariff, any proposal for a bounty, or any complaint that a manufacturer is taking undue advantage of the protection afforded him by the Tariff shall be held in public, and evidence in such inquiries shall be taken in public on oath, unless any witness objects to giving any evidence in public which the Board is satisfied is of a confidential nature, when the Board may take such evidence in private. Evidence taken by the Board in connexion with any inquiry under the Customs Tariff (Industries Preservation) Act 1921–1956 shall be taken in public on oath.

5. **Industries Preservation.**—The Customs Tariff (Industries Preservation) Act 1921–1956 provides that, after inquiry and report by the Tariff Board, special duties shall be collected in the following cases when the importation of the goods referred to might be detrimental to an Australian industry. In the case of goods sold for export to Australia at a price less than the fair market value for home consumption or at a price which is less than a reasonable price, a special dumping duty shall be collected equal to the difference between the price at which the goods were sold and the fair market value, or the difference between the price at which the goods were sold and a reasonable price. Similar provision is made for goods consigned to Australia for sale. With regard to goods exported to Australia at rates of freight less than the normal rate of freight the dumping freight duty shall be—on goods carried free—the amount payable as freight at the normal rate ; and in the case of any other goods—an amount equal to the difference between the freight paid and the freight which would have been payable at the normal rate.

The Act, by recent amendment, also provides for the collection of an emergency duty on goods which enter Australia under conditions which cause or threaten serious injury to Australian industries or to industries in a third country whose exports enter Australia under preferential tariff.

The amount of emergency duty payable is the equivalent of the difference between the landed duty-paid cost of the goods and a reasonably competitive landed duty-paid cost.

The Act provides that the Minister for Customs and Excise may publish a notice in the *Commonwealth Gazette* specifying the goods upon which the special emergency duties under this Act shall thereupon be charged and collected.

6. **Trade Descriptions.**—The Commerce (Trade Descriptions) Act 1905–1950 gives power to require the application of a proper trade description on certain prescribed goods imported into or exported from the Commonwealth. Goods which must bear a prescribed trade description upon importation into Australia are specified in the Commerce (Imports) Regulations. As regards exports from Australia, marking requirements are prescribed in regulations issued under the Act and relating to specified export commodities.

7. **Import Controls.**—(i) *Customs (Import Licensing) Regulations.* The Customs (Import Licensing) Regulations were first promulgated in December, 1939, and were made pursuant to the Customs Act 1901–1954, sections 52 (g) and 56. These regulations provide, *inter alia*, that the importation into the Commonwealth of any goods shall be prohibited, unless :—

- (a) a licence to import the goods is in force and the terms and conditions (if any) to which the licence is subject are complied with ; or
- (b) the goods are excepted from the application of the regulations.

The regulations were at first applied only to imports from non-sterling sources, with the object of conserving non-sterling exchange and enabling priority in shipping space to be given to essential imports. However, with a subsequent decline in Australia's sterling balances in London and changes in the general war situation the restrictions were extended in December, 1941 to cover a wide range of imports from sterling countries. The position remained basically the same during the remainder of the war and in the immediate post-war period.

As Australia's external financial position improved, the restrictions were progressively relaxed until, by November, 1950, imports from most countries had been exempted from the application of the regulations and, with minor exceptions, the restrictions applied only to imports from the dollar area and Japan. This position obtained until March, 1952.

During the financial year 1951–52, following a fall in the price of wool and a large increase in the volume of imports (the product, in turn, of the wool boom of 1950–51), Australia incurred a substantial deficit on current account. Oversea reserves fell rapidly in the latter part of 1951 and early 1952, endangering Australia's external financial position to such a degree that it became necessary on 8th March, 1952 to apply the Customs (Import Licensing) Regulations to imports from all sources, with the exception of goods originating in Papua, New Guinea and Norfolk Island.

During 1953 and the first half of 1954, Australia's balance of payments showed sufficient improvement to justify a gradual general relaxation of the import controls applying to goods from sources other than the dollar area and Japan. By April, 1954, a wide range of commodities was licensed virtually without restriction.

Towards the latter half of 1954 Australia's balance of payments prospects for 1954–55 were such that the Government was forced to review import licensing policy and a general tightening of the controls was announced on 1st October, 1954. Further reductions in overall import expenditure operated from 1st April, 1955 and 1st October, 1955.

On 1st July, 1956, the Government reviewed the likely results of the Australian balance of payments in 1955–56 and prospects for 1956–57. As a result of this review, a further restraint was imposed upon the flow of imports and the basis of import licensing was recast.

Goods of Japanese origin have been subject to import licensing control since the resumption of private trading with Japan early in 1948. With the introduction of licensing controls on all imports as from March, 1952, the restrictions on Japanese goods were intensified and the issue of licences was restricted within given values to essential goods not available from other non-dollar sources. A gradual relaxation occurred in line with the controls operating on non-dollar, non-Japanese goods but all applications for Japanese goods continued to be dealt with on an individual basis. In November, 1954, effect was given to a policy of assimilating Japan with other non-dollar countries for import licensing purposes. The net result of this assimilation is that import controls are now administered in relation to two currency areas only, namely, the dollar area and all other countries.

Restrictions on imports from the dollar area have been maintained in varying degrees since their imposition in December, 1939 and, in general, the issue of licences for the importation of goods from the dollar area is restricted to goods of a high degree of essentiality, unavailable in adequate quantities from other countries. The goods imported from the dollar area are mainly capital goods, raw materials, semi-manufactures and other producer goods. All applications for licences are treated on the merits of each individual case.

(ii) *Customs (Prohibited Imports) Regulations.* In addition to the Import Licensing Regulations which are imposed for balance of payments reasons, section 52 of the Customs Act provides for the prohibition of the importation of specified types of commodities and also provides for the making of regulations prohibiting the importation of other types of commodities.

Prohibition by regulation may be exercised by—(a) prohibiting the importation of goods completely; (b) prohibiting the importation of goods except with the consent of the Minister; (c) prohibiting the importation of goods except subject to conditions. Lists of products subject to prohibition are set out in the Customs (Prohibited Imports) Regulations. Commodities the importation of which has been prohibited under the regulations include dangerous drugs, firearms, undesirable publications and articles deleterious to public health.

8. **Export Control.**—(i) *Commodity Control.* Section 112 of the Customs Act provides that the Governor-General may by regulation prohibit the exportation of goods from Australia and that this power may be exercised by—(a) prohibiting the exportation of goods absolutely; (b) prohibiting the exportation of goods to a specified place; and (c) prohibiting the exportation of goods unless prescribed conditions or restrictions are complied with. Goods subject to this export control are listed in the Customs (Prohibited Exports) Regulations.

(ii) *Monetary Control—Banking Act 1945–1953.* As an integral part of the framework of exchange control, a control over goods exported from Australia is maintained under the provisions of Part III. of the Banking (Foreign Exchange) Regulations to ensure that the full proceeds of such goods are received into the Australian banking system and that these proceeds are received in the currency and in the manner prescribed by the Commonwealth Bank of Australia. This action is complementary to that taken under other parts of the Banking (Foreign Exchange) Regulations to control the movement out of Australia of capital in the form of securities, gold and currency.

Provision is made in the regulations for the grant of export licences subject to such terms and conditions as are imposed. On the receipt in Australia by the Commonwealth Bank, or by a bank acting as agent for that Bank, of advice that the foreign currency has been paid to the Commonwealth Bank or to an agent of the Bank in payment for goods exported in accordance with a licence granted under the regulations, the Bank, or an agent of the Bank, pays the licensee, or such other person as is entitled to receive it, an amount in Australian currency equivalent to the foreign currency received. In addition to commercial transactions, exports by private individuals are controlled. Persons leaving Australia for overseas are required to obtain licences to cover their bona fide baggage, personal effects and household effects in any individual case where the gold content thereof exceeds £A50, or where jewellery and other articles of high intrinsic worth either exceed £A1,000 in value or have not been the personal property of the passenger for at least twelve months.

9. **Trade Agreements.**—(i) *The United Kingdom.* The United Kingdom and Australia Trade Agreement (Ottawa Agreement) was signed on and had effect from 20th August, 1932, although the Australian tariff changes which were necessary in order to implement the preference formula in the agreement did not operate until 14th October, 1932. Broadly speaking, Australia secured preferences in the United Kingdom market for a wide range of Australian export commodities and in return Australia incurred obligations in respect of tariff levels and the grant of preference to United Kingdom goods.

(ii) *Canada.* The existing trade agreement between Canada and Australia came into force on 3rd August, 1931. The basis of the agreement is, generally, the mutual accord of British Preferential Tariff treatment. Exceptions to this general rule are specified in the schedules to the agreement.

The Customs Tariff (Canadian Preference) 1931 and the Customs Tariff (Canadian Preference) 1934–1956 give effect to the agreement so far as Australia is concerned.

(iii) *New Zealand.* The existing trade agreement between Australia and New Zealand came into force on 1st December, 1933. The basis of the agreement is, generally, the mutual accord of British Preferential Tariff treatment. The exceptions to this general rule are listed in the schedules to the agreement.

The Customs Tariff (New Zealand Preference) 1933–1954 gives legislative effect to the provisions of the agreement.

(iv) *Federation of Rhodesia and Nyasaland.* During June, 1955, a trade agreement was negotiated with the Federation. Australia's principal undertaking was to grant an exclusive tariff preference to the Federation on unmanufactured tobacco, a concession formerly accorded to Southern Rhodesia only under a trade agreement now terminated. The Federation accorded preferential tariff treatment on a wide range of Australian export products, including wheat and powdered and condensed milk.

(v) *Other Countries.* Australia has entered into bilateral trade agreements with the Union of South Africa, Belgium, Brazil, Czechoslovakia, France, Greece and Switzerland. Summaries of the texts of these agreements were given in earlier issues of the Official Year Book. In 1951, Australia entered into a trade agreement with Israel under which each country undertook to accord most-favoured-nation tariff treatment to imports from the other. A similar agreement with Iceland was concluded in 1952.

(vi) *The General Agreement on Tariffs and Trade (G.A.T.T.).* The General Agreement on Tariffs and Trade is an international trade agreement which has been in operation since 1st January, 1948. Australia was an original signatory of the Protocol of Provisional Application, by which Parts I. and III. of the Agreement are being provisionally applied. Part II. is being applied to the fullest extent not inconsistent with existing legislation at the date of signature of the Protocol.

In May, 1957 there were 35 contracting parties to the Agreement, comprising most of the world's larger trading nations.

Many of the Articles in Part II. of the General Agreement are similar to articles which were included in the Havana Charter for an International Trade Organization. Had the Charter come into force, Part II. of the General Agreement, containing general commercial policy provisions to prevent the circumvention of tariff concessions by other measures, would have been suspended.

Four series of tariff negotiations have been conducted under the provisions of the General Agreement. As a result of these negotiations, Australia has obtained tariff concessions on almost all the principal products of which she is an actual or potential exporter to the individual countries concerned. These concessions were a result both of direct negotiation by Australia and of negotiation by other countries—in the latter case, the benefits occur through the operation under the Agreement of the most-favoured-nation principle.

The contracting parties periodically hold plenary sessions to deal with questions arising out of the administration of the agreement. The eleventh session was held at Geneva in October, 1956.

§ 3. Imperial Preference in the United Kingdom.

1. *Preferential Tariff of the United Kingdom.*—Prior to 1919 the United Kingdom levied duties on a limited number of items for revenue purposes and did not extend preferential treatment to any of the Empire countries. The majority of imported goods entered the United Kingdom free of duty and, in fact, there was no scope for preferential treatment. In 1919, however, the range of revenue duties was extended and preference rates of duty were established on certain items, those so affected of interest to Australia at that time being currants, dried and preserved fruit, sugar, molasses and wine.

The extension of preferential treatment was conditional on the goods being consigned from, and grown, produced or manufactured in, the British Empire. In the case of manufactured articles, preference applied only where a prescribed proportion of their value was the result of labour within the British Empire. The conditions have been embodied in all subsequent preference arrangements in substantially the same form.

During the period from 1919 to 1932 it became increasingly obvious that the United Kingdom, for economic reasons, was being forced to depart from the free trade principles which had conditioned trade during the years preceding the 1914-18 War. Every time a new duty was introduced, provision was made for further preferential treatment to Empire products, although, in a great many cases, the preferences were of little or no significance to Australia, because the new duties were on products which were neither grown nor manufactured in Australia. The Safeguarding of Industries Act 1921 provided for the imposition of duties on imports of key industry goods from foreign countries with free

entry or preferential rates on similar goods from Empire countries. The purpose of these duties was to provide protection to vital United Kingdom industries in order to encourage their growth without fear of foreign competition. Similarly, the Dyestuff Import Regulations of the previous year allowed the unrestricted import of dyestuffs of Empire origin, whereas imports of foreign dyestuffs were subjected to licensing restrictions. In 1925, preferences were accorded or increased on sugar (for ten years), tobacco, dried fruit, wine and several other items. In succeeding years Key Industries Duties were imposed on a further range of industrial goods and in 1927 screening quotas for British films and in 1928 further sugar concessions were introduced.

By 1931, therefore, the United Kingdom imposed duties on a fairly wide range of goods, provision being made in all cases for preferential treatment to Empire goods. The important preferences for Australia which emerged from these enactments were those on sugar, dried fruit, wine and jams and jellies. Even at this time, however, the United Kingdom adhered to the principles of free trade and by far the greater part of imports was free of duty.

In order to counteract the flood of dumping which followed the collapse of world trade in 1929-30, the United Kingdom introduced emergency tariff legislation in 1931. *Ad valorem* duties were imposed on almost all goods imported into the United Kingdom with the exception of certain raw materials, goods from Empire countries being exempt from these duties. These temporary measures were embodied in the Import Duties Act of March, 1932, by the enactment of which the United Kingdom finally abandoned free trade as a policy. This Act provided for the free entry for Empire goods pending the conclusion of some permanent agreement. The Ottawa Agreements Act of November, 1932 emerged from the Imperial Economic Conference held in Ottawa and embodied agreements concluded between the United Kingdom and the Dominions, Newfoundland and Southern Rhodesia. For the purpose of considering the present preferences enjoyed by Australia in the United Kingdom, it is expedient to regard the Import Duties Act and the Ottawa Agreements Act as complementary.

The Import Duties Act provided for the imposition of a general *ad valorem* duty of 10 per cent. on all imports with certain exceptions (i.e., those on the Free List and those already dutiable under previous enactments). Additional duties could be imposed and items on the Free List subjected to duty, and in fact the range of items subject to duties under this Act has been extended from time to time since its enactment.

The freedom of Empire goods from these duties was guaranteed under the Ottawa Agreements Act, which also provided for the imposition of new duties on imports from foreign, but not Empire, countries of a number of products of special interest to the Empire countries concerned. Whilst free entry was guaranteed to Empire producers on a wide range of products, the margins of preference thereby applicable were not bound, and the duties could be varied up or down by the United Kingdom Government without the consent of Empire countries. On a selected range of items, however, which are specified in the schedules to the Ottawa Agreements Act, the duties may not be varied by the United Kingdom without the consent of the other party to the respective agreement.

Since 30th October, 1947, Canada and the United Kingdom have, by an exchange of letters, recognized the rights of their respective Governments to reduce or eliminate the preferences they accord one another without prior consultation or consent.

2. The Australia-United Kingdom Trade Agreement.—This Agreement is a unit of the Ottawa Agreements and through it preferences in the United Kingdom were established on a number of export items of considerable importance to Australia. The preferences accorded are summarized as follows, the rates being shown in sterling currency:—

- (a) Continued free entry was guaranteed for three years for Australian eggs, poultry, butter, cheese and other milk products. (This freedom of entry still continues.) Similar foreign goods were subjected to duty, thus giving Australia a preference of 1s. to 1s. 9d. per 120 eggs; 10 per cent. *ad val.* on poultry; 15s. per cwt. on butter; 15 per cent. *ad val.* on cheese; 5s. per cwt. on sweetened whole condensed milk; and 6s. per cwt. on unsweetened whole condensed milk and milk powder and other unsweetened preserved milk.

- (b) Preferences were created on the following products by imposing a duty on like foreign articles whilst guaranteeing free entry to Australian produce; wheat (2s. per quarter); apples and pears (4s. 6d. per cwt.); canned apples (3s. 6d. per cwt.); other canned fruit (15 per cent. *ad val.*); certain dried fruit, raisins, etc. (10s. 6d. per cwt.); honey (7s. per cwt.); oranges (3s. 6d. per cwt. in season); raw grapefruit (5s. per cwt. in season); and grapes 1½d. per lb. in season).
- (c) The preferential margins on the commodities mentioned in (a) and (b) above were not to be reduced without the consent of the Australian Government and this provision also applied to the 10 per cent. preference on leather, tallow, canned meats, barley, wheat flour, macaroni, dried peas, casein, eucalyptus oil, meat extracts and essences, copra, sugar of milk, sausage casings, wattle bark, asbestos and certain dried fruits.
- (d) The Agreement also provided for a preference of 2d. per lb. on unwrought copper, but this was never implemented as Empire producers could not demonstrate their ability to continue offering their copper on first sale to the United Kingdom at prices not exceeding the world price, which was a condition of the preference. A similar condition applied to wheat, zinc and lead. In the case of zinc and lead the duty was changed at an early stage in the life of the Agreement from an *ad valorem* rate of 10 per cent. to a specific rate.
- (e) Australia, although not securing in the Agreement with the United Kingdom a commitment on the amount and duration of the preference margin applying to a number of commodities of some importance to Australia (e.g., rice), had its interests safeguarded by the fact that such items were usually covered by the United Kingdom's agreement with another Empire country. Such benefits were generalized to Australia.
- (f) The United Kingdom agreed to regulate meat imports and stated that its policy was to give the Dominions an expanding share of United Kingdom meat imports.
- (g) Preferential tariff advantages were also obtained in the British non-self-governing colonies and protectorates.

The preferences operating before, and not increased by, the Ottawa Agreement were continued. Thus the preferential margins on heavy wines, sugar, the sugar content of goods containing added sweetening matter, currants, etc., remained in operation.

3. **Developments since the Ottawa Agreement.**—The Australia-United Kingdom Agreement operated with virtually no alteration until the beginning of 1939. Since then the following have been the major factors responsible for altering its terms or significance:—

- (a) *The United Kingdom-United States of America Trade Agreement, 1938.* This Agreement became effective from 1st January, 1939, and, to enable the United Kingdom to secure concessions from the United States of America, Australia agreed to the following reductions in the preferences which her products were enjoying in the United Kingdom:—

Wheat (preference eliminated); apples and pears (1s. 6d. per cwt. in Northern Hemisphere season); honey (2s. per cwt.); canned apples (1s. 3d. per cwt.); canned grapefruit (preference eliminated). The *ad valorem* duty of 15 per cent. was replaced by specific duties of 5s. 6d. per cwt. on canned fruit salad, 5s. per cwt. on canned pineapples and 4s. per cwt. on canned loganberries.

- (b) *Long-term Contracts with the United Kingdom.* During the war and in the post-war period, Australia negotiated contracts with the United Kingdom under which the Ministry of Food undertook to purchase the whole or a substantial part of the exportable surplus of several important Australian products normally entitled to preferential treatment. The commodities concerned were meat, sugar, flour, dried fruit, apples, canned fruit, butter, cheese, eggs, tallow and copra.

While bulk purchasing was in operation the preferential system was by-passed in respect of the commodities affected, but as the United Kingdom has returned the marketing of foodstuffs to private traders, United Kingdom importers of these goods from foreign sources are again obliged to pay duties.

The only Australian commodity still purchased by the United Kingdom Government under bulk contract is copra. In the case of sugar, the British Commonwealth Sugar Agreement sets an upper limit to the quantity of Australian sugar that may be sold in any year but the Agreement provides for sales at prices above world price levels. Exports of meat to the United Kingdom are protected by the Australia - United Kingdom 15 Year Meat Agreement, which sets minimum prices for Australian meat sold in the United Kingdom.

- (c) *The General Agreement on Tariffs and Trade.* Australia has participated in the four rounds of tariff negotiations under this agreement held at Geneva, 1947, Annecy, 1949, Torquay, 1950-51 and Geneva, 1955-56. In order to reach agreement with the various countries participating in these tariff negotiations, Australia consented to a number of reductions in preference margins guaranteed to her under the Ottawa Agreements, in return for more favourable tariff treatment in some twenty-seven countries with which agreements have been made. The reductions are summarized below:—

Apples (margin eliminated during Northern Hemisphere season); raisins (2s. per cwt.); canned peaches, pears and apricots (3 per cent. *ad val.*); non-tropical canned fruit salad (margin eliminated); dried apricots (2s. 6d. per cwt.); dried prunes, apples, peaches and nectarines (margin eliminated); honey (nil to 1s. 6d. per cwt. according to value for duty). The preference margin was also modified on a number of items in which Australia was interested but on which her consent to reduction was not required under the Ottawa Agreement. Examples are fruit pulp, pig iron, rice, hard soap, glue, gelatine and size.

The preference on heavy wine was increased from 4s. per gallon to 10s. per gallon.

- (d) *Increases in Commodity Prices.* The effective value of margins of preference accorded Australia under the Australia-United Kingdom Agreement, which are expressed in terms of British currency ("specific margins"), has been reduced, particularly in the post-war period, by rises in the prices of commodities on which they were accorded. The commodities affected are butter, eggs, processed milk, honey, fresh apples, pears, oranges, grapefruit, grapes, canned apples, loganberries, pineapples, tropical fruit salad, raisins, dried apricots, sugar, sugar of milk and wines.

The following table shows, for selected items, how the *ad valorem* incidence of specific preference margins has been reduced by increases in the average value of the commodities on which they are granted.

IMPERIAL PREFERENCE: CHANGES IN VALUE OF PREFERENCES.

Ad Valorem Incidence of Specific Preferences Received by Australia in the United Kingdom.

Commodity.	Preference Margin.	<i>Ad Valorem Incidence. (a) (Per cent.)</i>			
		1938.	1947.	1953.	1954.
Sugar, raw	£3 14s. 8d. per ton	35.8	12.2	9.5	9.4
Butter	15s. per cwt. ..	13.3	7.6	4.5	4.3
Beef (frozen)	3d. per lb. ..	17.3	10.3	4.6	4.3
Canned pineapple	5s. per cwt. ..	21.4	5.5	3.3	2.9
Currants	2s. per cwt. ..	7.2	2.8	2.4	2.4
Raisins	10s. 6d. per cwt. to 1947; 8s. 6d. per cwt. from 1948	31.2	13.1	9.6	9.7
Honey	7s. per cwt. to 1938; 5s. per cwt. from 1939	19.0	6.8	5.1	5.4
Milk, condensed, sweetened	5s. per cwt. ..	13.1	4.8	3.9	3.9
Milk, dried whole	6s. per cwt. ..	8.7	4.7	2.9	2.9
Milk, dried skim	6s. per cwt. ..	20.1	7.4	5.8	7.0
Apples	4s. 6d. per cwt. ..	26.4	9.9	5.6	5.9
Pears	4s. 6d. per cwt. ..	19.5	6.7	5.5	5.3

(a) The *ad valorem* incidence of a preference is calculated by expressing the specific margin of preference (in £ sterling per cwt., per ton, etc.) on a particular commodity as a percentage of the average unit value (in £ sterling per cwt., per ton, etc.) of United Kingdom imports of that commodity from all sources in the year concerned.

(e) *Review of the Ottawa Agreement.* In July, 1956, discussions began in London between representatives of Australia and the United Kingdom about the trade problems of the two countries, with the intention of arriving at a new agreement.

§ 4. Trade Commissioner Service.

In the interest of building and maintaining a high level of trade, Governments nowadays generally appoint commercial representatives in their main export markets, their duties including the collection of information about trade conditions, assisting exporters in their difficulties and promotion of trade generally.

Prior to 1929, Australian representation abroad was limited to the High Commissioner's Office in London, with a subsidiary agent in Paris, and the Office of the Commissioner-General for Australia in New York. Apart from the facilities afforded by those offices, the only form of oversea trade representation available to Australia was that of the United Kingdom Department of Overseas Trade, whose activities were naturally concerned with the development of United Kingdom rather than Dominion trade.

The growing importance of Australia's trade with Canada led to the appointment in 1929 of an Australian Trade Commissioner in that country. The part played by that official in the subsequent negotiations of the Trade Agreement with Canada, in the cultivation of close and cordial relations with the Canadian authorities, and in general in focussing interest on Australia and Australian products, amply demonstrated the value of such appointments to both the Commonwealth Government and the Australian trading community.

The Trade Commissioners Act 1933 provided for the establishment of an Australian Government Trade Commissioner Service and by the beginning of the 1939-45 War posts had been established at Wellington, Batavia (now Djakarta), Shanghai, Tokyo, Cairo, Bombay, New York and Calcutta. The Trade Commissioner Service was further expanded in 1946 and in February, 1957 there were 25 Trade Commissioner posts in 19 countries.

The general advantages to be derived from the appointment of Trade Commissioners may be briefly stated as follows:—(a) fostering of goodwill, (b) correction and avoidance of misunderstandings, and (c) dissemination of knowledge concerning the respective countries. Particular facilities which they are able to afford to the trading community are (a) information as to present and prospective demand for goods, (b) information as to foreign and local competition, (c) advice as to best selling methods, (d) reports as to the standing of foreign buyers, (e) specification of articles in demand, (f) dealing with trade inquiries, (g) advice and assistance to commercial visitors regarding trade matters, (h) settlement of difficulties between exporters in Australia and buyers abroad, and (i) furnishing of information as to foreign import requirements, customs duties, trade regulations, etc.

In addition to the foregoing trade functions, it is the duty of a Trade Commissioner to watch and advise the Government of any developments in his territory (which may include several countries) likely to affect trade and commerce with Australia, and other matters of economic interest to the home Government. He may be called upon to represent his Government at oversea conferences, and in certain countries where there is no diplomatic or consular mission (e.g., British West Indies, Hong Kong and the Federation of Rhodesia and Nyasaland), he is called upon to act as the Australian representative on official occasions.

Trade Commissioners usually enter the Service from either the commercial world or the Public Service, and applications for entry into the Service are called for periodically by public advertisement. In the more important posts it is the practice for the Trade Commissioner to share his duties with an Assistant Trade Commissioner, who is selected to be trained in the Service and qualify at a later stage for appointment as a Trade Commissioner. These staffing arrangements are designed to enable the Government to draw upon experienced and able executives in both private enterprise and the Public Service, and at the same time to build up a body of competent personnel to carry out a policy of vigorous expansion in the field of oversea trade.

The Trade Commissioner Service is administered by the Commonwealth Department of Trade (as distinct from the diplomatic and consular services, administered by the Department of External Affairs), but in countries where there is an Australian diplomatic or consular mission it is the practice for Trade Commissioners to be attached to the mission and to hold an appropriate diplomatic or consular rank (Commercial Counsellor, Commercial Secretary or Commercial Attaché).

The oversea trade representation is shown in Chapter XXX.—Miscellaneous.

§ 5. Method of Recording Imports and Exports.

1. **Source of Statistics.**—Oversea trade statistics are compiled from documents obtained under the Customs Act and supplied to this Bureau by the Department of Customs and Excise.

2. **Customs Area.**—The Customs Area, to which all oversea trade statistics issued by this Bureau apply, is the whole area of the Commonwealth of Australia. Non-contiguous territories are treated as outside countries, and trade transactions between Australia and these non-contiguous territories are part of the oversea trade of Australia. Such transactions are shown separately, i.e., the trade of Australia with each particular country is separately recorded and tabulated.

3. **The Trade System.**—There are two generally accepted systems of recording oversea trade statistics, namely, (a) special trade and (b) general trade, and statistics of both are published by the Bureau, although greater emphasis is placed on general trade. The United Nations Statistical Office defines the two systems as follows:—

(a) *Special Trade.* Special imports are the combined total of imports directly for domestic consumption and withdrawals from bonded warehouses or free zones for domestic consumption, transformation or repair. Special exports comprise exports of national merchandise, namely, goods wholly or partly produced or manufactured in the country, together with exports of nationalized goods. (Nationalized goods are goods which, having been included in special imports, are then exported.)

- (b) *General Trade.* General imports are the combined total of imports directly for domestic consumption and imports into bonded warehouse or free zone. Direct transit trade and trans-shipment under bond are excluded. General exports are the combined total of national exports and re-exports of imported merchandise including withdrawals from bonded warehouse or free zone for re-export.

The tables which follow refer to general trade, except for those appearing in § 16, para. 2, which refer to imports cleared for home consumption.

4. **Statistical Classification of Imports and Exports.**—Statistics of overseas imports and exports from which the summary tables in this issue of the Official Year Book have been extracted were compiled according to the revised classification which came into operation on 1st July, 1945. This classification is designed to allow for the inclusion of items which become significant with varying trade conditions, and in 1955–56 provided for 2,201 separate import items and 1,056 export items.

5. **The Trade Year.**—From 1st July, 1914, the statistics relating to overseas trade have been shown according to the financial year (July to June). Prior to that date the figures related to the calendar year. A table is included in § 17 showing the total value of imports and exports in the calendar years 1952 to 1956 inclusive.

6. **Valuation.**—(i) *Imports.* The recorded value of goods imported from countries beyond Australia as shown in the following tables represents the amount on which duty is payable or would be payable if the duty were charged *ad valorem*. By Act No. 54 of 1947, which operated from 15th November, 1947, the Customs Act was amended to provide that the value for duty of goods imported into Australia should be the f.o.b. value in Australian currency instead of the British currency f.o.b. value plus 10 per cent.

Section 154 (1) of the Customs Act 1901–1954 provides that “when any duty is imposed according to value, the value for duty shall be the sum of the following :—

- (a) (i) the actual money price paid or to be paid for the goods by the Australian importer plus any special deduction, or
 (ii) the current domestic value of the goods, whichever is the higher ; and
 (b) all charges payable or ordinarily payable for placing the goods free on board at the port of export.”

“Current domestic value” is defined as “the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country.” All import values shown throughout this and other chapters of this issue of the Official Year Book are therefore uniform f.o.b. values at port of shipment in Australian currency.

(ii) *Exports.* Since 1st July, 1937, the following revised definitions of f.o.b. values have been adopted for exports generally :—

- (a) Goods sold to overseas buyers before export—the f.o.b. port of shipment equivalent of the price at which the goods were sold (e.g., as regards wool, the actual price paid by the overseas buyer plus the cost of all services incurred by him in placing the wool on board ship).
 (b) Goods shipped on consignment—the Australian f.o.b. port of shipment equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods were dispatched for sale (as regards wool, the f.o.b. port of shipment equivalent of the current price ruling in Australia will normally provide a sufficient approximation to the f.o.b. port of shipment equivalent of the price ultimately received).

Exporters are required to show all values in terms of Australian currency, and to include the cost of containers.

An account of the bases of valuation in operation prior to 1st July, 1937 was given on page 469 of Official Year Book No. 39.

7. **Inclusions and Exclusions.**—(i) *Ships' Stores.* Prior to 1906, goods shipped in Australian ports on oversea vessels as ships' stores were included as exports. From 1906, ships' stores have been specially recorded as such, and omitted from the tabulation of exports. A table showing the value of these stores (including bunker coal and oil) shipped each year since 1951–52 is shown on page 352.

(ii) *Outside Packages.* Outside packages (containers, crates, etc.) have always been included as a separate item in the tabulation of imports, but except for those received from the United Kingdom a classification according to country of origin has been available only since 1950–51. For exports, however, the value recorded for each item includes the value of the outside package.

(iii) *Trade on Government Account.* Imports and exports on Government account are treated as normal transactions and are an integral part of oversea trade transactions.

(iv) *Currency.* Notes and coins of base metal are included in the oversea trade statistics at their commodity value only.

(v) *Gold Content of Ores and Concentrates.* The value of ores and concentrates imported and exported includes the value of the gold content. The latter is not recorded separately for purposes of inclusion in imports and exports of gold.

(vi) *Personal Effects.* Migrants' effects are included in imports and exports.

8. **Countries to which Trade is Credited.**—(i) *Imports.* From 1st January, 1905, in addition to the record of the countries whence goods arrived directly in Australia, a record of the countries of their origin was kept, as it was considered that classification of imports according to country of origin was of greater interest and value than classification according to country of shipment. Up to and including the year 1920–21, imports continued to be classified both according to country of shipment and according to country of origin, but the former tabulation was discontinued as from the year 1921–22.

(ii) *Exports.* In the export sections of tables in this chapter, "country" refers to country of consignment.

9. **Pre-Federation Records.**—In the years preceding Federation, each State independently recorded its trade, and in so doing did not distinguish other Australian States from foreign countries. As the aggregation of the records of the several States is necessarily the only available means of ascertaining the trade of Australia for comparison with later years, it is unfortunate that past records of values and the direction of imports and exports were not on uniform lines. Imports and exports for years prior to Federation may be found in issues of the Official Year Book prior to No. 41. On the introduction of the Customs Act 1901 the methods of recording values were made uniform throughout the States.

§ 6. Total Oversea Trade.

1. **Including Gold.**—The following table shows the total trade (including gold) of Australia with oversea countries from 1901 to 1955–56. To save space, the period 1901 to 1950–51 has been divided into five-year periods, and the figures shown represent the annual averages for the periods specified. Figures for individual years were published in earlier issues of the Official Year Book, but it should be borne in mind that the figures for imports in issues prior to No. 37 were in British currency.

In this chapter the values in all tables of imports and exports are shown in Australian currency f.o.b. at port of shipment.

OVERSEA TRADE : AUSTRALIA.
(INCLUDING GOLD.)

Period.(a)	Value.(£'000.)			Excess of Exports (+) or Imports (-). (£'000.)	Value per Head of Population.(£)			
	Imports.	Exports.	Total.		Imports.	Exports.	Total.	
1901 to 1905 ..	35,689	51,237	86,926	+	15,548	9.1	13.1	22.2
1906 to 1910 ..	46,825	(b) 69,336	116,161	+	22,511	11.0	16.3	27.3
1911 to 1915-16 ..	66,737	74,504	141,241	+	7,767	13.8	15.4	29.2
1916-17 to 1920-21	91,577	115,066	206,643	+	23,489	17.4	21.9	39.3
1921-22 to 1925-26	124,404	134,545	258,949	+	10,141	21.1	22.9	44.0
1926-27 to 1930-31	119,337	131,382	250,719	+	12,045	18.6	20.5	39.1
1931-32 to 1935-36	73,798	120,958	194,756	+	47,160	11.1	18.1	29.2
1936-37 to 1940-41	123,553	157,610	281,163	+	34,057	17.8	22.7	40.5
1941-42 to 1945-46	211,514	163,955	375,469	-	47,559	29.1	22.4	51.5
1946-47 to 1950-51	449,273	571,430	1,020,703	+	122,157	57.2	72.7	129.9
1951-52.. ..	1,053,423	675,008	1,728,431	-	378,415	123.5	79.1	202.6
1952-53.. ..	514,109	871,272	1,385,381	+	357,163	58.9	99.7	158.6
1953-54.. ..	681,609	828,332	1,509,941	+	146,723	76.6	93.0	169.6
1954-55.. ..	843,742	774,164	1,617,906	-	69,578	92.8	85.2	178.0
1955-56.. ..	821,088	781,864	1,602,952	-	39,224	88.1	83.9	172.0

(a) The figures shown for the years 1901 to 1950-51 represent the annual averages for the periods covered. The trade for the individual years will be found in Official Year Book No. 40 and earlier issues, but it should be noted that in issues prior to No. 37 imports were shown in British currency. From 1914-15 onwards the particulars relate to financial years. (b) Prior to 1906, ships' stores were included in exports. For the value of such goods shipped on oversea vessels during each of the years 1951-52 to 1955-56 see table on p. 352.

In issues of the Official Year Book prior to No. 23, fluctuations in the value of the oversea trade of Australia for earlier years were treated in some detail. The enhanced prices ruling for commodities and the peculiar conditions affecting Australian trade were responsible for the high value of imports in the years following the 1914-18 War, and these factors should be taken into consideration in making comparisons with earlier years. In the three years ended 1928-29 imports fell while exports were well maintained, but in 1929-30 both imports and exports declined substantially. The full effects of the economic depression are reflected in the greatly diminished trade figures for the period 1931-32 to 1935-36 and some years thereafter. The lowest level was recorded in 1931-32 when the total trade amounted to £137,538,000.

The outbreak of war in the Pacific in 1941 resulted in a substantial increase in the value of imports during the years 1941-42 to 1945-46. Since the end of the war the annual values of imports and exports have increased considerably, largely because of higher prices.

A graph showing the oversea trade of Australia from 1930-31 to 1955-56 will be found on p. 341.

2. **Excluding Gold.**—The fluctuations in recent years in merchandise trade (including silver as merchandise) are shown more clearly in the following table, from which all gold movements have been excluded.

OVERSEA TRADE : AUSTRALIA.
(EXCLUDING GOLD.)

Year.	Value. (£'000.)			Value per Head of Population.(£)		
	Imports.	Exports.	Total Trade.	Imports.	Exports.	Total Trade.
1951-52	1,050,164	668,019	1,718,183	123.1	78.4	201.5
1952-53	510,513	850,874	1,361,387	58.4	97.5	155.9
1953-54	678,650	814,563	1,493,213	76.3	91.5	167.8
1954-55	841,018	760,446	1,601,464	92.5	83.7	176.2
1955-56	818,343	773,540	1,591,883	87.9	83.0	170.9

§ 7. Direction of Oversea Trade.

1. According to Countries.—(i) *Values.* The following table shows the value of Australian imports and exports during each of the years 1953-54 to 1955-56, according to country of origin or consignment respectively.

COUNTRIES OF ORIGIN OR CONSIGNMENT OF AUSTRALIAN IMPORTS AND EXPORTS : VALUES.

(EXCLUDING GOLD.)

(£'000.)

Country.	Imports.			Exports.		
	1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
<i>Commonwealth Countries—</i>						
United Kingdom	331,697	378,669	355,912	295,960	285,476	257,333
Australian Territories	4,723	5,792	6,860	12,180	12,910	15,102
Canada	18,742	23,840	23,306	11,037	10,503	10,911
Ceylon	13,490	19,516	8,632	11,847	8,723	8,687
India	18,475	26,057	23,469	14,293	19,428	12,159
Malaya, Federation of	8,721	12,797	16,230	9,143	8,410	9,337
New Zealand	6,387	7,602	8,254	33,459	37,787	40,920
Singapore	8,599	2,492	1,453	11,288	11,600	12,100
Other British Countries	31,827	46,741	32,342	32,233	32,124	30,660
<i>Total, Commonwealth Countries</i>	<i>442,661</i>	<i>523,506</i>	<i>476,458</i>	<i>431,440</i>	<i>426,961</i>	<i>397,209</i>
<i>Foreign Countries—</i>						
Arabian States	27,925	27,851	28,606	1,737	2,011	2,039
Belgium-Luxemburg	7,063	12,234	11,578	32,663	31,252	26,173
France	11,793	14,689	15,626	71,038	64,056	67,314
Germany, Federal Republic	21,365	30,838	34,998	27,096	31,823	36,431
Indonesia	21,972	22,529	22,401	6,585	3,702	6,705
Italy	11,182	11,740	11,821	51,326	35,915	34,621
Japan	6,545	18,422	22,592	55,689	58,573	86,490
Netherlands	9,618	13,081	13,233	5,578	6,857	6,192
Sweden	10,230	13,516	12,048	3,601	3,241	3,483
United States of America	73,254	102,157	98,790	55,505	52,415	54,998
Other Foreign Countries	34,412	49,410	69,115	72,305	43,637	51,873
<i>Total, Foreign Countries</i>	<i>235,359</i>	<i>316,467</i>	<i>340,808</i>	<i>383,123</i>	<i>333,482</i>	<i>376,379</i>
<i>Country unknown</i>	<i>630</i>	<i>1,045</i>	<i>1,077</i>	<i>..</i>	<i>3</i>	<i>12</i>
Total	678,650	841,018	818,343	814,563	760,446	773,540

(ii) *Proportions.* In view of the fluctuations in the total values of imports and exports, it is somewhat difficult to ascertain from the preceding table the relative importance of the various countries in the trade of Australia. A better idea of the proportions of imports supplied by the various countries and of their relative importance as markets for Australian exports during the years 1953-54 to 1955-56 may be obtained from the following table.

COUNTRIES OF ORIGIN OR CONSIGNMENT OF AUSTRALIAN IMPORTS AND EXPORTS : PROPORTIONS.

(EXCLUDING GOLD.)

(Per Cent. of Total.)

Country.	Imports.			Exports.		
	1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
<i>Commonwealth Countries—</i>						
United Kingdom	48.88	45.03	43.49	36.33	37.54	33.27
Australian Territories ..	0.70	0.69	0.84	1.50	1.70	1.95
Canada	2.76	2.83	2.85	1.36	1.38	1.41
Ceylon	1.99	2.32	1.05	1.45	1.15	1.12
India	2.72	3.10	2.87	1.75	2.55	1.57
Malaya, Federation of ..	1.29	1.52	1.98	1.12	1.11	1.21
New Zealand	0.94	0.90	1.01	4.11	4.97	5.29
Singapore	1.26	0.30	0.18	1.39	1.53	1.57
Other British Countries ..	4.69	5.56	3.95	3.96	4.22	3.96
<i>Total, Commonwealth Countries</i>	<i>65.23</i>	<i>62.25</i>	<i>58.22</i>	<i>52.97</i>	<i>56.15</i>	<i>51.35</i>
<i>Foreign Countries—</i>						
Arabian States	4.11	3.31	3.50	0.21	0.26	0.26
Belgium-Luxemburg	1.04	1.45	1.42	4.01	4.11	3.38
France	1.74	1.75	1.91	8.72	8.42	8.70
Germany, Federal Republic ..	3.15	3.67	4.28	3.33	4.19	4.71
Indonesia	3.24	2.68	2.74	0.81	0.49	0.87
Italy	1.65	1.40	1.44	6.30	4.72	4.48
Japan	0.96	2.19	2.76	6.84	7.70	11.18
Netherlands	1.42	1.55	1.62	0.68	0.90	0.80
Sweden	1.51	1.60	1.47	0.44	0.43	0.45
United States of America ..	10.79	12.15	12.07	6.81	6.89	7.11
Other Foreign Countries ..	5.07	5.88	8.44	8.88	5.74	6.71
<i>Total, Foreign Countries</i>	<i>34.68</i>	<i>37.63</i>	<i>41.65</i>	<i>47.03</i>	<i>43.85</i>	<i>48.65</i>
<i>Country unknown</i>	<i>0.09</i>	<i>0.12</i>	<i>0.13</i>	<i>..</i>	<i>..</i>	<i>..</i>
Total	100.00	100.00	100.00	100.00	100.00	100.00

2. *According to Currency Areas.*—The following table shows the trade of Australia according to currency areas during the years 1954-55 and 1955-56.

The sterling area includes the United Kingdom, its colonies and dependencies, all other countries of the British Commonwealth (except Canada and the New Hebrides Condominium) and certain non-British countries of which the most important are Burma, Bahrein Islands, other Arabian States (excluding Saudi Arabia and Yemen) and Iceland.

The dollar area is comprised of the United States of America and dependencies, Canada, Mexico, other Central American countries, Bolivia, Colombia, Ecuador, Venezuela, the Philippines and Liberia.

The O.E.E.C. area consists of non-sterling members of the Organization for European Economic Co-operation, namely, Belgium, France, Italy, Norway, the Netherlands and Portugal together with their associated States and dependencies, Austria, Denmark, the Federal Republic of Germany, Greece, Luxemburg, Sweden, Switzerland, Trieste, Turkey and the New Hebrides Condominium.

Of the remaining countries grouped under "other non-sterling", the more important as regards trade with Australia are Czechoslovakia, Finland, Poland, Spain, the Union of Soviet Socialist Republics, Egypt, Iran, Saudi Arabia, Japan, Indonesia, Thailand, Brazil and Chile.

OVERSEA TRADE OF AUSTRALIA ACCORDING TO CURRENCY AREAS.
(INCLUDING GOLD.)
(£'000.)

Currency Area.	1954-55.	1955-56.
STERLING.		
Imports—		
From—United Kingdom	378,669	355,912
Other Sterling Area Countries	144,319	123,990
Total	522,988	479,902
Exports—		
To—United Kingdom	285,506	257,414
Other Sterling Area Countries	144,467	141,478
Total	429,973	398,892
Excess of Exports (+) or Imports (—)	-93,015	-81,010
DOLLAR.		
Imports—		
From—United States of America	102,157	98,790
Canada	23,840	23,305
Other Dollar Area Countries	1,194	4,432
Total	127,191	126,527
Exports—		
To—United States of America	52,440	55,004
Canada	10,503	10,911
Other Dollar Area Countries	6,682	7,481
Total	69,625	73,396
Excess of Exports (+) or Imports (—)	-57,566	-53,131
OTHER NON-STERLING.		
Imports—		
From—Countries of the O.E.E.C., including dependencies	122,290	125,823
Other Countries	71,273	88,836
Total	193,563	214,659
Exports—		
To—Countries of the O.E.E.C., including dependencies	187,534	187,461
Other Countries	87,032	122,115
Total	274,566	309,576
Excess of Exports (+) or Imports (—)	+81,003	+94,917
ALL CURRENCY AREAS.		
Total Imports	843,742	821,088
Total Exports	774,164	781,864
Excess of Exports (+) or Imports (—)	-69,578	-39,224

A graph showing the overseas trade of Australia according to currency areas for the years 1950-51 to 1955-56 will be found on page 342.

§ 8. Trade with the United Kingdom.

1. Statistical Classes.—The following table shows, according to statistical classes, the value of imports into Australia of United Kingdom origin and of exports from Australia to the United Kingdom during each of the years 1953-54 to 1955-56.

TRADE WITH THE UNITED KINGDOM : CLASSES.
(£'000.)

Class.	Imports.			Exports.		
	1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
I. Animal foodstuffs, etc. . .	1,256	1,599	1,408	71,109	80,362	80,161
II. Vegetable foodstuffs; non-alcoholic beverages, etc. . .	967	1,085	1,031	69,619	64,808	57,396
III. Alcoholic liquors, etc. . .	1,118	1,688	1,742	460	417	432
IV. Tobacco, etc. . .	4,386	2,219	875	..	4	22
V. Live animals . . .	167	154	224	14	9	2
VI. Animal substances, etc. . .	446	321	395	120,546	110,910	86,039
VII. Vegetable substances, etc. . .	757	710	814	168	462	851
VIII. Apparel, textiles, etc. . .	66,681	66,061	51,672	168	253	194
IX. Oils, fats and waxes . . .	6,153	6,009	883	1,799	633	2,218
X. Pigments, paints and varnishes . . .	2,407	2,783	3,145	3	17	27
XI. Rocks, minerals, etc. . .	332	483	485	3,466	3,704	4,633
XII. Metals, metal manufactures and machinery . . .	171,677	205,282	203,334	22,175	19,474	19,809
XIII. Rubber and leather, etc. . .	2,935	4,041	3,540	1,655	1,402	1,654
XIV. Wood and wicker, etc. . .	361	378	368	541	395	534
XV. Earthenware, etc. . .	8,613	10,115	8,495	4	5	15
XVI. Paper and stationery . . .	19,102	21,643	22,644	199	285	282
XVII. Jewellery, etc. . .	2,506	3,179	2,914	36	45	60
XVIII. Optical, surgical and scientific instruments . . .	4,916	5,705	5,607	257	137	79
XIX. Chemicals, drugs, fertilizers . . .	9,816	14,485	14,597	514	380	504
XX. Miscellaneous . . .	(a)27,084	(a)30,729	(a)31,739	1,029	1,612	2,269
XXI. Gold and silver; bronze specie . . .	21	..	..	7,003	192	233
Total . . .	331,701	378,669	355,912	300,765	285,506	257,414

(a) Includes outside packages.

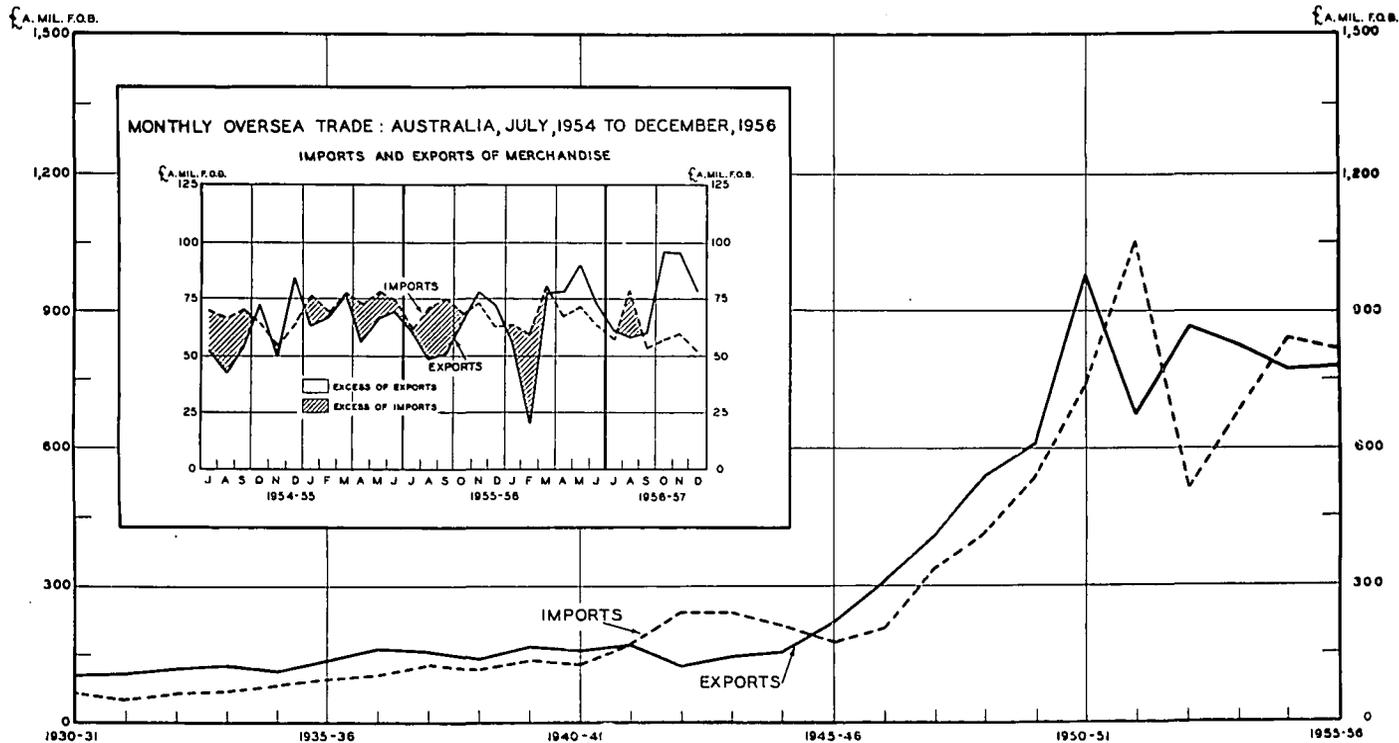
2. Imports of Principal Articles.—The following table shows the value of the principal articles imported into Australia from the United Kingdom during each of the years 1953-54 to 1955-56.

IMPORTS OF PRINCIPAL ARTICLES OF UNITED KINGDOM ORIGIN : AUSTRALIA.
(£'000.)

Article.	1953-54.	1954-55.	1955-56.	Article.	1953-54.	1954-55.	1955-56.
Arms and ammunition, military, naval and air force stores. . .	3,495	6,707	5,205	Motor vehicles, chassis, bodies and parts . . .	44,931	58,743	56,004
Apparel. . .	6,179	7,114	5,164	Optical, surgical and scientific instruments . . .	3,590	4,012	4,025
Carpets and carpeting . . .	6,823	7,710	5,976	Paper printing . . .	8,017	8,599	8,848
Chemicals, medicinal products, essential oils and fertilizers . . .	9,816	14,485	14,597	Piece-goods—			
Cigarettes . . .	4,296	2,137	802	Cotton and linen . . .	22,465	21,097	14,565
Crockery . . .	3,803	4,500	3,314	Silk and rayon . . .	8,157	7,038	4,544
Cutlery and platedware . . .	2,072	2,160	2,052	All other piece-goods . . .	4,381	5,048	5,000
Electrical cable and wire, covered . . .	1,868	1,826	1,828	Prefabricated houses and buildings . . .	2,067	533	806
Electrical machinery and appliances . . .	18,580	20,824	25,980	Rubber and rubber manufactures . . .	2,507	3,440	2,938
Glass and glassware . . .	2,497	2,928	2,976	Sewing silks, cottons, etc. . .	2,355	2,249	2,095
Iron and steel—				Stationery and paper manufactures . . .	7,459	8,422	9,208
Plate and sheet . . .	9,327	18,134	14,423	Tools of trade . . .	2,335	2,976	2,728
Other . . .	5,744	12,971	10,147	Vehicles and parts, other than motor vehicles . . .	6,958	4,573	4,775
Linoleums . . .	3,615	3,095	2,934	Yarns—			
Machines and machinery (except dynamo electrical)—				Cotton . . .	3,098	3,198	2,446
Agricultural . . .	2,822	3,202	3,487	Rayon . . .	6,034	5,523	5,868
Metal-working . . .	5,940	5,745	5,401	Other . . .	604	492	474
Motive-power . . .	25,911	23,307	25,730	All other articles(a) . . .	67,662	75,096	73,884
Other . . .	26,293	30,785	27,688	Total Imports . . .	331,701	378,669	355,912

(a) Includes outside packages.

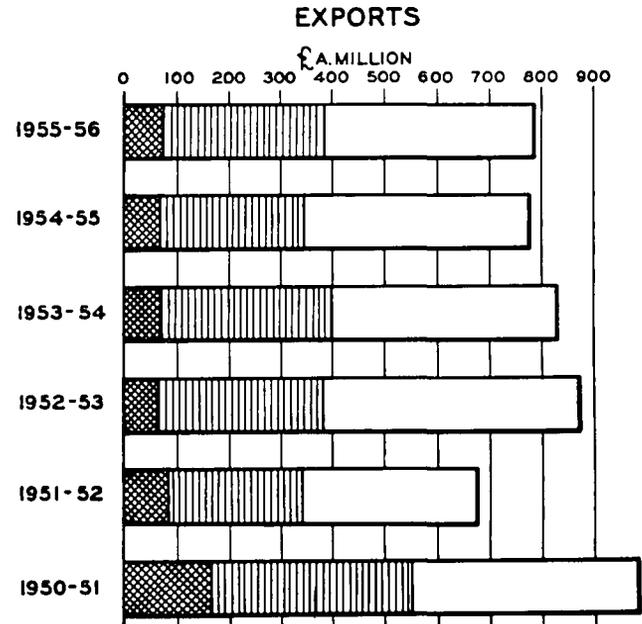
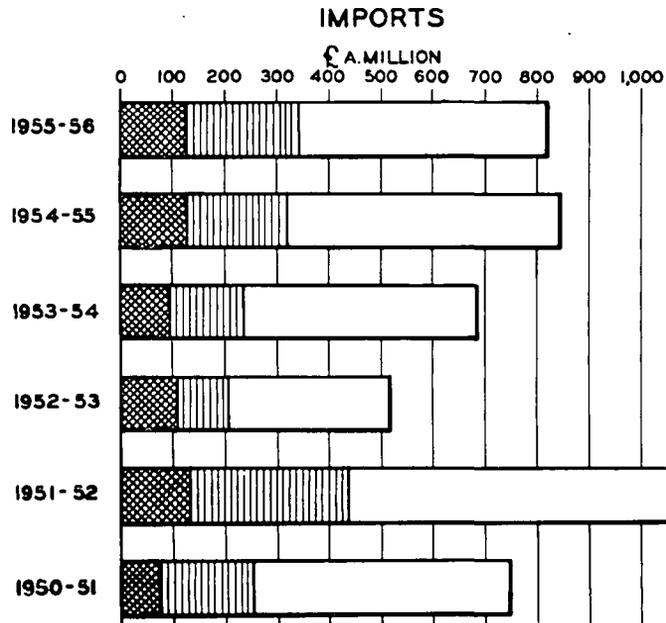
OVERSEA TRADE: AUSTRALIA, 1930-31 to 1955-56



OVERSEA TRADE ACCORDING TO CURRENCY AREAS

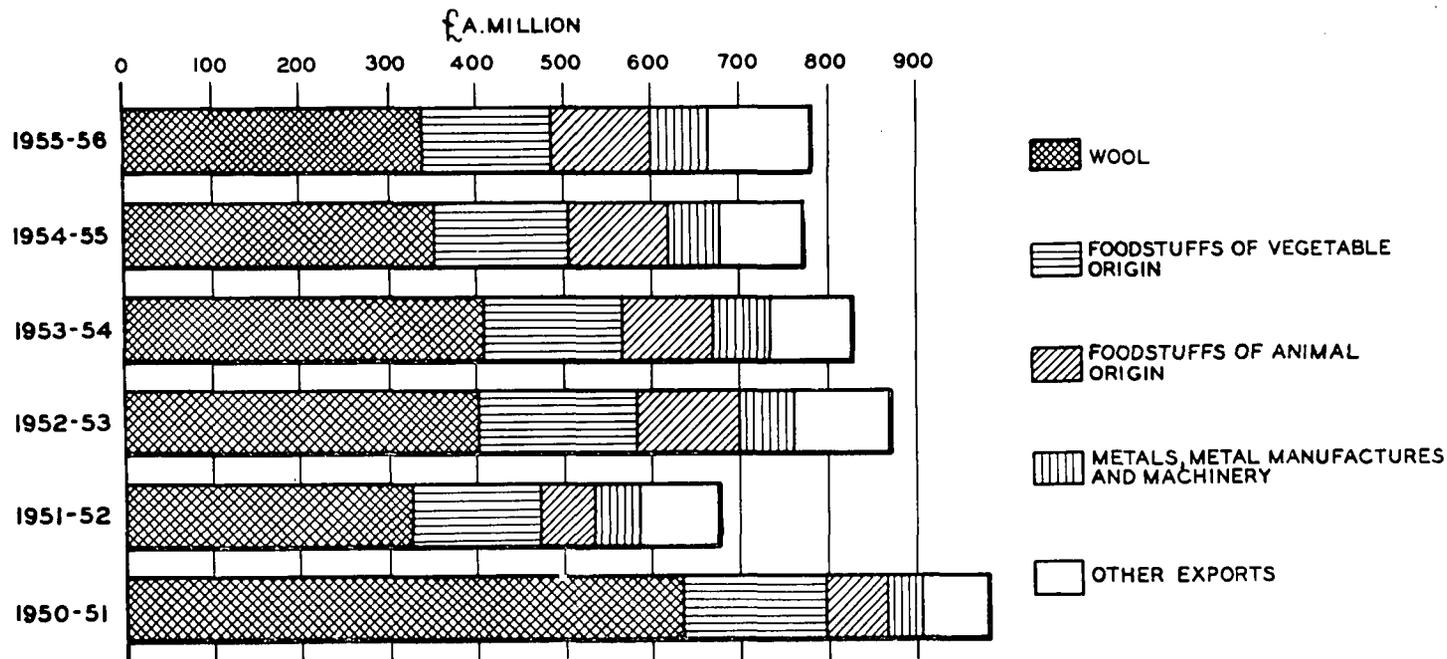
AUSTRALIA, 1950-51 TO 1955-56

DOLLAR AREA
 OTHER NON-STERLING AREAS
 STERLING AREA



EXPORTS OF PRINCIPAL COMMODITIES

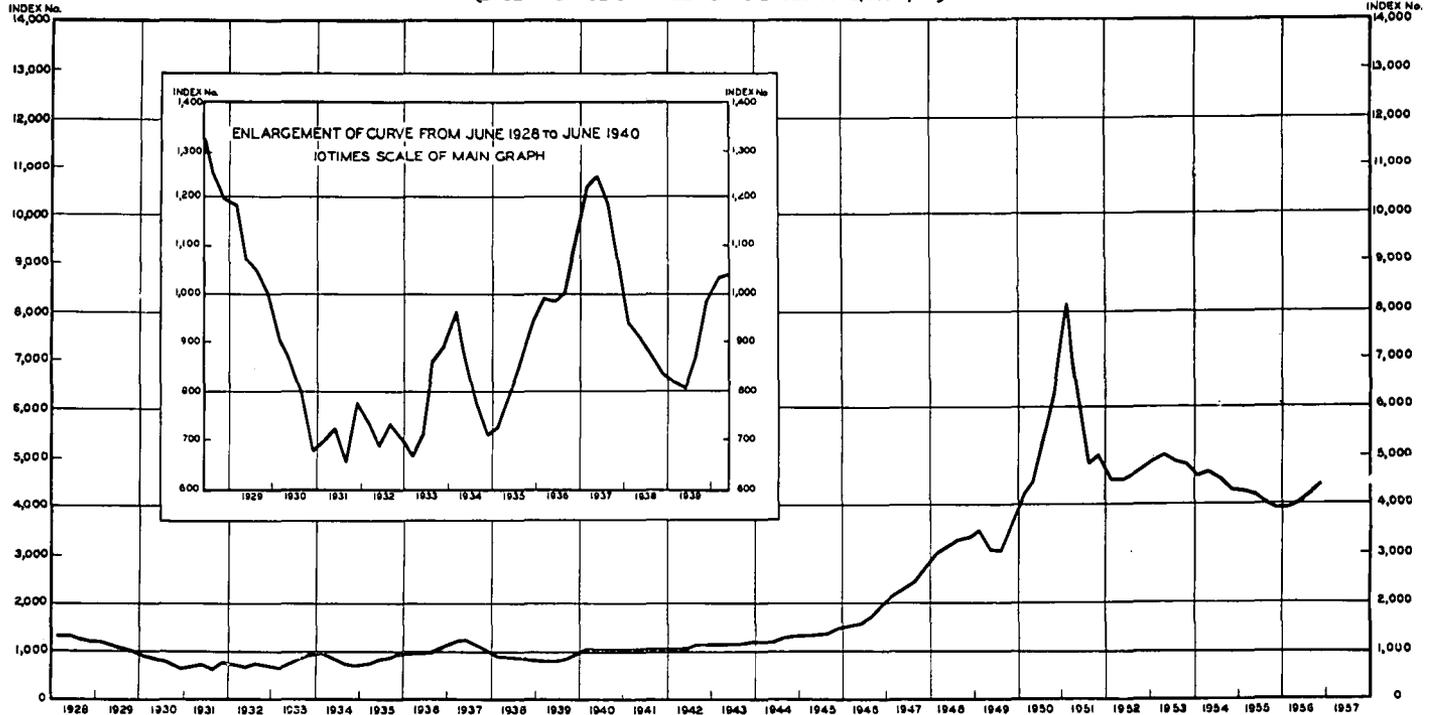
AUSTRALIA, 1950-51 TO 1955-56



EXPORT PRICE INDEX NUMBERS : AUSTRALIA, 1928 to 1956

SIMPLE AGGREGATIVE INDEX: FIXED WEIGHTS

(BASE: AVERAGE OF THREE YEARS ENDED JUNE, 1939 = 1,000)



3. Exports of Principal Articles of Australian Produce.—The following table shows the quantities and values of the principal articles of Australian produce exported to the United Kingdom during each of the years 1953-54 to 1955-56.

PRINCIPAL ARTICLES EXPORTED TO THE UNITED KINGDOM : AUSTRALIA.
(Australian Produce.)

Article.	Unit of Quantity.	Quantity.			Value.(£'000.)		
		1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
Barley	ton	176,066	91,349	71,897	3,904	2,322	1,441
Butter	"	29,054	54,485	72,420	11,295	20,767	24,464
Cheese	"	17,935	18,098	13,630	3,692	3,666	2,231
Eggs in shell	'000 doz.	9,907	16,642	12,902	2,075	2,697	2,115
Flour	ton(a)	65,659	80,832	67,079	2,442	2,261	1,767
Fruit, dried	ton	45,774	45,944	37,549	4,712	5,341	4,763
" fresh	'000 bus.	4,308	3,764	3,869	5,791	5,004	5,047
" preserved in airtight containers	ton	76,400	84,859	84,542	12,174	13,358	14,100
Gold	'000 fine oz.	298	2	5	4,773	30	80
Hides and skins .. .. .	"	..	..	..	2,596	2,803	2,745
Lead bullion	ton	34,124	40,818	29,812	4,393	6,133	4,639
" pig	"	108,137	77,398	85,089	11,692	9,495	11,368
Leather .. .. .	"	..	..	..	1,605	1,231	1,642
Meats preserved by cold process—							
Beef and veal	ton	121,080	98,139	112,347	18,016	16,708	17,247
Lamb	"	15,913	39,075	32,683	2,494	9,293	6,967
Mutton	"	17,669	8,608	10,757	1,292	927	1,342
Pork	"	90	1,890	450	26	446	128
Meats, tinned	"	55,859	53,122	49,134	18,948	17,584	15,427
Milk and cream	'000 lb.	38,225	9,519	24,550	2,102	396	955
Silver bullion	'000 fine oz.	5,772	408	348	2,188	158	141
Sugar (cane)	ton	534,749	435,017	327,127	23,751	18,962	13,909
Tallow (unrefined)	"	11,638	3,200	11,445	725	263	884
Timber, undressed(b)	'000 super ft.	5,424	3,280	1,412	353	190	95
Wheat	ton	308,582	512,524	548,030	9,575	13,718	12,783
Wine	'000 gal.	936	865	896	453	410	422
Wool	'000 lb.	315,507	327,163	300,852	117,715	107,914	83,088
Zinc bars, etc.	ton	15,264	9,002	9,896	1,461	951	1,181
All other articles .. .. .	"	..	..	..	28,706	20,451	23,412
Total Exports (Australian Produce) .. .. .	..	..	..	..	298,949	283,479	254,383

a) 2,000 lb. (b) Excludes railway sleepers.

4. Imports from the United Kingdom and Competing Countries.—Since 1908, permanent resident Commissioners appointed by the British Board of Trade have been located in Australia for the purpose of advising manufacturers and merchants in the United Kingdom with regard to Australian trade affairs. From 8th August, 1907, the Commonwealth Customs Tariffs have provided preferential rates of customs duties on certain goods the produce or manufacture of the United Kingdom, with the object of assisting the British manufacturer to retain or improve his position in this market in relation to other countries. The main provisions in these Acts relating to preference are dealt with on previous pages in this chapter.

In an investigation into the relative position occupied by the United Kingdom in the import trade of Australia, the comparison must, of course, be restricted to those classes of goods which are produced or manufactured in the United Kingdom. The imports into Australia include many commodities, such as tea, rice, raw coffee, unmanufactured tobacco, petroleum products, copra, timber, etc., which the United Kingdom could not supply. These items, in addition to others not available from that country, have therefore been omitted from the computation following.

The imports into Australia have been classified under nine headings, and the trade of the United Kingdom therein is compared with that of France, Germany, Japan and the United States of America. These countries have been selected as the principal competitors in normal times with the United Kingdom for the trade of Australia under the specified headings. Totals for each of the years 1953-54 to 1955-56 are shown in the following table.

IMPORTS FROM THE UNITED KINGDOM AND ITS MAIN COMPETITORS.
(£'000.)

Nature of Imports.	Year.	United Kingdom.	France.	Federal Republic of Germany.	Japan.	United States of America.	All Countries.
Foodstuffs of animal origin	1953-54	1,257	7	16	358	145	5,702
	1954-55	1,599	7	132	739	81	7,034
	1955-56	1,408	11	201	1,801	82	7,566
Yarns and manufactured fibres, textiles and apparel	1953-54	66,681	3,963	2,882	4,735	669	113,805
	1954-55	66,061	5,073	3,875	9,026	524	126,752
	1955-56	51,672	5,105	4,821	9,097	568	111,320
Metals, metal manufactures and machinery	1953-54	171,677	2,961	9,394	191	37,838	245,494
	1954-55	205,282	5,390	13,300	4,044	56,687	319,169
	1955-56	203,334	6,274	15,995	7,202	54,986	322,068
Rubber and leather and manufactures thereof, and substitutes therefor	1953-54	2,935	94	87	1	564	12,390
	1954-55	4,041	283	171	22	860	17,825
	1955-56	3,540	217	152	25	3,083	22,821
Earthenware, cement, china, glass and stoneware	1953-54	8,613	176	294	234	420	12,150
	1954-55	10,115	345	707	680	528	15,589
	1955-56	8,495	419	889	1,218	475	14,291
Pulp, paper and board; paper manufactures and stationery	1953-54	19,102	77	528	8	1,048	34,097
	1954-55	21,643	221	816	1,464	1,528	46,410
	1955-56	22,644	238	859	242	1,504	44,225
Sporting material, toys, fancy goods, jewellery and timepieces	1953-54	2,507	132	1,345	123	24	7,688
	1954-55	3,179	181	2,392	611	19	10,442
	1955-56	2,914	128	2,245	920	17	10,069
Optical, surgical and scientific instruments, etc.; photographic goods, n.e.i.	1953-54	4,916	107	873	36	1,377	8,467
	1954-55	5,705	148	1,691	139	1,682	10,770
	1955-56	5,607	134	1,686	292	1,864	10,803
Chemicals, medicinal and pharmaceutical products, essential oils and fertilizers	1953-54	9,816	851	2,133	128	1,453	19,606
	1954-55	14,485	1,032	3,333	371	2,250	27,941
	1955-56	14,597	1,095	3,747	253	2,384	29,984
Total, above-mentioned imports	1953-54	287,504	8,368	17,552	5,814	43,538	459,399
	1954-55	332,110	12,680	26,417	17,096	64,159	581,932
	1955-56	314,211	13,621	30,595	21,050	64,963	573,147
Total imports (less bullion and specie) (a)	1953-54	331,680	11,793	21,365	6,544	73,253	678,590
	1954-55	378,669	14,689	30,838	18,422	102,157	840,972
	1955-56	355,912	15,626	34,998	22,592	98,790	818,293

(a) Includes outside packages.

The principal classes of competitive imports are metals, metal manufactures and machinery (value £322,068,000 in 1955-56) and manufactured fibres, textiles and apparel (value £111,320,000 in 1955-56). The value of goods included in these two groups represented 75.6 per cent. of the total value of competitive commodities during 1955-56. In 1955-56 the United Kingdom supplied 54.8 per cent. of the total value of competitive goods.

§ 9. Trade with Eastern Countries.

1. **Merchandise Trade according to Countries.**—The values of imports from and exports to Eastern countries during the years 1953-54 to 1955-56 are shown in the following table. The principal commodities imported in 1955-56 according to countries of origin were :—Borneo (British)—crude petroleum, £7,666,000 ; Ceylon—tea, £7,535,000 ; India—

bags and sacks, £9,997,000, cotton and linen piece-goods, £3,511,000, hessian, £2,614,000 and cotton fibres, £666,000; Malaya—crude rubber, £11,667,000, timber, £1,676,000; Japan—metals and metal manufactures, £7,144,000, cotton and linen piece-goods, £6,604,000, other textiles, £1,969,000, tinned fish, £1,791,000; Indonesia—petroleum spirit, £7,127,000, kerosene, £3,740,000, crude petroleum, £3,473,000, residual and solar oil, £2,037,000, tea, £2,021,000.

MERCHANDISE TRADE WITH EASTERN COUNTRIES : AUSTRALIA.

(£'000.)

Country.	Imports.			Exports.		
	1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
<i>Commonwealth Countries—</i>						
Borneo	8,439	15,522	9,801	960	927	1,042
Ceylon	13,490	19,516	8,632	11,447	6,552	6,257
Hong Kong	1,717	2,369	2,775	4,956	5,535	5,927
India	18,475	26,057	23,469	14,293	19,428	12,159
Malaya, Federation of	8,721	12,797	16,230	9,143	8,410	9,337
Pakistan	3,706	2,253	2,006	3,287	2,947	1,816
Singapore	8,599	2,492	1,453	11,288	11,600	12,100
<i>Foreign Countries—</i>						
Bhutan and Nepal .. .. .	..	..	3	1	..	..
Burma	18	11	60	1,689	1,788	2,040
China	1,983	1,732	2,275	2,192	2,705	2,701
Formosa	137	100	83	444	546	828
<i>French Associated States—</i>						
Cambodia .. .. .	..	..	1	..	3	66
Laos .. .. .	..	7	..	598	70	351
Vietnam	1	9	1	34	2	15
Indonesia	21,972	22,529	22,401	6,585	3,702	6,705
Japan	6,545	18,422	22,592	55,689	58,573	86,490
Korea	3	4	2	2,586	970	516
Philippines	82	115	121	1,039	1,709	2,190
<i>Portuguese Dependencies—</i>						
India (Portuguese) .. .. .	..	..	..	212	69	76
Macao	2	..	1	2	..	2
Timor	29	58	37	34	39	24
Thailand	35	76	167	1,244	1,157	1,353
Total	(a) 93,954	(a)124,069	(a)112,110	127,723	126,732	151,995

(a) Includes outside packages.

The balance of trade with Eastern countries shows an excess of exports from Australia during each of the years 1953-54 to 1955-56.

2. Exports of Principal Articles.—The following table shows the value of exports (including re-exports) from Australia to Eastern countries for each of the years 1953-54 to 1955-56. The countries concerned in this trade are listed in the previous table.

TOTAL EXPORTS FROM AUSTRALIA TO EASTERN COUNTRIES.

(£'000.)

Article.	1953-54.	1954-55.	1955-56.	Article.	1953-54.	1954-55.	1955-56.
Animal (except marine) oils and fats	1,209	2,321	1,997	Meats	3,443	3,726	3,556
Army stores	2,052	1,123	2,472	Metals and metal manufactures except zinc bars, etc.	6,597	2,729	3,553
Butter	2,354	2,193	2,003	Milk and cream	6,215	6,731	6,512
Cheese	825	790	711	Sugar (raw)	673	5,741	3,343
Fruit, fresh or preserved	1,490	1,537	1,396	Wool	47,317	51,287	71,704
<i>Grain and cereals—</i>				Zinc bars, blocks, etc.	2,242	2,432	2,562
Flour (wheaten), plain white	22,707	13,853	14,658	Other merchandise	8,410	7,055	13,580
Wheat	8,058	15,150	12,629	Total Merchandise	127,723	126,732	151,995
Other (prepared and unprepared)	9,667	5,091	7,275	Gold and silver; bronze specie	5,626	15,825	10,636
Infants' and invalids' foods	1,540	1,263	1,381	Total Exports	133,349	142,557	162,631
Leather	657	791	647				
Machines and machinery	2,267	2,919	2,016				

§ 10. Oversea Trade at Principal Ports.

The following table shows the value of overseas imports and exports at the principal ports of Australia during the year 1955-56, together with the totals for each State.

OVERSEA TRADE AT PRINCIPAL PORTS, 1955-56.
(£'000.)

Port.	Imports.	Exports.	Port.	Imports.	Exports.
NEW SOUTH WALES.			SOUTH AUSTRALIA.		
Sydney, including Botany Bay	322,981	201,215	Port Adelaide, including Adelaide	61,057	66,205
Newcastle, including Port Stephens	10,147	20,696	Port Pirie	722	22,990
Port Kembla	3,848	3,261	Port Lincoln	526	3,790
Other		478	Walleroo	438	1,860
Total	336,976	225,650	Other	9	2,821
VICTORIA.			Total	62,752	97,666
Melbourne	270,799	191,918	WESTERN AUSTRALIA.		
Geelong	28,017	14,492	Fremantle, including Perth and Kwinana	45,911	63,488
Portland	524	2,986	Geraldton		136
Total	299,340	209,396	Bunbury	246	2,840
QUEENSLAND.			Other	189	5,950
Brisbane	55,536	95,078	Total	46,482	76,143
Townsville	2,230	23,372	TASMANIA.		
Cairns	1,743	6,765	Hobart	7,796	12,880
Mackay	973	7,297	Devonport	1,062	609
Rockhampton	568	6,003	Launceston	1,796	3,470
Bowen		5,967	Burnie	1,987	3,346
Gladstone	648	4,021	Total	12,641	20,305
Maryborough	25	3,446	NORTHERN TERRITORY.		
Other	14	196	Darwin	1,155	559
Total	61,738	152,145	AUSTRALIAN CAPITAL TERRITORY.		
			Canberra	4	
			Grand Total	821,088	781,864

§ 11. Classified Summary of Australian Oversea Trade.

1. Statistical Classes.—(i) *Imports and Exports.* The following table shows, according to statistical classes, the value of Australian imports and exports during each of the years 1953-54 to 1955-56.

OVERSEA TRADE : CLASSES.
(£'000.)

Class.	Imports.			Exports.		
	1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
I. Animal foodstuffs, etc.	5,702	7,034	7,566	102,684	112,546	113,366
II. Vegetable foodstuffs; non-alcoholic beverages, etc.	25,702	35,925	22,059	154,938	152,600	148,760
III. Alcoholic liquors, etc.	1,328	2,028	2,101	1,657	1,716	1,460
IV. Tobacco, etc.	17,809	17,316	16,215	281	348	518
V. Live animals	571	693	727	700	1,031	1,188
VI. Animal substances, etc.	4,437	4,108	4,000	431,620	374,690	360,692
VII. Vegetable substances, etc.	18,240	19,461	17,482	1,280	1,831	2,432
VIII. Apparel, textiles, etc.	113,805	126,752	111,320	2,269	2,758	2,220
IX. Oils, fats and waxes	83,491	96,918	99,640	5,689	6,588	14,053
X. Pigments, paints and varnishes	5,272	5,900	5,937	927	922	977
XI. Rocks, minerals, etc.	5,946	8,234	7,293	16,236	17,052	22,677
XII. Metals, metal manufactures and machinery	245,494	319,169	322,068	66,128	59,108	64,494
XIII. Rubber and leather, etc.	12,390	17,825	22,821	3,249	3,196	3,279
XIV. Wood and wicker, etc.	11,875	17,459	17,881	3,283	2,316	2,985
XV. Earthenware, etc.	12,150	15,589	14,291	1,008	1,161	897
XVI. Paper and stationery	34,097	46,410	44,225	2,169	2,560	2,661
XVII. Jewellery, etc.	7,688	10,442	10,069	558	570	547
XVIII. Optical, surgical and scientific instruments	8,467	10,770	10,803	1,592	1,253	1,053
XIX. Chemicals, etc., fertilizers	19,606	27,941	29,984	3,999	4,505	5,417
XX. Miscellaneous	(a) 44,520	(a) 50,998	(a) 51,811	11,599	11,290	21,161
XXI. Gold and silver; bronze specie	3,019	2,770	2,795	16,466	16,123	11,027
Total	681,609	843,742	821,088	828,332	774,164	781,864

(a) Includes outside packages.

(ii) *Exports—Australian Produce and Re-exports.* In the following table the exports from Australia of (a) Australian produce and (b) re-exports are shown according to statistical classes for each of the years 1953-54 to 1955-56.

EXPORTS FROM AUSTRALIA : AUSTRALIAN PRODUCE AND RE-EXPORTS.
(£'000.)

Class.	Australian Produce.			Re-exports.		
	1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
I. Animal foodstuffs, etc. . .	102,625	112,488	113,307	59	58	59
II. Vegetable foodstuffs; non-alcoholic beverages, etc. . .	154,674	152,078	148,465	264	522	295
III. Alcoholic liquors, etc. . .	1,633	1,697	1,448	24	19	12
IV. Tobacco, etc. . .	269	264	446	12	84	72
V. Live animals . . .	661	958	1,097	39	73	91
VI. Animal substances, etc. . .	431,332	374,399	360,370	288	291	322
VII. Vegetable substances, etc. . .	1,241	1,769	2,404	39	62	28
VIII. Apparel, textiles, etc. . .	2,003	2,494	1,974	266	264	246
IX. Oils, fats and waxes . . .	5,207	6,029	13,459	482	559	594
X. Pigments, paints and varnishes . . .	850	891	939	77	31	38
XI. Rocks, minerals, etc. . .	16,174	16,861	22,440	62	191	237
XII. Metals, metal manufactures and machinery . . .	61,889	55,193	60,299	4,239	3,915	4,195
XIII. Rubber and leather, etc. . .	3,198	3,172	3,252	51	24	27
XIV. Wood and wicker, etc. . .	3,199	2,185	2,928	84	131	57
XV. Earthenware, etc. . .	983	1,136	847	25	25	50
XVI. Paper and stationery . . .	2,087	2,444	2,546	82	116	115
XVII. Jewellery, etc. . .	439	460	487	119	110	60
XVIII. Optical, surgical and scientific instruments . . .	1,101	870	747	491	383	306
XIX. Chemicals, etc., fertilizers . . .	3,803	4,309	5,228	196	196	189
XX. Miscellaneous . . .	10,267	10,068	14,417	1,332	1,222	6,744
XXI. Gold and silver; bronze specie . . .	16,422	16,118	10,990	44	5	37
Total . . .	820,057	765,883	768,090	8,275	8,281	13,774

2. *Imports of Principal Articles.*—The next table shows the quantity, where available, and the value of the principal articles imported into Australia during each of the years 1953-54 to 1955-56.

PRINCIPAL ARTICLES IMPORTED : AUSTRALIA.

Article.	Unit of Quantity.	Quantity.			Value. (£'000.)		
		1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
Apparel—							
Blouses, skirts, costumes, etc.				550	1,178	704
Gloves . . .	doz. prs.	396,031	510,301	495,562	1,464	1,627	1,358
Headwear				973	939	920
Men's and boys' outer clothing				495	722	637
Socks and stockings				925	1,143	537
Trimmings and ornaments				4,933	5,383	4,794
Other apparel and attire				2,060	2,591	2,519
Arms and explosives, military stores, etc.				4,694	9,463	6,155
Bags and sacks				6,086	11,643	10,184
Carpets and carpeting				7,251	8,606	7,134
Chemicals, drugs, fertilizers				19,606	27,941	29,984
Crockery, etc.				4,046	5,171	4,555
Electrical machinery and appliances				24,027	26,872	33,617
Fibres				12,365	12,288	10,659
Glass and glassware				4,781	6,176	5,929
Iron and steel—							
Pipes, tubes and fittings . . .	cwt.	493,979	685,129	285,046	2,862	2,603	1,398
Plate and sheet	2,899,901	6,670,808	4,471,564	13,486	29,583	21,302
Other				5,148	17,768	24,810
Machines and machinery (except dynamo electrical)—							
Agricultural				4,325	5,043	5,233
Metal-working				8,204	8,635	12,963
Motive power				41,062	41,221	43,475
Other				39,730	49,043	47,848

PRINCIPAL ARTICLES IMPORTED : AUSTRALIA—*continued.*

Article.	Unit of Quantity.	Quantity.			Value. (£'000.)		
		1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
Motor vehicles, chassis, bodies and parts .. .. .	..	..	..	..	57,523	77,701	77,105
Oils—							
Linseed	'000 gal.	3,567	3,636	2,383	1,585	1,386	1,247
Petroleum and shale—							
Kerosene .. .. .	..	136,729	150,735	130,168	6,941	7,705	6,747
Lubricating (mineral) .. .. .	..	26,994	43,885	42,835	3,436	5,509	5,584
Petroleum and shale spirit .. .. .	..	689,164	603,715	455,577	39,938	34,052	27,766
Residual and solar .. .. .	..	474,254	377,021	156,988	16,923	13,807	6,014
Paper, printing .. .. .	..	..	..	..	13,104	19,218	16,768
Piece-goods—	'000 sq. yds.						
Canvas and duck .. .. .	..	7,631	8,211	7,982	1,263	1,398	1,264
Cotton and linen .. .. .	..	..	..	..	40,480	42,919	35,156
Silk and rayon .. .. .	..	..	..	..	14,680	14,875	14,085
Woolen and containing wool .. .. .	..	..	..	..	1,299	1,703	1,438
All other piece-goods .. .. .	..	..	..	..	6,915	8,760	9,155
Plastic materials .. .. .	..	..	..	..	4,984	5,851	5,775
Prefabricated houses and buildings .. .. .	..	..	..	..	4,476	880	808
Rubber and rubber manufactures .. .. .	..	..	..	..	11,827	17,032	22,030
Stationery and paper manufactures .. .. .	..	..	..	..	9,065	10,516	11,650
Tea	'000 lb.	58,533	65,212	46,326	13,647	21,743	11,196
Timber, undressed, including logs ^(a)	'000 sup. ft.	244,595	331,346	322,792	9,572	13,265	14,111
Yarns—							
Cotton	'000 lb.	6,369	6,411	5,297	3,143	3,255	2,496
Rayon .. .. .	..	24,377	18,392	17,026	10,236	8,990	8,923
Woolen .. .. .	..	119	157	138	221	207	184
Other .. .. .	..	1,802	1,483	2,233	496	387	481
All other articles .. .. .	..	..	..	..	200,782	256,944	264,389
Total Imports .. .. .	..	..	..	..	681,609	843,742	821,088

(a) Excludes undressed timber not measured in super, feet.

3. Exports of Principal Articles of Australian Produce.—The following table shows the quantities and values of the principal articles of Australian produce exported during each of the years 1953-54 to 1955-56.

EXPORTS OF PRINCIPAL ARTICLES OF AUSTRALIAN PRODUCE.

Article.	Unit of Quantity.	Quantity.			Value. (£'000.)		
		1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
Arms, ammunition, military, naval and air force stores .. .. .	..	..	..	..	3,927	3,299	3,067
Barley	ton	601,536	421,174	470,210	14,870	10,357	10,471
Butter .. .. .	..	39,299	62,507	82,636	16,052	24,589	28,966
Cheese .. .. .	..	22,749	22,117	17,181	5,329	5,057	3,537
Chemicals, drugs, fertilizers .. .. .	..	..	..	..	3,803	4,309	5,228
Flour	ton ^(a)	761,268	605,619	666,793	29,682	20,305	19,703
Fruit—							
Dried	ton	65,314	71,177	62,931	7,393	8,435	7,803
Fresh, including frozen	'000 bus.	6,596	6,284	6,689	9,384	8,771	9,139
Preserved in airtight containers	ton	88,937	96,337	93,359	14,184	15,245	15,469
Gold	'000 fine oz.	871	864	532	13,737	13,717	8,323
Hides and skins .. .. .	..	..	..	..	19,422	19,674	20,849
Lead, pig	ton	170,207	140,256	145,987	18,550	17,182	19,539
Machines and machinery (except dynamo electrical) .. .. .	..	..	..	..	6,744	8,789	7,492
Meats preserved by cold process—							
Beef and veal	ton	141,508	123,392	144,084	22,046	21,899	23,431
Lamb .. .. .	..	19,688	42,403	36,440	3,297	10,191	7,867
Mutton .. .. .	..	24,817	15,094	15,472	1,964	1,626	1,885
Pork .. .. .	..	1,231	2,908	1,104	462	781	364
Meats, tinned .. .. .	..	65,333	62,963	58,286	21,847	20,559	18,224
Milk and cream	'000 lb.	117,143	105,285	127,278	9,675	8,306	8,915
Ores and concentrates	ton	427,683	383,457	505,912	13,037	14,292	19,663
Sugar (cane) .. .. .	..	706,796	737,150	592,229	31,592	31,146	24,723
Wheat .. .. .	..	965,838	1,691,063	1,902,896	30,957	45,222	46,456
Wool (b)	'000 lb.	1,168,204	1,144,560	1,263,983	410,431	353,106	337,508
All other articles .. .. .	..	..	..	..	111,672	99,026	119,468
Total Exports (Australian Produce) .. .. .	..	..	..	..	820,057	765,883	768,090

(a) 2,000 lb.

(b) Quantity in terms of greasy wool.

A graph showing exports in principal commodity groups in each of the years 1950-51 to 1955-56 will be found on page 343.

4. **Imports of Merchandise and Bullion and Specie.**—The table hereunder shows the value of imports into Australia during each of the years 1951-52 to 1955-56, grouped under the headings—Merchandise, and Bullion and Specie. The imports of merchandise are shown under the sub-headings of “free” and “dutiable” goods.

IMPORTS OF MERCHANDISE AND BULLION AND SPECIE: AUSTRALIA.
(£'000.)

Year.	Merchandise.			Bullion and Specie.	Total Imports.
	Free Goods.	Dutiable Goods.	Total Merchandise.		
1951-52.. ..	554,959	494,792	1,049,751	3,672	1,053,423
1952-53.. ..	301,870	208,472	510,342	3,767	514,109
1953-54.. ..	317,850	360,740	678,590	3,019	681,609
1954-55.. ..	399,063	441,909	840,972	2,770	843,742
1955-56.. ..	421,208	397,085	818,293	2,795	821,088

5. **Exports of Merchandise and Bullion and Specie.**—The next table shows the recorded value of exports from Australia during each of the years 1951-52 to 1955-56, grouped under the headings—Merchandise, and Bullion and Specie. The exports of Australian produce and re-exports are shown separately.

EXPORTS OF MERCHANDISE AND BULLION AND SPECIE: AUSTRALIA.
(£'000.)

Year.	Merchandise.			Bullion and Specie.			Total Expo.ts.
	Australian Produce.	Re-exports.	Total.	Australian Produce.	Re-exports.	Total.	
1951-52 ..	657,344	7,896	665,240	9,716	52	9,768	675,008
1952-53 ..	840,634	7,864	848,498	22,657	117	22,774	871,272
1953-54 ..	803,635	8,231	811,866	16,422	44	16,466	828,332
1954-55 ..	749,765	8,276	758,041	16,118	5	16,123	774,164
1955-56 ..	757,100	13,737	770,837	10,990	37	11,027	781,864

6. **Imports and Net Customs Revenue.**—The percentage of net Customs revenue, omitting primage, collected to the total value of all merchandise imported in each of the years 1951-52 to 1955-56 was as follows:—1951-52, 10.0 per cent.; 1952-53, 12.6 per cent.; 1953-54, 12.8 per cent.; 1954-55, 11.1 per cent.; and 1955-56, 9.8 per cent. Primage duty was in force during these years and if this is added to net Customs revenue the percentages become:—1951-52, 10.9 per cent.; 1952-53, 13.8 per cent.; 1953-54, 14.0 per cent.; 1954-55, 12.1 per cent.; and 1955-56, 10.7 per cent. The percentages of the net Customs revenue, omitting primage, on the total value of dutiable goods only were: 1951-52, 21.1 per cent.; 1952-53, 31.0 per cent.; 1953-54, 24.0 per cent.; 1954-55, 21.1 per cent.; and 1955-56, 20.2 per cent. The calculations are based on Australian currency values and on the assumption that the value of clearances approximated to the value of imports during the same period.

§ 12. Ships' Stores.

Prior to 1906, goods shipped in Australian ports on board oversea vessels as ships' stores were included in the general exports. From 1906, ships' stores have been specially recorded as such, and have been omitted from the export figures. The value of these stores shipped each year during the period 1951-52 to 1955-56, with fuel oils separate, is shown in the following table :—

VALUE OF STORES SHIPPED ON OVERSEA VESSELS : AUSTRALIA.
(£'000.)

Item.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Fuel Oils	5,532	6,460	5,674	6,925	7,681
All Stores (including Fuel Oils)	10,478	11,696	10,266	13,181	13,539

In addition to fuel oils, the principal items of ships' stores supplied to oversea vessels in 1955-56 were :—Meats, £2,022,302 ; fruit and vegetables, £771,970 ; oils, other than fuel, £289,556 ; eggs, £207,995 ; butter, £205,665 ; ale, porter, beer, etc., £185,146 ; fish, £179,960 ; coal, £165,224 ; flour, £141,318 ; rice, £70,002 ; milk and cream, £63,679.

§ 13. Movement of Bullion and Specie.

1. Imports and Exports.—The following table shows the values of gold and silver bullion and specie and of bronze specie imported into and exported from Australia during each of the years 1953-54 to 1955-56.

IMPORTS AND EXPORTS, BULLION AND SPECIE : AUSTRALIA.
(£.)

Item.	Imports.			Exports.		
	1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
Gold—Bullion ..	2,955,517	2,720,834	2,745,143	13,769,222	13,716,622	8,323,118
Specie ..	3,537	2,948	..	..	1,000	80
<i>Total</i> ..	<i>2,959,054</i>	<i>2,723,782</i>	<i>2,745,143</i>	<i>13,769,222</i>	<i>13,717,622</i>	<i>8,323,198</i>
Silver—Bullion ..	29,929	34,429	33,173	2,592,377	2,356,908	2,620,905
Specie ..	29,353	11,814	16,691	103,416	47,763	82,749
<i>Total</i> ..	<i>59,282</i>	<i>46,243</i>	<i>49,864</i>	<i>2,695,793</i>	<i>2,404,671</i>	<i>2,703,654</i>
Bronze—Specie ..	217	..	488	903	909	327
Total— Australian Pro- duce ..	..	..	..	16,422,354	16,117,547	10,990,312
Re-exports ..	..	..	..	43,564	5,655	36,867
Grand Total ..	3,018,553	2,770,025	2,795,495	16,465,918	16,123,202	11,027,179

2. Imports and Exports by Countries.—The next table shows the imports and exports of bullion and specie from and to various countries during the year 1955-56 :—

IMPORTS AND EXPORTS OF BULLION AND SPECIE BY COUNTRIES :
AUSTRALIA, 1955-56.
(£.)

Country.	Imports.			Exports.		
	Bullion.	Specie.	Total.	Bullion.	Specie.	Total.
Australia (re-imported) ..	382	15,045	15,427	..	..	..
United Kingdom ..	8	61	69	221,672	11,523	233,195
Australian Territories—						
Nauru .. ..	..	..	..	..	5,600	5,600
New Guinea	1,258,108	..	1,258,108	..	24,775	24,775
Norfolk Island .. ..	..	..	..	..	198	198
Papua	788	..	788	..	5,010	5,010
Canada .. ..	..	..	..	..	1,107	1,107
Ceylon .. ..	..	..	..	2,430,299	..	2,430,299
Hong Kong .. ..	..	..	..	8,126,421	..	8,126,421
New Zealand	279,090	1,682	280,772	28,349	20,028	48,377
Pacific Islands (British)—						
Fiji	1,239,938	..	1,239,938	1,579	..	1,579
Gilbert and Ellice Islands .. ..	..	..	..	..	3,640	3,640
Solomon Islands .. ..	..	..	..	..	1,752	1,752
Tonga .. ..	..	..	..	..	1,500	1,500
South Africa, Union of .. ..	..	..	..	..	1,286	1,286
<i>Total, Commonwealth Countries</i>	<i>2,778,314</i>	<i>16,788</i>	<i>2,795,102</i>	<i>10,808,320</i>	<i>76,419</i>	<i>10,884,739</i>
Germany, Federal Republic of	2	..	2	..	..	..
Sweden .. ..	..	52	52	..	..	..
Switzerland .. ..	..	46	46	..	..	..
Syria .. ..	..	..	..	50,091	..	50,091
Thailand .. ..	..	..	..	79,281	..	79,281
United States of America .. ..	..	293	293	6,331	6,737	13,068
<i>Total, Foreign Countries</i>	<i>2</i>	<i>391</i>	<i>393</i>	<i>135,703</i>	<i>6,737</i>	<i>142,440</i>
Grand Total ..	2,778,316	17,179	2,795,495	10,944,023	83,156	11,027,179

§ 14. Exports According to Industries.

1. Classification.—The following table provides an analysis of the total recorded value of Australian exports for the three successive financial years ended June, 1956. This analysis is designed to show fluctuations in the value of exports of Australian produce dissected according to the main industry of their origin, although any such classification is necessarily arbitrary in some respects.

EXPORTS OF AUSTRALIAN PRODUCE ACCORDING TO INDUSTRIAL GROUPS.

Industrial Group.	Value. (£'000.)			Proportion of Value of Exports of Australian Produce (excluding Gold). (Per cent.)		
	1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
Agriculture, Horticulture and Viticulture—						
Unprocessed	63,463	72,300	77,038	7.9	9.6	10.2
Processed	91,513	81,074	73,263	11.3	10.8	9.6
Total	154,976	153,374	150,301	19.2	20.4	19.8
Pastoral—						
Unprocessed	416,827	369,711	353,929	51.7	49.2	46.5
Processed	73,399	69,031	71,579	9.1	9.1	9.4
Total	490,226	438,742	425,508	60.8	58.3	55.9
Dairy and Farmyard—						
Unprocessed	4,649	6,079	5,315	0.5	0.8	0.7
Processed	41,507	43,139	45,827	5.2	5.7	6.0
Total	46,156	49,218	51,142	5.7	6.5	6.7
Mines and Quarries (other than Gold)—						
Unprocessed	14,584	14,818	19,850	1.9	2.0	2.6
Processed	37,134	34,737	40,708	4.6	4.6	5.4
Total	(a)51,718	(a)49,555	(a)60,558	6.5	6.6	8.0
Fisheries—						
Unprocessed	2,618	2,853	3,391	0.3	0.4	0.5
Processed	1,697	1,613	1,554	0.2	0.2	0.2
Total	4,315	4,466	4,945	0.5	0.6	0.7
Forestry—						
Unprocessed	601	241	333	0.1	(b)	(b)
Processed	2,652	1,874	2,739	0.3	0.3	0.4
Total	3,253	2,115	3,072	0.4	0.3	0.4
Total Primary Produce—						
Unprocessed	502,742	466,002	459,856	62.4	62.0	60.5
Processed	247,902	231,468	235,670	30.7	30.7	31.0
Total	750,644	697,470	695,526	93.1	92.7	91.5
Manufactures	47,938	45,917	45,669	6.0	6.1	6.0
Refined Petroleum Oils	194	2,100	7,272	(b)	0.3	1.0
Unclassified	7,525	6,678	11,300	0.9	0.9	1.5
Total Australian Produce (excluding Gold)	806,301	752,165	759,767	100.0	100.0	100.0
Re-exports (excluding Gold)	8,262	8,281	13,774	..	..	..
Gold Exports	(a)13,769	(a)13,718	(a) 8,323	..	..	..
Total Recorded Value of Exports	828,332	774,164	781,864	..	..	..

(a) The value of production of gold was £16,354,533 in 1953-54, £16,939,351 in 1954-55 and £16,192,638 in 1955-56. (b) Less than 0.05 per cent.

2. **Relative Importance of Industrial Groups.**—In the year 1955–56 Australian produce (other than gold) exported amounted to approximately £760 million. Of this, £696 million or 92 per cent. was mainly produce of primary industries, comprising £460 million of unprocessed produce and £236 million of goods which had been processed in some degree before export. The values of the principal individual items of processed primary produce exported were :—Raw sugar, £24,234,000 ; flour, etc., £20,685,000 ; canned fruit, £15,469,000 ; dried fruit, £7,803,000 ; wool (scoured, tops, etc.), £43,786,000 ; canned meats, £17,057,000 ; butter, £28,966,000 ; milk (condensed, dried, etc.), £9,470,000 ; pig lead, £19,389,000 ; lead bullion, £4,789,000 ; zinc bars, blocks, etc., £4,107,000 ; copper ingots, £6,094,000 ; and undressed timber, £2,169,000.

The value of manufactures exported as classified above was £46 million, or approximately 6 per cent. of Australian produce (other than gold) exported in 1955–56. The values of principal individual items here included were :—Manufactures of metal, £17,797,000 ; implements and machinery, £7,492,000 ; drugs and chemicals, £4,073,000 ; and paper and stationery, £2,545,000.

The items enumerated indicate the arbitrariness of the line necessarily drawn between primary produce and manufactures in any classification of this kind. The value of processed primary products exported includes some element of value added by the simpler processes of manufacture, while the value shown for manufactures exported necessarily includes the value of raw materials (primary produce) used in those manufactures.

Refined petroleum oils exported are shown separately, as they consist of imported crude oils refined in Australia and re-exported in the refined form. The values of principal individual items shown as "unclassified" in 1955–56 were :—Individual consignments of less than £50 in value, £4,345,000 ; and military equipment and stores and supplies for Australian projects overseas, £4,189,000.

§ 15. Australian Index of Export Prices.

1. **General.**—Over the past fifty years the exports of Australia have become increasingly diversified, but, although the proportion of highly manufactured exports has increased, it is still small in relation to total exports. Most of the exports still consist of basic products, such as wool, wheat, butter, etc.

2. **Historical.**—An annual index of export prices has been published by this Bureau since its inception.

The first index was compiled annually for the years 1901 to 1916–17. The method of computation was to select all those articles of export which were recorded by units of quantity, and to apply to the quantities of these export commodities actually exported during any year the average price per unit ruling in the year 1901 (adopted as the base year). The total value so obtained was divided into the total actual (recorded) value of these exports for that year. The quotient (multiplied by 1,000) thus obtained was the export price index number for that year.

The method was changed in 1918. A weight for all principal exports was calculated on the average quantities of exports for the nineteen and a half years from 1st January, 1897 to 30th June, 1916. To these weights were applied the "average unit export values" of each export in successive years, and a weighted aggregative index of "price" variations was derived. It was published for the years 1897 to 1929–30, and particulars of this index were last published in Official Year Book No. 24, page 147.

After the 1914–18 War, however, the relative importance of different exports changed considerably. In addition, the pattern of exports had become liable to vary considerably from year to year.

3. **Present Indexes.**—For the reasons just mentioned, two new series of monthly export price indexes—one using fixed weights, the other changing weights—were published in 1937, computed back to 1928. These are the only export price indexes now published.

The data on which both series are based differ from those utilized in the old series of annual index numbers. The most important change was the use of actual (or calculated) export parities, based on actual price quotations, in place of the "unit-values" declared at the Customs.

The old index took no account of gold exports. The omission is natural and reasonable for countries which produce little or no gold. For gold-producing countries, although some exports of gold would be irrelevant (e.g., the Australian shipments of gold reserves during the depression), the exports of newly-produced gold should be taken into account. In the new series, therefore, gold is included, but the weight given to it is not the quantity exported but the quantity produced.

The two series are compiled monthly, and both relate to commodities which normally constitute about 80 per cent. of the total value of exports of merchandise and silver and gold production.

4. **Monthly Index (Fixed Weights).**—(i) *General.* This is a weighted aggregative index of price variations. It was computed back to 1928, with that year taken as base. It is now usually published on the base—average of three years ended June, 1939 = 100.

The purpose of this index is to provide comparisons, over a limited number of years, of the level of prices of those commodities normally exported from Australia, making no allowance for any benefit or disadvantage accruing from variations during the period in the relative proportions of the different kinds of exports.

(ii) *Weights.* The original weights (used for the period 1928 to 1936) were, in round figures, the average annual exports (production, in the case of gold) during the five years 1928–29 to 1932–33.

From July, 1936, the weights were revised, and are now based on the average annual exports (production, in the case of gold) during the three years 1933–34 to 1935–36. The break of continuity has been bridged by the usual method of splicing. Consideration is being given to adopting weights for a post-war period.

The weight adopted for wheat takes into account the wheat equivalent of flour exported, the weight allotted to greasy wool takes account of the greasy equivalent of scoured wool, tops, and wool on skins, whilst for some metals allowance is made for the metallic content of ores and concentrates exported.

The twenty items, together with the units of quantity and the weights or "quantity multipliers", are given in the following table.

EXPORT PRICE INDEX : COMMODITIES AND WEIGHTING SYSTEM.
(FROM 1ST JULY, 1936.)

Item.	Unit of Quantity.	"Quantity Multipliers" (Weights).	Percentage Distribution of Total Aggregate.			
			Base Period 1936–37 to 1938–39.		Year 1951–52.	
			Excluding Gold.	Including Gold.	Excluding Gold.	Including Gold.
Wool	lb.	975,000,000	49.05	45.63	55.89	54.37
Wheat (a)	bushel	101,000,000	18.34	17.06	16.16	15.72
Butter	cwt.	2,140,000	12.21	11.36	7.19	6.99
Metals—						
Silver	oz.	7,300,000	0.68	0.64	0.52	0.50
Copper	ton	3,600	0.20	0.20	0.21	0.20
Tin	"	1,300	0.31	0.28	0.27	0.26
Zinc	"	99,000	2.05	1.90	3.96	3.86
Lead	"	208,500	4.10	3.81	7.07	6.88
Meats—						
Beef	lb.	182,000,000	2.56	2.38	1.74	1.69
Lamb	"	138,000,000	3.56	3.31	1.56	1.52
Mutton	"	44,000,000	0.58	0.54	0.23	0.22
Pork	"	16,000,000	0.43	0.40	0.26	0.25
Sugar	ton	305,000	2.58	2.40	2.43	2.37
Dried Fruits—						
Sultanas	"	38,200	1.45	1.35	0.86	0.84
Lexias	"	3,000	0.12	0.11	0.07	0.07
Currants	"	13,400	0.37	0.35	0.25	0.24
Tallow	cwt.	600,000	0.69	0.64	0.63	0.61
Hides—						
Cattle	lb.	28,000,000	0.64	0.59	0.63	0.62
Calf	"	1,800,000	0.08	0.07	0.07	0.07
Gold	fine oz.	937,000	..	6.98	..	2.72
			100.00	100.00	100.00	100.00

(a) Includes "wheat equivalent" of flour.

The percentage distributions of the "Total Aggregate" shown in the foregoing table are of importance, firstly, as showing their variations from time to time as the result of differential price movements as between the various commodities, and secondly, as regards the effect on the indexes as a whole of the percentage price variations in each commodity.

(iii) *Prices.* The adoption of current market prices (as distinct from the former average unit export values) in the present indexes permitted the use of standards for each commodity.

All export parities are calculated from price quotations from the most reliable and representative sources available. In most cases, the prices used are those at which current sales are being effected.

(iv) *Index Numbers.* The following table shows export price index numbers for Australia for individual commodities, groups of commodities, and all groups combined for each financial year from 1936-37 to 1955-56 and monthly for the year 1955-56.

EXPORT PRICE INDEXES : AUSTRALIA.

SIMPLE AGGREGATIVE INDEX ; FIXED WEIGHTS.

INDIVIDUAL COMMODITIES, GROUPS OF COMMODITIES AND ALL GROUPS (COMBINED).

(Base of each section : Average of three years ended June, 1939 = 100.)

Period.	Wool.	Wheat.	Butter.	Metals. (a)	Meats. (b)	Sugar.	Dried Fruits. (c)	Tallow.	Hides. (d)	Gold. (e)	All Groups.	
											Ex- cluding Gold.	In- cluding Gold.
Percentage Dis- tribution of Base Aggregate—												
(f)...	45.63	17.06	11.36	6.83	6.63	2.40	1.81	0.64	0.66	6.98		
(g)...	49.05	18.34	12.21	7.34	7.13	2.58	1.94	0.69	0.72	..	100.00	100.00
1936-37 ..	122	123	92	120	98	104	103	122	113	99	116	115
1937-38 ..	99	111	107	96	106	92	103	100	100	98	102	102
1938-39 ..	79	66	101	84	96	104	94	78	87	103	82	83
1939-40 ..	98	82	108	92	102	126	94	76	120	118	96	98
1940-41 ..	101	102	110	95	103	137	95	82	98	121	103	104
1941-42 ..	101	105	110	101	109	137	106	114	133	120	105	106
1942-43 ..	117	106	114	100	112	152	112	119	145	119	114	114
1943-44 ..	117	116	114	113	113	159	121	123	151	119	117	117
1944-45 ..	117	154	147	129	122	172	128	151	147	120	130	130
1945-46 ..	117	213	147	196	123	213	137	161	152	122	148	146
1946-47 ..	173	305	173	308	139	264	152	361	334	122	209	203
1947-48 ..	287	420	193	372	146	320	157	436	364	122	296	283
1948-49 ..	365	413	233	478	171	343	162	499	421	122	348	332
1949-50 ..	473	400	250	421	196	369	176	400	479	164	399	383
1950-51 ..	999	432	271	689	209	410	226	356	752	176	690	654
1951-52 ..	564	436	291	811	263	464	302	451	486	184	495	473
1952-53 ..	616	445	313	504	314	501	297	358	369	186	505	483
1953-54 ..	615	411	325	450	338	479	287	321	336	179	496	474
1954-55 ..	538	357	313	511	344	445	267	349	218	178	450	431
1955-56 ..	464	324	320	562	355	451	286	353	238	178	414	397
1955-56—												
July ..	(h) 505	352	313	538	359	468	266	342	225	178	437	419
August ..	453	351	313	538	365	468	266	341	234	178	411	395
September ..	437	334	313	545	398	468	278	344	235	178	404	388
October ..	437	329	337	543	408	454	282	351	238	178	406	390
November ..	437	323	364	549	383	454	284	366	227	178	407	391
December ..	453	315	368	575	364	454	283	365	232	178	414	398
January ..	460	313	361	590	348	441	285	356	239	178	416	400
February ..	460	311	328	592	331	441	288	364	240	178	411	395
March ..	453	312	304	592	322	441	292	364	247	178	404	388
April ..	468	310	273	579	317	441	293	354	248	178	406	390
May ..	498	316	265	556	324	441	302	344	241	178	420	403
June ..	(h) 505	317	299	548	335	441	317	347	252	178	428	411

(a) Non-ferrous—silver, copper, tin, zinc, lead. (b) Beef, lamb, mutton, pork. Guaranteed minimum prices are used when operative. (c) Sultanas, lexias, currants. (d) Cattle hides, calf skins. (e) Where Australian gold has been sold on the oversea premium markets such price has been used in the index. (f) For "All Groups including Gold"—applicable from 1936-37. (g) For "All Groups (excluding Gold)"—applicable from 1936-37. (h) Nominal.

A graph showing index numbers for All Groups (including Gold) appears on page 344.

Reference to the group indexes in the table above shows the great fluctuations and the wide dispersion of prices of export commodities in recent years. In particular, very great movements upwards and downwards have occurred in the price of wool. Since wool is a predominant export and comprises 46 per cent. of the base aggregate of the index, fluctuations in wool prices obscure the movements affecting the other components in the All Groups index. For purposes of comparison, wool and "other groups" are shown separately below.

RECENT TRENDS—EXPORT PRICE INDEX : WOOL AND "OTHER GROUPS".

(Base of each section : Average of three years ended June, 1939 = 100.)

Period.	1948-49.			1949-50.			1950-51.			1951-52.		
	Wool.	Other Groups.	All Groups.	Wool.	Other Groups.	All Groups.	Wool.	Other Groups.	All Groups.	Wool.	Other Groups.	All Groups.
July ..	(a) 351	316	332	(a) 339	277	305	(a) 592	333	451	(a) 717	400	544
August ..	(a) 351	313	330	(a) 347	284	313	864	340	579	551	400	468
September ..	355	308	329	339	292	314	890	355	599	498	400	445
October ..	328	314	320	392	305	345	890	360	602	686	403	532
November ..	366	313	337	419	305	357	965	366	639	603	398	492
December ..	400	308	350	456	307	375	973	366	643	581	403	484
January ..	400	310	351	562	310	425	1,252	368	771	566	402	477
February ..	411	305	353	536	315	416	1,339	369	811	520	402	456
March ..	(a) 411	304	353	524	316	411	1,437	377	860	460	400	427
April ..	332	294	311	(a) 554	324	429	1,094	384	708	475	397	432
May ..	336	291	311	611	328	457	973	385	653	543	385	457
June ..	339	288	311	592	331	450	717	383	535	566	376	463
Average of Year	365	305	332	473	308	383	999	365	654	564	397	473

Period.	1952-53.			1953-54.			1954-55.			1955-56.		
	Wool.	Other Groups.	All Groups.	Wool.	Other Groups.	All Groups.	Wool.	Other Groups.	All Groups.	Wool.	Other Groups.	All Groups.
July ..	(a) 566	381	465	(a) 641	369	493	(a) 622	338	468	(a) 505	347	419
August ..	(a) 566	380	465	(a) 634	367	488	566	338	442	453	347	395
September ..	551	379	457	626	365	484	566	339	442	437	347	388
October ..	588	370	469	634	363	486	536	344	431	437	351	390
November ..	588	368	469	634	360	485	513	343	421	437	352	391
December ..	618	376	486	611	358	473	532	348	432	453	352	398
January ..	618	376	486	603	354	468	520	345	425	460	349	400
February ..	626	371	487	581	350	455	528	342	427	460	340	395
March ..	656	369	500	581	351	456	528	341	426	453	334	388
April ..	671	363	503	(a) 596	348	461	520	340	422	468	325	390
May ..	701	361	516	618	346	470	520	340	422	498	324	403
June ..	641	363	490	622	346	472	505	343	417	(a) 505	332	411
Average of Year	616	371	483	615	356	474	538	342	431	464	342	397

(a) Nominal.

5. **Monthly Index (Changing Weights).**—This series was designed for shorter period comparisons—from one or more months of the current year to the corresponding months of the previous year. The fixed weights index numbers indicate satisfactorily the general trend of export prices, but take no account of the relative quantities actually sold at the different prices ruling during each month. The impact of the price movements on current sales is indicated more directly by the index numbers in the following table. In computing these, the "quantity multipliers" are the quantities actually exported in the months (or periods) to which the index numbers relate.

For any given month, the procedure is to multiply the price of each commodity in that month, and its price in the corresponding month of the previous year, by the quantity exported during the given month. A comparison of the resulting aggregates gives one possible measure of the change in prices over the period; i.e., the change assuming that the proportions of the different kinds of exports whose prices are to be measured were the same as their proportions in the given month. Another possible measure is given by assuming that the proportions of the different kinds of exports in the given month were the same as their proportions in the corresponding month of the previous year. Accordingly the first step in the procedure is repeated, substituting the quantities exported during the corresponding month of the previous year.

The index numbers so obtained have been proved over a period of years to lie very close together. As it is convenient for practical reasons to have one single figure rather than two close alternatives the two index numbers are multiplied together and the square root of the product extracted. This is taken to be the index number for the month, the prices of the corresponding month of the previous year being taken as base.

The index numbers for two or more months of one year, as compared with the corresponding period of the previous year, are computed in very much the same way. The process involves merely the cumulative addition of the aggregates computed for the individual months, and extraction of the index numbers as explained above.

Index numbers computed on this basis are shown in the following table for the years 1954-55 and 1955-56 :—

MONTHLY EXPORT PRICE INDEX (CHANGING WEIGHTS) : AUSTRALIA.

(Base : *Weighted Average Price Level in corresponding months of preceding year = 100.*)

Month.	Month stated compared with same month of preceding year.				Period of trade year ending in month stated compared with same period of preceding year.			
	1954-55.		1955-56.		1954-55.		1955-56.	
	Ex-cluding Wool.	In-cluding Wool. (a)	Ex-cluding Wool.	In-cluding Wool. (a)	Ex-cluding Wool.	In-cluding Wool. (a)	Ex-cluding Wool.	In-cluding Wool. (a)
July	92	95	101	88	92	95	101	88
August	94	93	103	95	93	94	102	91
September	96	93	104	89	94	94	103	91
October	97	88	103	89	95	92	103	90
November	97	86	103	92	95	90	103	90
December	99	91	101	91	96	90	102	91
January	98	91	101	94	96	90	102	91
February	99	94	97	91	96	91	102	91
March	100	94	97	89	97	91	101	91
April	98	90	97	93	97	91	101	91
May	99	89	97	96	97	91	101	92
June	100	87	96	98	97	91	100	92

(a) For certain months a nominal price is used for wool as indicated in the preceding two tables.

Monthly export price index numbers are issued in the mimeographed publication *Monthly Index of Australian Export Prices*, in the *Monthly Review of Business Statistics* and in the *Quarterly Summary of Australian Statistics*.

§ 16. External Trade of Australia and other Countries.

1. **Essentials of Comparison.**—Direct comparison of the external trade of any two countries is possible only when the general conditions prevailing therein, and the system of record, are more or less identical. For example, in regard to the mere matter of record, it may be observed that in one country the value of imports may be the value at the port of shipment, while in another the cost of freight, insurance and charges may be added thereto. Again, the values of imports and exports in one may be declared by merchants, whereas in another they may be the official prices fixed from time to time by a commission constituted for the purpose. In later years, moreover, a very substantial difference in the value of imports would result from the different methods of converting the moneys of foreign countries, i.e., from the application of current rates of exchange or of the mint par. Lastly, the figures relating to the external trade of any country are also affected in varying degree by the extent to which they include transit or re-export trade. This class of trade represents a much greater proportion of the trade of Switzerland and Belgium than that of other countries. France and the United Kingdom also re-export largely, whereas in Canada, Australia and New Zealand the same class of trade represents a comparatively small proportion of the total.

2. **“Special Trade” of Various Countries.**—In the following table the figures, which represent Australian currency values, relate as nearly as possible to imports cleared for consumption in the various countries specified and to exports of their domestic products. It is to be noted, however, that these figures do not invariably denote the same thing throughout, since, in the United Kingdom and other manufacturing countries, raw or partly manufactured materials are imported as for home consumption and, after undergoing some process of manufacture or further modification, are re-exported as domestic production. Nevertheless, a comparison of this character reveals approximately the extent of the external trade which otherwise would not be manifest. The countries listed below are not necessarily all the important trading countries of the world, but those important countries for which comparable statistics are available.

IMPORTS CLEARED FOR HOME CONSUMPTION, AND EXPORTS OF DOMESTIC PRODUCTS (MERCHANDISE ONLY) : VARIOUS COUNTRIES, 1954.

Country.	Trade. (£A. Million).			Trade per Head of Population.(£A.)		
	Imports Cleared. c.i.f.	Exports. f.o.b.	Total.	Imports Cleared.	Exports.	Total.
United States of America	a4,603.9	6,682.0	11,285.9	28.3	41.1	69.4
United Kingdom ..	b4,098.0	3,343.4	7,441.4	80.3	65.5	145.8
Germany, Federal Republic of	2,089.2	2,398.6	4,487.8	42.2	48.4	90.6
France	1,881.8	1,870.0	3,751.8	43.8	43.5	87.3
Canada	a1,877.0	1,810.5	3,687.5	123.5	119.2	242.7
Netherlands	1,275.8	1,077.5	2,353.3	120.2	101.5	221.7
Belgium-Luxemburg	1,131.6	1,026.6	2,158.2	128.3	116.4	244.7
Italy	1,071.9	730.4	1,802.3	22.5	15.3	37.8
Australia(c)	a822.0	752.2	1,574.2	90.4	82.8	173.2
Sweden	793.3	708.7	1,502.0	110.0	98.2	208.2
Switzerland	581.9	548.3	1,130.2	118.2	111.4	229.6
Denmark	519.2	423.3	942.5	117.8	96.1	213.9
Norway	454.8	260.2	715.0	134.1	76.7	210.8
Indonesia	280.8	382.2	663.0	34.6	47.1	81.7
Austria	291.7	272.1	563.8	41.9	39.0	80.9
Spain	274.3	207.3	481.6	9.5	7.2	16.7
Egypt	204.7	177.3	382.0	9.0	7.8	16.8
Turkey	213.6	149.5	363.1	9.3	6.5	15.8
Chile	153.5	180.4	333.9	23.8	28.0	51.8
Greece	147.3	67.8	215.1	18.6	8.6	27.2

(a) f.o.b. (b) Covers goods imported as distinct from imports cleared for home consumption.
(c) Year ended June, 1955.

§ 17. Oversea Trade in Calendar Years.

For the purpose of comparison with countries which record overseas trade in calendar years, the following table has been compiled to show Australian imports and exports for each of the calendar years 1952 to 1956 :—

**OVERSEA TRADE IN CALENDAR YEARS : AUSTRALIA.
(£'000.)**

Year.	Merchandise.		Bullion and Specie.		Total.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
1952	767,846	751,099	4,916	20,920	772,762	772,019
1953	577,128	880,093	2,620	20,165	579,748	900,258
1954	751,949	736,301	3,341	12,127	755,290	748,428
1955	862,547	777,640	2,480	20,320	865,027	797,960
1956(a)	770,893	823,422	2,082	22,236	772,975	845,658

(a) Subject to revision.

§ 18. Excise.

Although excise goods have no immediate bearing on overseas trade, the rates of excise duty are in some cases related to the import duty on similar goods. Moreover, as the Excise Acts are administered by the Department of Customs and Excise, it is convenient to publish here the quantities of Australian produce on which excise duty has been paid. Particulars of Customs and Excise Revenue are shown in Chapter XXI.—Public Finance. The following table shows the quantities of spirits, beer, tobacco, etc., on which excise duty was paid in Australia during the years 1954–55 and 1955–56.

QUANTITY OF SPIRITS, BEER, TOBACCO, ETC., ON WHICH EXCISE DUTY WAS PAID : AUSTRALIA.

Article.	1954-55.	1955-56.	Article.	1954-55.	1955-56.
	proof gallons.	proof gallons.	Tobacco	lb. 21,059,763	lb. 19,170,733
			Snuff .. ..	.. ..	780
Spirits—			Cigars—		
Brandy	581,864	708,194	Hand-made	35,907	26,854
Gin	363,934	377,840	Machine-made	107,503	104,749
Whisky	355,416	424,683	Total Cigars..	143,410	131,603
Rum	627,014	622,737	Cigarettes—		
Liqueurs	66,610	74,928	Hand-made .. ..	.. ..	103
Other	226	28	Machine-made	22,378,896	26,403,131
Total Spirits (Potable) ..	1,995,064	2,208,410	Total Cigarettes	22,378,896	26,403,234
Spirits for—			Cigarette Papers and Tubes	60 papers or tubes. 138,089,418	60 papers or tubes. 122,828,573
Fortifying Wine	1,979,775	1,912,025	Coal	tons. 18,011,070	tons. 16,969,020
Industrial or Scientific purposes ..	214,906	217,190	Matches	gross of boxes. 3,374,542	gross of boxes. 3,268,311
Making Vinegar	114,280	120,210	Petrol	gallons. 364,461,008	gallons. 540,419,499
Manufacture of—			Playing Cards	doz. packs. 100,970	doz. packs. 95,150
Essences	104,168	101,089			
Scents and Toilet Preparations ..	61,722	71,548			
	gallons.	gallons.			
Beer	213,151,945	217,044,984			

§ 19. Interstate Trade.

Prior to the federation of the Australian Colonies (now States), each Colony published statistics of its trade with the other Colonies. A similar record was continued by the Commonwealth Government under the provisions of the Constitution (section 93). On the expiry of the "book-keeping" period, these records were discontinued as from 13th September, 1910, and the last published statements were for the year 1909. Later, the Governments of Western Australia and Tasmania revived the records, and relevant statistics are available again for those States. A detailed collection for Queensland was re-introduced from July, 1953.

At the Conference of Statisticians held in January, 1928 it was resolved that efforts should be made in other States to record the interstate movement of certain principal commodities.

Interstate trade statistics are published in detail for Queensland and Western Australia by the Government Statisticians in those States. Detailed statistics are also available for Tasmania, prepared by the Deputy Commonwealth Statistician in that State. The Government Statist for South Australia publishes some figures for that State, made up from the records of Western Australia and Tasmania and from various other sources. The statistics of interstate trade for New South Wales and Victoria are very meagre. The Melbourne Harbour Trust publishes, in its annual report, the quantities of various commodities of interstate trade loaded and discharged in the Port of Melbourne. The trade with individual States is not disclosed.

§ 20. The Australian Balance of Payments.

1. **General.**—Estimates of the Australian balance of payments are of particular importance as an aid to the analysis of Australian economic conditions in view of the importance of international trade to the Australian economy.

Comprehensive estimates of Australia's balance of payments will be found in *The Australian Balance of Payments, 1928-29 to 1951-52*, which contained a full explanation of the principles on which the estimates are based and the techniques employed in their compilation. Full details are also given therein of the adjustments made to recorded trade statistics to arrive at statistics of exports and imports, adjusted for balance of payments purposes, as shown in tables in this section. Continuous investigations are conducted with a view to improving the methods of estimation employed, and further revisions to current estimates may be necessary as more refined techniques are adopted in the future.

The estimates used on this occasion have been revised in comparison with those presented in Official Year Book No. 42. Particulars of revisions and changes, together with more detailed estimates, will be found in the mimeographed publication "The Australian Balance of Payments, 1954-55, 1955-56 and First Half 1956-57, and in the Appendix.

2. **Australia's Balance of Payments on Current Account.**—The record of the post-war years has been one of considerable balance of payments instability. The balance of payments on current account, after a deficit of £47 million in 1946-47, improved to a small favourable balance of £3 million in 1947-48 and this was increased to £30 million in 1948-49. However, a deficit of £44 million occurred in 1949-50, followed by a favourable balance of £105 million in 1950-51. A record deficit of £579 million was recorded in 1951-52 but a sharp favourable movement in 1952-53 produced a surplus on current account of £191 million. A progressive deterioration in exports in 1953-54 and 1954-55 coupled with a rising level of imports was largely responsible for deficits of £16 million in 1953-54 and £259 million in 1954-55.

In 1955-56 the unfavourable current account balance showed a moderate improvement to a deficit of £228 million. Exports increased by £11 million, due mainly to increases of £5.2 million in exports of petroleum and shale oils and of £4.4 million in exports of butter. A fall of £15.9 million in exports of wool and sheep skins was offset by increases in the value of various other export items. Imports fell by £27 million, decreases occurring in most major commodity classes except machines and machinery, and oils, fats and waxes.

Invisible credits rose by £11 million, due mainly to increases of £3.1 million in port expenditure of overseas ships and of £3.5 million in income from investment. Other items (except gold production) increased to a lesser extent. Invisible debits increased by £8 million, an increase of £15 million in freight payable overseas being mainly responsible.

The Commonwealth Statistician's Index of Export Prices (excluding gold) showed substantial increases in the immediate post-war years. A sharp fall occurred in 1951-52 (due mainly to a fall in the index for the price of wool) followed by an increase of 2 per cent. in 1952-53 and a decrease of 2 per cent. in 1953-54. The index, which stood at 496 in 1953-54, fell by 9 per cent. to 450 in 1954-55 and by a further 8 per cent. to 414 in 1955-56. The index of the price of wool fell by 13 per cent. from 615 in 1953-54 to 538 in 1954-55 and by a further 14 per cent. to 464 in 1955-56.

The Index of Australian Import Prices, prepared by the Commonwealth Bank of Australia, recorded steady increases in the post-war years up to 1951-52 but fell by 5 per cent. between 1951-52 and 1952-53. A further fall of 2 per cent. was recorded between 1952-53 and 1953-54, but this trend was reversed when the index rose by 2 per cent. between 1953-54 and 1954-55. A further rise of 3 per cent. occurred between 1954-55 and 1955-56.

Comparison of the index of export prices with the index of import prices indicates that Australia's terms of trade moved favourably in the immediate post-war years, reaching an extremely favourable level in 1950-51; however, the fall in the price of wool produced an adverse movement of 36 per cent. between 1950-51 and 1951-52. The terms of trade improved by 8 per cent. between 1951-52 and 1952-53 and remained constant between 1952-53 and 1953-54. A deterioration of 10 per cent. occurred between 1953-54 and 1954-55, followed by a further deterioration of 11 per cent. between 1954-55 and 1955-56.

The table below presents estimates of Australia's balance of payments on current account for the years 1953-54 to 1955-56.

BALANCE OF PAYMENTS ON CURRENT ACCOUNT : AUSTRALIA.

(£A. million.)

Particulars.	1953-54.	1954-55.	1955-56.
CREDITS.			
1. Exports f.o.b.	811.7	761.4	772.3
2. Gold Production(a)	16.7	16.2	15.6
3. Transportation—			
(i) Freight Earnings of Australian Ships	4.8	5.8	6.6
(ii) Port Expenditure of Oversea Ships	47.6	56.0	59.1
	52.4	61.8	65.7
4. Foreign Travel	5.0	5.7	6.0
5. Income from Investment	18.6	18.5	21.8
6. Government Transactions	6.4	7.2	9.5
7. Miscellaneous	9.1	9.2	9.5
8. Donations and Reparations—			
(i) Immigrants' Funds and Household Effects	11.0	13.1	14.2
(ii) Other	4.6	5.2	5.3
	15.6	18.3	19.5
9. Total Credits	935.5	898.3	919.9
DEBITS.			
10. Imports f.o.b.	681.9	846.9	819.4
11. Transportation and Marine Insurance			
(i) Freight Payable Overseas ..	69.0	88.0	103.0
(ii) Other Transportation	11.4	15.4	15.7
(iii) Marine Insurance Premiums and Claims (net) (b) ..	2.1	2.6	2.4
	82.5	106.0	121.1
12. Foreign Travel	16.7	21.6	22.1
13. Income from Investment—			
(i) Public Authority Interest ..	18.4	18.3	18.0
(ii) I.B.R.D. and I.M.F. Interest and Charges	2.7	3.4	4.3
(iii) Direct Investment	33.5	34.4	32.2
(iv) Portfolio Investment	7.6	8.9	7.9
(v) Undistributed Income	30.0	30.1	(c) 35.5
	92.2	95.1	97.9
14. Government Transactions—			
(i) Defence Expenditure	14.4	14.9	11.5
(ii) Expenditure in Papua and New Guinea	7.0	9.5	11.0
(iii) Other	10.4	12.9	14.7
	31.8	37.3	37.2
15. Miscellaneous	22.8	25.3	22.7
16. Donations and Reparations—			
(i) Personal Remittances	13.2	13.9	16.5
(ii) U.N.K.R.A., U.N.I.C.E.F., etc., and Colombo Plan	2.4	2.9	3.0
(iii) Other	8.3	8.2	7.8
	23.9	25.0	27.3
17. Total Debits	951.8	1,157.2	1,147.7
Balance on Current Account	-16.3	-258.9	-227.8

(a) Includes gold sold on the premium market valued at the price obtained. (b) Total marine insurance premiums payable on Australian imports (whether payable in Australia or overseas) were £3.8 million in 1953-54, £4.3 million in 1954-55 and £4.2 million in 1955-56. (c) Preliminary.

3. Australia's Balance of Payments on Capital Account.—The balance of payments on capital account records the net changes over specified periods in Australia's international assets and liabilities. In theory, the balance of payments on current account and the balance of payments on capital account together constitute a complete system of accounts, on the double-entry principle, recording Australia's international economic transactions, and the favourable (unfavourable) balance on current account should coincide with the net increase (decrease) in assets shown in capital account.

The table on page 365 sets out estimates of Australia's balance of payments on capital account for the years 1953-54 to 1955-56.

In practice it is necessary to introduce a "balancing item" (see item 18 in the table) in the capital account in order to make that account balance at the same figure as the current account. This balancing item is to a certain extent due to errors and omissions in other sections of the estimates, but it is believed to be due mainly to movements in short-term funds and to timing differences between the statistical recording of exports and imports and the crediting or debiting of the payments for these transactions against Australia's international reserves.

The individual items in the table may be conveniently examined in groups.

Item 8 records movements in public authority debt domiciled overseas between 1953-54 and 1955-56. In 1953-54 there was a substantial net reduction of £10.1 million in this debt followed by a net increase of £2.3 million in 1954-55.

The net increase of £7.9 million in Australian public authorities' debt overseas in 1955-56 included two loans raised in North America. A new loan of \$15 million (£6.7 million) was floated in Canada and a cash and conversion loan of \$25 million (£11.1 million) was raised in New York. These receipts were partly offset by the redemption of \$18 million (£8 million) of debt maturing in New York and normal sinking fund repayments accounted for a further decrease of £1.9 million in Australian public authorities' overseas debt during the year.

Item 10 records drawings of \$48 million in 1953-54, \$53 million in 1954-55 and \$43 million in 1955-56 under loans made to Australia by the International Bank for Reconstruction and Development. Initial repayments of \$3 million on the first of these loans were made in 1955-56.

Item 11 shows the changes in Australia's liability in respect of purchases of dollars from the International Monetary Fund. In 1949-50 \$20 million (£8.9 million) were purchased from the Fund and a second purchase of \$30 million (£13.4 million) was made in 1952-53. In 1953-54 repayment was commenced with instalments totalling \$24 million (£10.7 million) and repayment was completed in 1954-55 with further instalments of \$26 million (£11.6 million).

Australia's international reserves (items 5 and 6) rose by £9.5 million in 1953-54 but fell by £142.4 million in 1954-55 and by a further £73.3 million in 1955-56 to a level of £355.0 million at the end of June, 1956.

Net direct investment (excluding undistributed income), net portfolio investment, net private investment in public authority securities, net remittances of life assurance offices and the balancing item * may be conveniently grouped for examination as "private capital movements and balancing items". As mentioned above, the "balancing item" is believed to consist predominantly of various types of private capital movements which cannot be identified from available statistics.

The transactions included in this group resulted in a small net inflow of funds of £4 million in 1953-54, while in 1954-55 there was a much larger inflow of £75 million. In 1955-56 there was an apparent inflow of £96 million.

Movements in other items in capital account were of minor importance.

4. Australia's Balance of Payments on Current Account—Various Countries and Monetary Areas.—There was a deterioration of £243 million between 1953-54 and 1954-55 in Australia's balance on current account. This was accounted for by unfavourable movements of £97 million for the sterling area, £44 million for the dollar area, and £101 million for "other" non-sterling countries. Total exports fell by £50 million between these two years, due mainly to falls of £23 million in exports to countries of the Organization for European Economic Co-operation (see page 338) and of £25 million in exports to other non-dollar, non-sterling countries. Total imports rose by £165 million. This movement affected all the countries and monetary areas shown in the table, the major increases being £46 million for imports from the United Kingdom, £31 million for imports from "other" sterling area countries and £32 million for imports from the United States of America.

* Items 1 (i) (ii), 1 (ii) (ii), 2, 13 (i) (ii), 13 (ii) (ii), 14, 15, 16 and 18 in the table on page 365.

BALANCE OF PAYMENTS ON CAPITAL ACCOUNT : AUSTRALIA.
(£A. million.)

Particulars.	1953-54.	1954-55.	1955-56.
INCREASE IN ASSETS.			
1. Direct Investment Overseas—			
(i) Branches—			
(i) Unremitted Profits	0.6	0.7	(a)0.8
(ii) Other	-0.2	4.3	(a)3.5
(ii) Subsidiaries—			
(i) Undistributed Profits	2.4	2.7	(a)3.5
(ii) Other	2.0	1.3	(a)1.7
2. Portfolio Investment Overseas	-1.2	-0.2	(a)-1.5
3. Stocks and Balances Overseas of Australian Marketing Authorities	-0.5	0.5	9.5
4. Other Official Transactions	4.9	-0.4	-9.9
5. Monetary Gold Holdings	7.0	5.3	10.8
6. Foreign Exchange Holdings	2.5	-147.7	-84.1
7. Total Increase in Assets	17.5	-133.5	-65.7
INCREASE IN LIABILITIES.			
8. Public Authority Debt (excl. I.B.R.D.)—			
(i) Commonwealth—Long-term	-3.3	1.3	7.1
(ii) Commonwealth—Short-term	-0.3	-0.3	-0.3
(iii) States—Long-term	-6.2	-3.6	1.4
(iv) States—Short-term .. .. .	..	4.0	..
(v) Local Authorities	-0.3	0.9	-0.3
9. Discounts and Cash Bonuses on the Conversion of Public Debt	-0.1	-0.1	-0.1
10. Dollars received from I.B.R.D. (net)	21.5	23.6	17.9
11. Dollars received from I.M.F.	-10.7	-11.6	..
12. Australian Currency Holdings of Foreign Banks	-0.5	-0.5	-0.3
13. Direct Investment in Australian Companies—			
(i) Branches—			
(i) Unremitted Profits	3.3	1.7	(a) 1.7
(ii) Other	12.4	9.0	(a)16.6
(ii) Subsidiaries—			
(i) Undistributed Profits	26.7	28.4	(a)33.8
(ii) Other	21.4	46.9	(a)51.0
14. Portfolio Investment in Australian Companies	1.1	7.6	(a)10.5
15. Investment in Public Authority Securities Domiciled in Australia	-4.6	-3.7	(a)-4.8
16. Net Oversea Remittances of Life Offices Operating in Australia	-6.4	-6.7	(a)-1.1
17. Adjusting Item for Papua and New Guinea Transactions	-1.0	1.0	2.0
18. Balancing Item	-19.2	27.5	27.0
19. Total Increase in Liabilities	33.8	125.4	162.1
20. Net Increase in Assets	-16.3	-258.9	-227.8

(a) Preliminary.

NOTE.—Minus sign (—) denotes decrease.

Between 1954-55 and 1955-56 there was a slight improvement in Australia's balance on current account—from a deficit of £259 million in 1954-55 to one of £228 million in 1955-56. An increase of £38 million in exports to "other" non-sterling countries partially offset by a fall of £32 million in exports to the United Kingdom largely accounted for an increase of £11 million in total exports. Imports fell by £27 million between these two years, falls of £37 million in imports from the sterling area and of £7 million in imports from the dollar area being partly offset by an increase of £16 million in imports from "other" non-sterling countries.

With the exception of Canada, "other" dollar area countries and Organization for European Economic Co-operation countries, all countries and monetary areas shown shared in the favourable movement in Australia's balance on current account between 1954-55 and 1955-56. A decrease of £13 million in the deficit for U.S.A. and an improvement of £17 million in the balance with "Rest of World" were the largest favourable movements.

BALANCE OF PAYMENTS ON CURRENT ACCOUNT, VARIOUS COUNTRIES AND MONETARY AREAS^(a) : AUSTRALIA.

(£A. million.)

Particulars.	Gold production.	Sterling Area.		Dollar Area.			Other Non-Sterling.		Total.
		United Kingdom.	Other.	U.S.A.	Canada.	Other.	O.E.E.C.	Rest of World. (b)	
1953-54.									
Exports f.o.b. ..	..	295.8	125.7	55.7	11.0	4.6	208.3	110.6	811.7
Imports f.o.b. ..	..	-332.7	-110.3	-75.6	-18.7	-1.1	-90.8	-52.7	-681.9
Invisibles (net) ..	16.7	-71.4	-17.0	-41.6	-8.3	0.2	-12.2	-12.5	-146.1
Balance on Current Account ..	16.7	-108.3	-1.6	-61.5	-16.0	3.7	105.3	45.4	-16.3
		-109.9		-73.8			150.7		
1954-55.									
Exports f.o.b. ..	..	288.6	131.8	52.7	10.5	6.4	185.7	85.7	761.4
Imports f.o.b. ..	..	-378.7	-141.6	-108.1	-23.8	-1.2	-122.3	-71.2	-846.9
Invisibles (net) ..	16.2	-85.5	-21.6	-45.3	-9.1	0.3	-12.6	-15.8	-173.4
Balance on Current Account ..	16.2	-175.6	-31.4	-100.7	-22.4	5.5	50.8	-1.3	-258.9
		-207.0		-117.6			49.5		
1955-56.									
Exports f.o.b. ..	..	257.0	131.4	55.6	10.9	8.4	187.5	121.5	772.3
Imports f.o.b. ..	..	-355.2	-128.0	-98.7	-23.3	-4.4	-125.8	-84.0	-819.4
Invisibles (net) ..	15.6	-72.4	-30.5	-44.4	-11.0	-1.1	-14.8	-22.1	-180.7
Balance on Current Account ..	15.6	-170.6	-27.1	-87.5	-23.4	2.9	46.9	15.4	-227.8
		-197.7		-108.0			62.3		

(a) For a list of the countries included in each monetary area see page 338.

(b) Includes international bodies.

NOTE.—Minus sign (-) denotes debits ; other items are credits.

5. *Australia's Balance of Payments with the Dollar Area.*—The estimates of the balance of payments with the dollar area included in the previous table are on a purely geographic basis and no attempt has been made to classify transactions according to the currency in which payment was made.

The table on page 368 gives a detailed estimate in respect of dollar currency transactions. This table includes the trade statistics and invisible items included in the former table, but in addition it includes in "Other items (net)" (see item 16 in table on page 368) several items which make allowance for the fact that not all Australian transactions with the dollar area involve dollar receipts or payments and that some dollar receipts or payments are involved in Australian transactions with countries outside the dollar area, and with international bodies.

Principal among these transactions are receipts of dollars for exports to non-dollar countries (e.g., sales of gold on premium markets); interest payments to sterling area holders of Australian dollar bonds (included in total dollar interest payments in item 13); dollar payments to international bodies; and the difference between the estimated dollar component of Australia's imports of petroleum products from all sources and the estimated c.i.f. value of her direct imports of petroleum products from the dollar area. The statistics in the table are presented in terms of United States dollars.

In 1953-54 Australia's unfavourable balance of payments on current account with the dollar area was \$163 million. This deficit increased sharply to \$245 million in 1954-55 but fell slightly to \$228 million in 1955-56.

Principally as a result of an increase of \$83 million in imports from the United States of America and Canada there was a deterioration of \$87 million in Australia's trade balance with the dollar area between 1953-54 and 1954-55. A fall of \$22 million in these imports was largely responsible for an improvement in the trade balance with the dollar area between 1954-55 and 1955-56.

Australia's invisible balance with the dollar area improved by \$5 million between 1953-54 and 1954-55 but deteriorated by \$9 million in the following year to a deficit of \$113 million in 1955-56. Freight charges rose by \$10 million between 1953-54 and 1954-55 but this movement was more than offset by the net decrease in other items. The \$15 million improvement in the credits for "other items (net)" (item 16) in 1954-55 compared with 1953-54 was due principally to higher sales of gold on the premium market in the latter year and to a favourable movement in the difference between the c.i.f. value of direct imports of petroleum from the dollar area and the estimated dollar component of all Australian petroleum imports. The principal movement in 1955-56, compared with 1954-55, was a further increase of \$8.9 million in freight payments while remittances of profits and dividends to the dollar area showed a small decrease from the level of these payments in 1953-54 and 1954-55.

The investment account shows that \$11 million of securities domiciled in New York were redeemed during 1954-55 but that a net increase of \$19 million in Australian public authorities' borrowing in dollar area countries occurred in 1955-56. Private capital inflow (including errors and omissions) increased from \$7 million in 1953-54 to \$83 million in 1954-55 but fell to an estimated \$42 million in 1955-56. Undistributed income fell slightly from \$38 million in 1953-54 to \$36 million in 1954-55 but increased to \$41 million in 1955-56.

Australia's favourable balance on investment account was \$102 million in 1955-56 compared with \$108 million in 1954-55 and \$14 million in 1953-54. Taken in conjunction with the adverse balances on current account in those years, the total deficit with the dollar area fell by \$12 million from \$149 million in 1953-54 to \$137 million in 1954-55 and by a further \$11 million to \$126 million in 1955-56.

The final section of the table shows how Australia's dollar deficit was financed. In 1955-56 Australia received \$40 million (net) from the International Bank for Reconstruction and Development. This was \$13 million less than in 1954-55 and \$8 million less than in 1953-54. However, there were no repayments by Australia in 1955-56 of I.M.F. drawings. These repayments amounted to \$24 million in 1953-54 and \$26 million in 1954-55. Australia's dollar balances, which were run down by \$28 million in 1953-54, were increased by \$11 million in 1954-55 and by a further \$4 million in 1955-56. Australia's estimated drawings from the Sterling Area Dollar Pool, which were \$97 million in 1953-54, increased by \$24 million to \$121 million in 1954-55 but fell by \$31 million to \$90 million in 1955-56.

BALANCE OF PAYMENTS, WITH THE DOLLAR AREA : AUSTRALIA.
(United States \$ million.)

Particulars.	1953-54.	1954-55.	1955-56.
CURRENT ACCOUNT.			
<i>Merchandise Trade.</i>			
1. Merchandise exports, f.o.b., to United States of America and Canada	+150	+142	+149
2. Merchandise imports, f.o.b., from United States of America and Canada	-212	-295	-273
3. Trade balance with United States of America and Canada	- 62	-153	-124
4. Trade balance with other American account countries	+ 8	+ 12	+ 9
5. <i>Trade Balance with the Dollar Area</i>	- 54	-141	-115
OTHER CURRENT TRANSACTIONS.			
6. Freight on imports	-22.8	-32.5	-41.4
7. Other transportation	- 2.2	- 2.7	- 2.7
8. Expenditure by Australian travellers	- 2.8	- 3.5	- 3.9
9. Expenses of Australian companies in North America	- 3.4	- 5.5	- 6.1
10. Film remittances	- 5.4	- 5.8	- 5.8
11. Profits and dividends remitted	-30.6	-28.4	-24.4
12. Undistributed income accruing to companies incorporated in the dollar area	-38.3	-35.8	-40.5
13. Public authority interest payments	- 7.6	- 6.8	- 6.1
14. Other miscellaneous debits	-13.0	-16.2	-14.3
15. Miscellaneous credits	+14.9	+15.9	+18.0
16. Other items (net)	+ 2.4	+17.0	+14.0
17. <i>Invisible Balance with the Dollar Area</i>	-109	-104	-113
18. <i>Balance on Current Account</i>	-163	-245	-228
INVESTMENT ACCOUNT.			
19. Increase in debt of public authorities	- 31	- 11	+ 19
20. Undistributed income (see item 12)	+ 38	+ 36	+ 41
21. Identified private capital inflow .. .. .	..	+ 52	+ 34
22. Balancing item	+ 7	+ 31	+ 8
23. <i>Balance of Investment Account</i>	+ 14	+108	+102
24. Dollar Surplus or Deficit (18 + 23)	-149	-137	-126
DOLLAR FINANCING.			
25. Dollar purchase, from I.M.F. (net)	- 24	- 26	..
26. Dollar loans from I.B.R.D.	+ 48	+ 53	+ 40
27. Estimated dollar drawing from (+) or contributions to (-) Sterling Area Dollar Pool	+ 97	+121	+ 90
28. Movement in Australian dollar balances (increases -)	+ 28	- 11	- 4
29. Total	+149	+137	+126

NOTE.—In current account, + indicates credit items and - indicates debit items. In investment account, + indicates net increases in liabilities or net decreases in assets; - indicates net decreases in liabilities or net increases in assets.

CHAPTER XI.
TRANSPORT AND COMMUNICATION.
PART I.—TRANSPORT.

NOTE.—Most of the statistics in this Part, except those relating to road traffic accidents, cover the year 1955–56. In some divisions, particularly B., Government Railways, the statistics have been advanced two years since the previous issue but, owing to the exigencies of space, it has been impossible in some cases to show figures for both 1954–55 and 1955–56 in the tables. More detailed figures for 1954–55 will be found in *Transport and Communication*, Bulletin No. 46.

A. SHIPPING.

§ 1. Control of Shipping.

1. **War-time Control.**—An account of the action taken by the Commonwealth Government to control and regulate shipping throughout Australian waters during the 1939–45 War was given in Official Year Book No. 36, pp. 121–130.

2. **Post-war Control and Developments.**—A brief account of the post-war control of shipping and the establishment of the Australian Stevedoring Industry Board and the Australian Shipping Board will be found in Official Year Book No. 39, pp. 147–8.

The Maritime Industry Commission established during the 1939–45 War under National Security legislation was abolished on 19th December, 1952. Permanent legislation to cover many of the matters formerly dealt with by the Commission was enacted in 1952 in the form of amendments to the Navigation Act 1912–1950 (*see* page 384).

As at 30th June, 1956, the Australian Shipping Board operated 47 vessels totalling 177,532 gross tons, of which three vessels totalling 14,917 gross tons were operated on time charter from private owners. The Government-owned shipping, totalling 44 vessels of 162,615 gross tons (of which two vessels totalling 4,601 gross tons were on charter to private companies or other shipping organizations), comprised thirteen "A" or River Class vessels of an average of 5,145 gross tons, five "B" Class vessels of an average of 3,923 gross tons, seven "D" Class vessels of an average of 2,345 gross tons, two "D/A" Class vessels of an average of 2,407 gross tons, five "E" Class vessels of an average of 584 gross tons, two "Y" Class vessels of an average of 3,460 gross tons and a collier of 4,887 gross tons, all of which were built in Australian yards, plus nine vessels, totalling 40,157 gross tons, which were built overseas.

In the international sphere, ratification is still being awaited from four of 21 ship-owning nations of a Convention establishing an Inter-Governmental Maritime Consultative Organization within the framework of the United Nations. The major objectives of this organization will be to provide machinery for co-operation among governments with shipping engaged in international trade, and to encourage the removal by governments of discriminatory action and unnecessary restrictions regarding such shipping.

This organization is designed to replace the United Maritime Consultative Council which was established on a tentative basis after the expiry of the war-time United Maritime Authority and Combined Adjustment Board.

Up to 1st July, 1956, ratifications by seventeen countries had been lodged, and there is a possibility of the four others ratifying in the near future, thus bringing the organization into force.

§ 2. System of Record.

In the system of recording statistics of oversea shipping, Australia is considered as a unit, and therefore only one entry and one clearance are counted for each voyage, without regard to the number of States visited (*see* also § 4 following, paragraph 1).

On arrival at, or departure from, a port in Australia, whether from or for an oversea country or from another port in Australia, the master or agent must "enter" the vessel with the Customs authorities at the port, and supply certain prescribed information in regard to the ship, passengers and cargo. At the end of each month the information so obtained is forwarded to this Bureau. This arrangement has been in operation since 1st July, 1924.

The volume of the vessel, as distinct from the cargo it carries, is recorded in net tons, i.e., the gross tonnage or internal cubic capacity less certain deductions on account of crew spaces, engine room, water ballast and other spaces not used for passengers or cargo. It is thus a rough measure of the capacity of the vessel for cargo or passengers. The unit of measurement is the *ton register* of 100 cubic feet.

The majority of cargo is recorded in terms of the ton weight of 2,240 lb. However, some additional cargo, mainly bulky commodities, is shipped and recorded on the basis of 40 cubic feet of space occupied representing one ton measurement.

From 1st July, 1914, trade and shipping statistics of Australia have been recorded for the financial years ending 30th June.

§ 3. Oversea Shipping.

1. **Total Movement.**—The following table shows the number of entrances and clearances combined of oversea vessels at Australian ports, and the aggregate net tonnage, during each of the years 1951-52 to 1955-56 :—

OVERSEA SHIPPING : ENTRANCES AND CLEARANCES (COMBINED) OF VESSELS DIRECT, AUSTRALIA.

Particulars.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Number of Vessels	4,136	4,041	4,127	4,505	4,882
Net Tonnage '000 tons	18,225	17,571	17,733	20,003	22,324

The average net tonnage per vessel rose from 2,919 tons per vessel in 1921-22 to 4,573 tons in 1955-56.

Particulars of the total oversea movement of shipping for each year from 1822 to 1920-21 will be found in Official Year Book No. 15, p. 507, and for each year from 1921-22 to 1950-51 in Official Year Book No. 40, p. 97.

2. **Total Oversea Shipping, States.**—The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels direct from and to oversea countries, and the aggregate net tonnage, during the year 1955-56.

OVERSEA SHIPPING : ENTRANCES AND CLEARANCES OF VESSELS DIRECT, 1955-56.

Particulars.		N.S.W.	Vic.	Old.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	No.	713	457	347	198	655	39	16	2,425
	'000 net tons	2,979	2,374	1,207	768	3,742	126	32	11,128
Clearances	No.	618	429	490	223	646	36	15	2,457
	'000 net tons	2,485	2,190	1,893	954	3,369	172	33	11,096

3. Shipping Communication with Various Countries.—A vessel arriving in Australia from overseas is recorded as coming from the country where the voyage commenced, irrespective of the number of intermediate ports of call. Similarly, a vessel leaving Australia is recorded as going to the country where the voyage terminated.

The following table shows statistics of the net tonnage entered and cleared, with cargo and in ballast, according to the principal countries where vessels commenced or terminated their voyages to or from Australia.

OVERSEA SHIPPING : COUNTRIES FROM WHICH ENTERED OR FOR WHICH CLEARED, AUSTRALIA.

Country from which Entered or for which Cleared.	With Cargo or in Ballast.	Net Tonnage Entered ('000).			Net Tonnage Cleared ('000).		
		1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
United Kingdom	Cargo	1,897	2,004	1,833	2,159	1,966	2,002
	Ballast	21	11	75	29	207	121
New Zealand	Cargo	521	641	568	761	911	953
	Ballast	255	339	383	91	101	65
Other Commonwealth Countries	Cargo	1,902	2,248	2,249	1,412	1,440	1,497
	Ballast	220	155	136	667	1,089	1,003
Bahrein Islands	Cargo	549	506	436	87	65	71
	Ballast	7		3	359	407	418
Indonesia	Cargo	609	671	567	108	116	155
	Ballast	196	61	92	552	529	650
Japan	Cargo	309	283	344	348	315	502
	Ballast	282	98	254	8	18	10
United States of America	Cargo	462	476	496	228	221	340
	Ballast	1	5		60	49	51
Other Foreign Countries	Cargo	1,487	2,333	3,602	1,076	1,123	1,367
	Ballast	164	108	190	906	1,507	1,891
Total	Cargo	7,736	9,162	10,095	6,179	6,157	6,887
	Ballast	1,146	777	1,133	2,672	3,907	4,209
Total Cargo and Ballast ..	..	8,882	9,939	11,228	8,851	10,064	11,096

4. Nationality of Oversea Shipping.—Owing to war conditions, the proportion of shipping of British nationality progressively declined from 72.82 per cent. of the total tonnage entered in 1938-39 to 43.40 per cent. in 1943-44. On the other hand, the proportion of American (U.S.) shipping visiting Australia during the same period advanced from 2.61 per cent. in 1938-39 to 33.07 per cent. in 1943-44. Thereafter the trend was reversed, and in 1950-51 the proportion of British shipping entered was 70.83 per cent. and of American 2.34 per cent. In 1955-56 the proportion of British shipping entered had fallen to 59.23 per cent.

Particulars of the nationality of oversea shipping which entered Australia during each of the years 1953-54 to 1955-56 are given in the following table.

OVERSEA SHIPPING : NATIONALITY OF VESSELS ENTERED, AUSTRALIA.

('000 Net Tons.)

Vessels Registered at Ports in—	1953-54.	1954-55.	1955-56.	Vessels Registered at Ports in—	1953-54.	1954-55.	1955-56.
Commonwealth Countries—				Foreign Countries—			
Australia ..	300	347	308	<i>continued</i>			
New Zealand ..	400	423	395	Norway	776	1,129	1,246
United Kingdom ..	4,933	5,207	5,730	Panama	310	382	473
Other ..	203	241	218	Sweden	329	326	480
				U.S.A.	160	160	182
				Other	223	163	262
In Cargo ..	5,107	5,695	5,908				
In Ballast ..	729	523	743	In Cargo ..	2,629	3,467	4,187
				In Ballast ..	417	254	390
Total Commonwealth Countries ..	5,836	6,218	6,651	Total Foreign Countries	3,046	3,721	4,577
Proportion of total .. %	65.71	62.56	59.24	Proportion of total .. %	34.29	37.44	40.76
Foreign Countries—				All Countries—			
Denmark ..	144	173	283	In Cargo ..	7,736	9,162	10,095
France ..	163	185	192	Proportion of total %	87.10	92.17	89.91
Germany ..	2	54	142	In Ballast ..	1,146	777	1,133
Italy ..	266	332	379	Proportion of total %	12.90	7.83	10.09
Japan ..	142	209	308				
Netherlands ..	531	608	630	Grand Total ..	8,882	9,939	11,228

The Australian tonnage which entered Australian ports from overseas during the year 1955-56 represented 2.74 per cent. of the total tonnage entered and was confined mainly to the New Zealand and Pacific Islands trade.

The proportion of oversea shipping tonnage which entered Australia in cargo fell from 88.87 per cent. in 1938-39 to 79.37 per cent. in 1947-48. In 1955-56 it was 89.91 per cent. The proportion of shipping which cleared in cargo, however, declined from 87.64 per cent. in 1938-39 to 62.06 per cent. in 1955-56, the trend over the period being generally downward.

§ 4. Interstate Shipping.

1. **System of Record.**—*Interstate Shipping* comprises two elements : (a) Vessels engaged solely in interstate trade ; and (b) Vessels trading between Australia and oversea countries and in the course of their voyages proceeding from one State to another. (It should be mentioned that these vessels, except under special circumstances, do not engage in interstate carrying.) No complexity enters into the record of those in category (a), but with regard to the method of recording the movements of the oversea vessels (b) some explanation is necessary. Each State desires that its shipping statistics (which are prepared in this Bureau) should show in full its shipping communication with oversea countries, but at the same time it is necessary to avoid any duplication in the statistics for Australia as a whole. In order to meet these dual requirements, a vessel arriving in any State from an oversea country—say the United Kingdom—via another State, is recorded in the second State as from the United Kingdom via States, thus distinguishing the movement from a direct oversea entry. Continuing the voyage, the vessel is again recorded for the statistics of the third State as from the United Kingdom via other States. On an inward voyage the *clearance* from the first State to the second State is a *clearance* interstate, and is included with interstate tonnage in conformity with the pre-federation practice of the States, and to preserve the continuity of State statistics. Thus, movements of ships which are, from the standpoint of Australia as a whole, purely coastal movements, must for the individual States be recorded as "Oversea via other States" or "Interstate" according to the direction of the movement. The significance of the record of these movements will be more clearly seen from the following tabular presentation of the inward and outward voyages to and from Australia of a mail steamer which, it is presumed, reaches Fremantle (Western Australia) and then proceeds to the terminal port of the voyage—Sydney (New South Wales)—via South Australia and Victoria. From the terminal port the vessel will commence the outward voyage, and retrace its inward track.

ITINERARY OF AN OVERSEA VESSEL ON THE AUSTRALIAN COAST.

Particulars.	Recorded as—	
	For the State and for Australia.	For the States.
Inward Voyage—		
Enters Fremantle from United Kingdom	Oversea direct	
Clears Fremantle for Adelaide .. ..	.. ..	Interstate direct
Enters Adelaide from United Kingdom via Fremantle .. ..	.. ..	.. .. Oversea via States
Clears Adelaide for Melbourne .. ..	.. ..	Interstate direct
Enters Melbourne from United Kingdom via Adelaide .. ..	.. ..	.. .. Oversea via States
Clears Melbourne for Sydney .. ..	.. ..	Interstate direct
Enters Sydney from United Kingdom via Melbourne .. ..	.. ..	.. .. Oversea via States
Outward Voyage—		
Clears Sydney for United Kingdom via Melbourne .. ..	.. ..	.. .. Oversea via States
Enters Melbourne from Sydney .. ..	.. ..	Interstate direct
Clears Melbourne for United Kingdom via Adelaide .. ..	.. ..	.. .. Oversea via States
Enters Adelaide from Melbourne .. ..	.. ..	Interstate direct
Clears Adelaide for United Kingdom via Fremantle .. ..	.. ..	.. .. Oversea via States
Enters Fremantle from Adelaide .. ..	.. ..	Interstate direct
Clears Fremantle for United Kingdom ..	Oversea direct	

From the method outlined above, the requirements for Australia and for the individual States are ascertained as follows. (a) The aggregate of all ships recorded for each State as "Oversea direct" gives the overseas shipping for Australia as a whole; (b) the aggregate for all ships recorded in any State as "Oversea direct" plus those recorded as "Oversea via States" gives the total *oversea shipping* for that State; and (c) the aggregate for all ships recorded as "Oversea via States" may also be used, together with those recorded as "Interstate direct", to furnish figures showing the total *interstate movement* of shipping.

It should be remembered, however, that all overseas vessels do not follow the same itinerary as the vessel in the table above.

2. *Interstate Movement.*—(i) *Interstate Direct.* The following table shows the number of entrances and the net tonnage of vessels recorded into each State and the Northern Territory from any other State (including overseas vessels on interstate direct voyages) during each of the years 1953-54 to 1955-56. The shipping of the Murray River, between the States of New South Wales, Victoria and South Australia, is excluded.

INTERSTATE MOVEMENT OF SHIPPING: ENTRANCES OF VESSELS INTERSTATE DIRECT.

State or Territory.	Number.			Net Tons ('000).		
	1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
New South Wales	1,595	1,584	1,634	4,470	4,553	4,606
Victoria	1,586	1,555	1,614	4,030	4,058	4,475
Queensland	559	598	597	1,409	1,541	1,554
South Australia	928	963	1,027	3,301	3,476	3,733
Western Australia	491	524	554	2,428	2,725	2,753
Tasmania	965	960	893	1,068	1,085	984
Northern Territory	30	40	38	41	77	55
Australia	6,154	6,224	6,357	16,747	17,515	18,160

From 1938-39 the total net tonnage of interstate shipping declined steadily each year until 1942-43, when it represented only 38 per cent. of the total for the pre-war year. It remained practically unchanged during the next three years, but increased by almost one-third in 1946-47. By 1955-56 the total had risen to 91 per cent. of the 1938-39 total.

(ii) *Oversea via States.* To ascertain the aggregate movement of shipping between the States, including the total interstate movement of oversea vessels, the figures in the following table, which show the number of entrances and clearances of vessels to and from oversea countries via other Australian States and the aggregate tonnage, must be added to those in the preceding table.

INTERSTATE MOVEMENT OF SHIPPING : ENTRANCES AND CLEARANCES OF VESSELS OVERSEA VIA OTHER AUSTRALIAN STATES, 1955-56.

Particulars.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	No.	585	686	262	334	37	98	3	2,005
	'000 net tons	3,142	3,688	1,367	1,781	242	475	13	10,708
Clearances	No.	484	484	184	296	30	110	..	1,588
	'000 net tons	2,509	2,692	866	1,516	171	473	..	8,227

Oversea vessels moving interstate are with few exceptions not engaged in the active interstate trade of Australia, but are merely proceeding to the several States in continuation of their oversea voyages.

(iii) *Total, Australia.* The following table shows the total interstate movement of shipping, including oversea vessels travelling oversea via States and interstate direct, for each of the years 1951-52 to 1955-56.

INTERSTATE MOVEMENT OF SHIPPING : TOTAL, AUSTRALIA.

Particulars.		1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Entrances	.. .. No.	6,694	7,525	7,983	8,300	8,362
	'000 net tons	24,072	25,583	26,925	28,515	28,868
Clearances	.. .. No.	6,652	7,481	8,036	8,151	8,460
	'000 net tons	23,875	25,359	27,190	28,292	29,095

(iv) *Total, States.* The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels from and for other States (including the interstate movement of oversea vessels) during the year 1955-56, together with the aggregate net tonnage.

INTERSTATE MOVEMENT OF SHIPPING : TOTAL, 1955-56.

Particulars.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	.. No.	2,219	2,300	859	1,361	591	991	41	8,362
	'000 net tons	7,748	8,163	2,921	5,514	2,995	1,459	68	28,868
Clearances	No.	2,350	2,326	752	1,341	622	1,027	42	8,460
	'000 net tons	8,252	8,283	2,279	5,355	3,407	1,449	70	29,095

3. *Shipping Engaged Solely in Interstate Trade.*—The following table shows, for each State and the Northern Territory, the number of entrances direct from other States, of vessels engaged solely in interstate trade during the year 1955-56, together with the net tonnage.

SHIPPING ENGAGED SOLELY IN INTERSTATE TRADE: ENTRANCES, 1955-56.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Ships entered ..	1,298	1,192	362	758	187	792	37	4,626
Net tons .. '000	3,126	2,005	645	2,349	691	625	54	9,495

4. Interstate and Coastal Shipping Services.—The following table shows particulars, so far as they are available, of all vessels engaged in the regular interstate or coastal services at the end of each of the years 1951 to 1955:—

INTERSTATE AND COASTAL SHIPPING SERVICES: AUSTRALIA.

Particulars.	1951.	1952.	1953.	1954.	1955.
Number of companies operating ..	32	31	31	36	42
Number of vessels	173	173	172	174	185
Tonnage { Gross	492,558	494,580	501,782	524,975	522,326
{ Net	272,003	273,824	277,294	289,854	283,771
Horsepower (Nominal)	47,027	47,126	49,159	53,017	50,455
Number of passen- gers for which licensed(a) { 1st class	2,171	2,244	2,208	2,198	1,966
{ 2nd class and steerage	706	648	621	626	648
Complement of { Masters and officers	629	652	650	675	709
{ Engineers	738	742	751	785	795
{ Other	4,907	4,884	4,886	4,950	4,853

(a) Excludes purely day-passenger accommodation.

NOTE.—This table excludes particulars of a small number of chartered vessels for which returns could not be obtained.

§ 5. Shipping at Principal Ports.

1. Total Shipping, Australia.—The following table shows the total volume of shipping—oversea, interstate and coastwise—which entered the principal ports of Australia during the years 1954-55 and 1955-56. Warships are excluded from the table. Corresponding figures each year from 1949-50 will be found in *Transport and Communication*, Bulletin No. 46.

TOTAL SHIPPING: ENTRANCES AT PRINCIPAL PORTS, AUSTRALIA.

Port of Entry.	1954-55.		1955-56.		Port of Entry.	1954-55.		1955-56.	
	Num-ber.	Net Tons.	Num-ber.	Net Tons.		Num-ber.	Net Tons.	Num-ber.	Net Tons.
		'000.		'000.			'000.		'000.
<i>New South Wales—</i>					<i>South Australia—</i>				
Sydney ..	4,399	9,702	4,361	9,519	Adelaide ..	2,621	5,215	2,491	5,180
Newcastle ..	2,261	3,516	2,457	3,775	Port Lincoln ..	298	372	221	310
Port Kembla ..	611	1,885	578	1,778	Port Pirie ..	352	892	315	848
					Rapid Bay ..	79	192	133	181
					Walleroo ..	105	124	125	130
					Whyalla ..	475	1,373	478	1,412
<i>Victoria—</i>					<i>Western Australia—</i>				
Melbourne ..	2,527	9,029	2,502	9,183	Fremantle ..	1,078	5,708	1,202	6,418
Geelong ..	474	1,611	454	1,980	Albany ..	62	289	64	255
					Bunbury ..	64	168	56	155
					Carnarvon ..	115	152	97	147
					Geraldton ..	105	307	103	275
					Yampi ..	132	330	128	292
<i>Queensland—</i>					<i>Tasmania—</i>				
Brisbane ..	1,167	3,707	1,128	3,685	Hobart ..	360	856	396	864
Bowen ..	77	235	82	270	Burnie ..	229	331	224	332
Cairns ..	279	622	233	624	Devonport ..	260	209	228	196
Gladstone ..	80	248	75	276	Launceston ..	433	461	378	419
Mackay ..	93	271	98	282					
Rockhampton ..	112	217	126	286	<i>Northern Territory—</i>				
Townsville ..	294	987	329	993	Darwin ..	58	134	57	101

2. Total Shipping—Australia, New Zealand and the United Kingdom.—The following table shows the total shipping tonnage which entered the principal ports of Australia during 1955–56 and New Zealand and the United Kingdom during 1955.

TOTAL SHIPPING : ENTRANCES AT PORTS, AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM.

(’000 Net Tons.)

Port.	Net Tonnage Entered.	Port.	Net Tonnage Entered.	Port	Net Tonnage Entered.
AUSTRALIA—		AUSTRALIA—continued.		ENGLAND AND WALES—	
Sydney (N.S.W.) ..	9,519	Rockhampton (Qld.)	286	<i>continued.</i>	
Melbourne (Vic.) ..	9,183	Mackay (Qld.) ..	282	Tyne Ports ..	8,278
Fremantle (W. A.) ..	6,418	Gladstone (Qld.) ..	276	Manchester (including Runcorn) ..	(a)6,128
Adelaide (S.A.) ..	5,180	NEW ZEALAND—		Hull ..	5,662
Newcastle (N.S.W.)	3,775	Wellington ..	3,950	Bristol ..	5,579
Brisbane (Qld.) ..	3,685	Auckland ..	2,998	Swansea ..	5,109
Geelong (Vic.) ..	1,980	Lyttleton ..	2,511	Dover ..	(a)4,303
Port Kembla (N.S.W.) ..	1,778	Otago ..	1,078	Cardiff ..	4,184
Whyalla (S.A.) ..	1,412	Napier ..	579	Middlesbrough ..	4,065
Townsville (Qld.) ..	993	New Plymouth ..	476	SCOTLAND—	
Hobart (Tas.) ..	864	Bluff ..	437	Glasgow ..	7,110
Port Pirie (S.A.) ..	848	ENGLAND AND WALES—		NORTHERN IRELAND—	
Cairns (Qld.) ..	624	London ..	35,115	Belfast ..	6,856
Launceston (Tas.)	419	Southampton ..	20,125		
Burnie (Tas.) ..	332	Liverpool (including Birkenhead) ..	17,687		
Port Lincoln (S.A.)	310				
Yampi (W.A.) ..	292				

(a) Oversea direct entrances only.

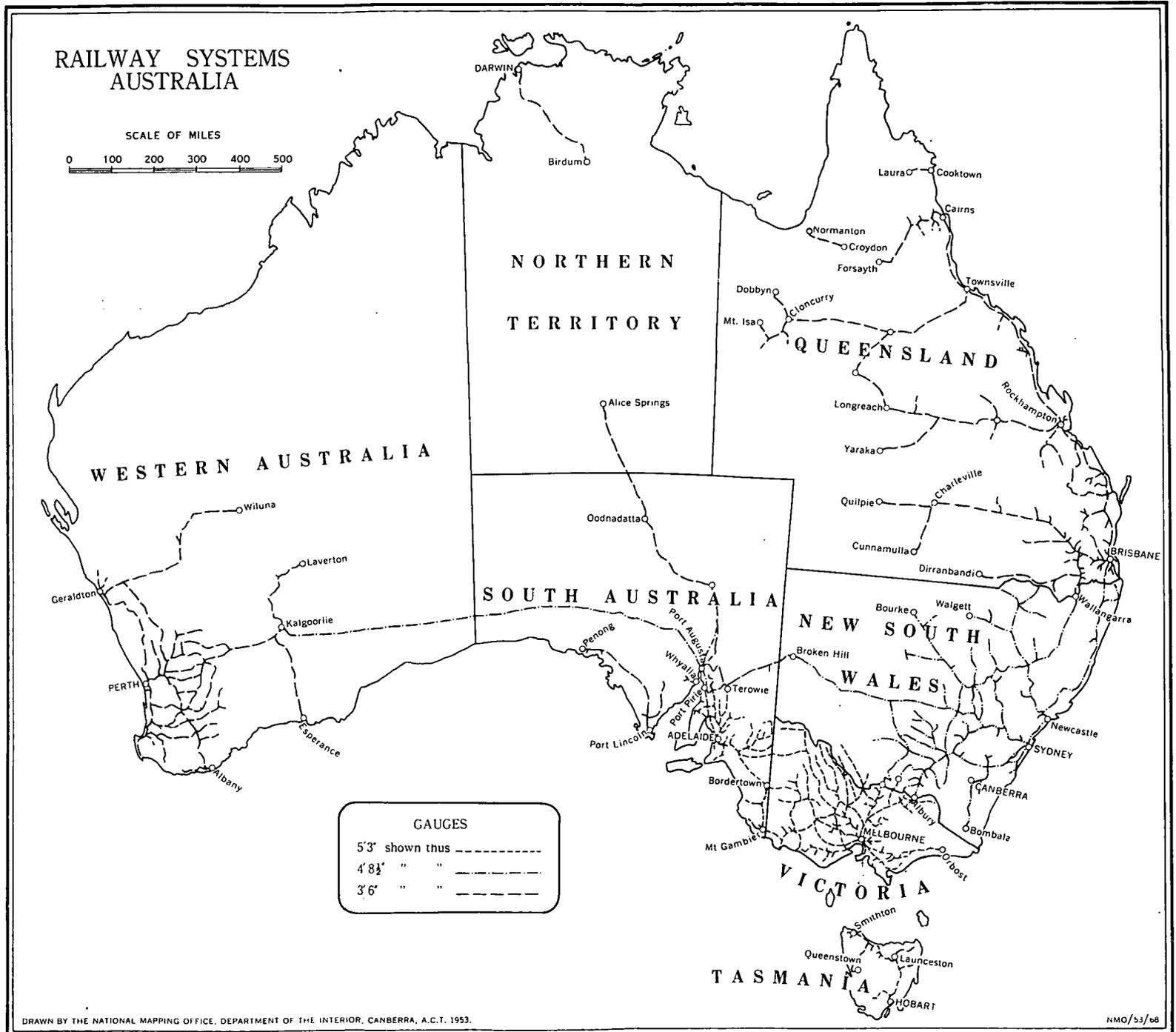
§ 6. Shipping Cargo.

1. Oversea and Interstate Cargo.—(i) *Australia.* The table hereunder shows the aggregate tonnage of oversea cargo discharged and shipped and the tonnage of interstate cargo shipped at Australian ports for the years 1951–52 to 1955–56. The majority of cargo is recorded in terms of the ton weight of 2,240 lbs. However, some additional cargo, mainly bulky commodities, is shipped and recorded on the basis of 40 cubic feet of space occupied representing one ton measurement.

SHIPPING CARGO MOVEMENT : AUSTRALIA.

(’000.)

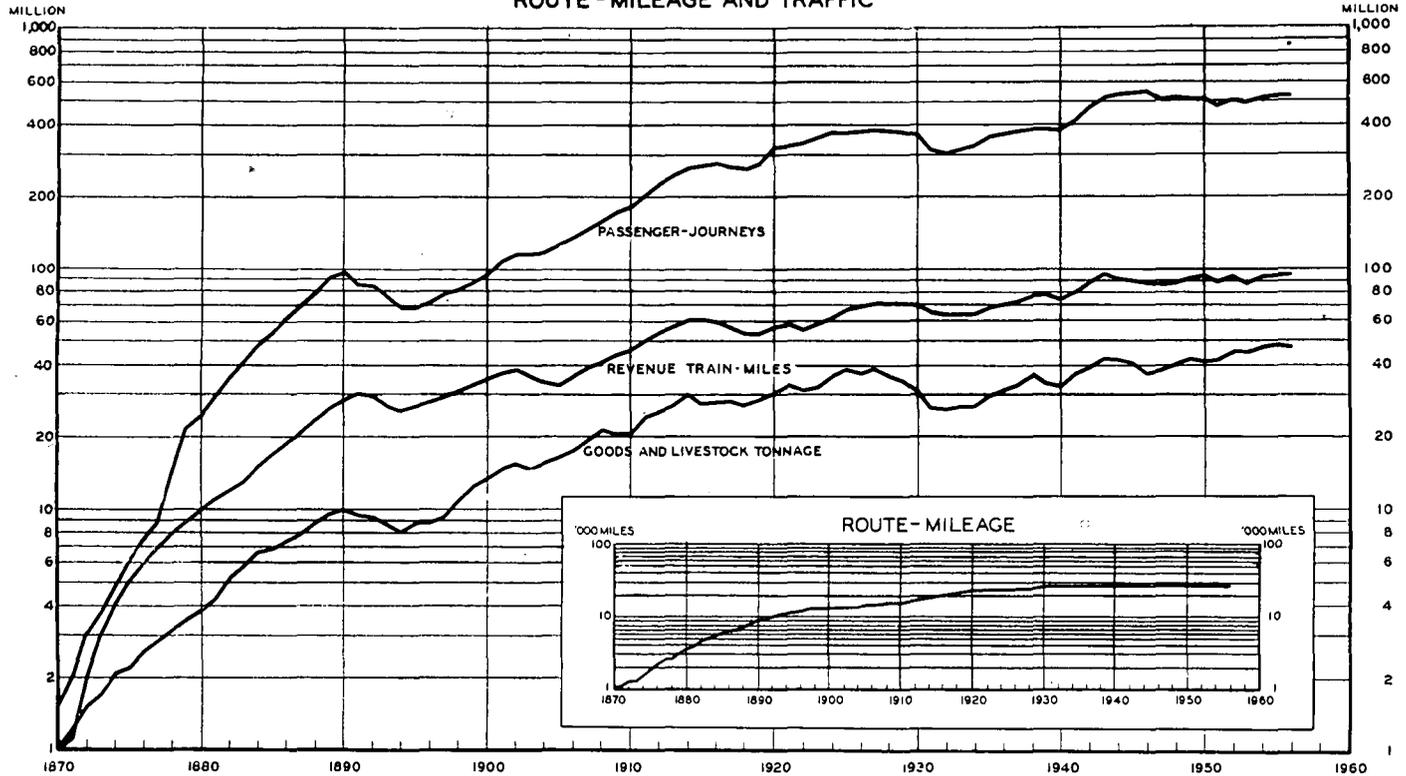
Year.	Oversea Cargo.				Interstate Cargo.	
	Discharged.		Shipped.		Shipped.	
	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.
1951–52 ..	9,727	4,682	4,487	1,231	7,697	1,324
1952–53 ..	7,733	1,929	6,045	1,452	8,447	1,275
1953–54 ..	8,520	2,812	5,765	1,355	9,105	1,539
1954–55 ..	10,992	3,403	6,084	1,420	10,212	1,472
1955–56 ..	12,431	3,421	6,667	1,546	11,632	1,315



GOVERNMENT RAILWAYS: AUSTRALIA, 1870 TO 1956

RATIO GRAPH

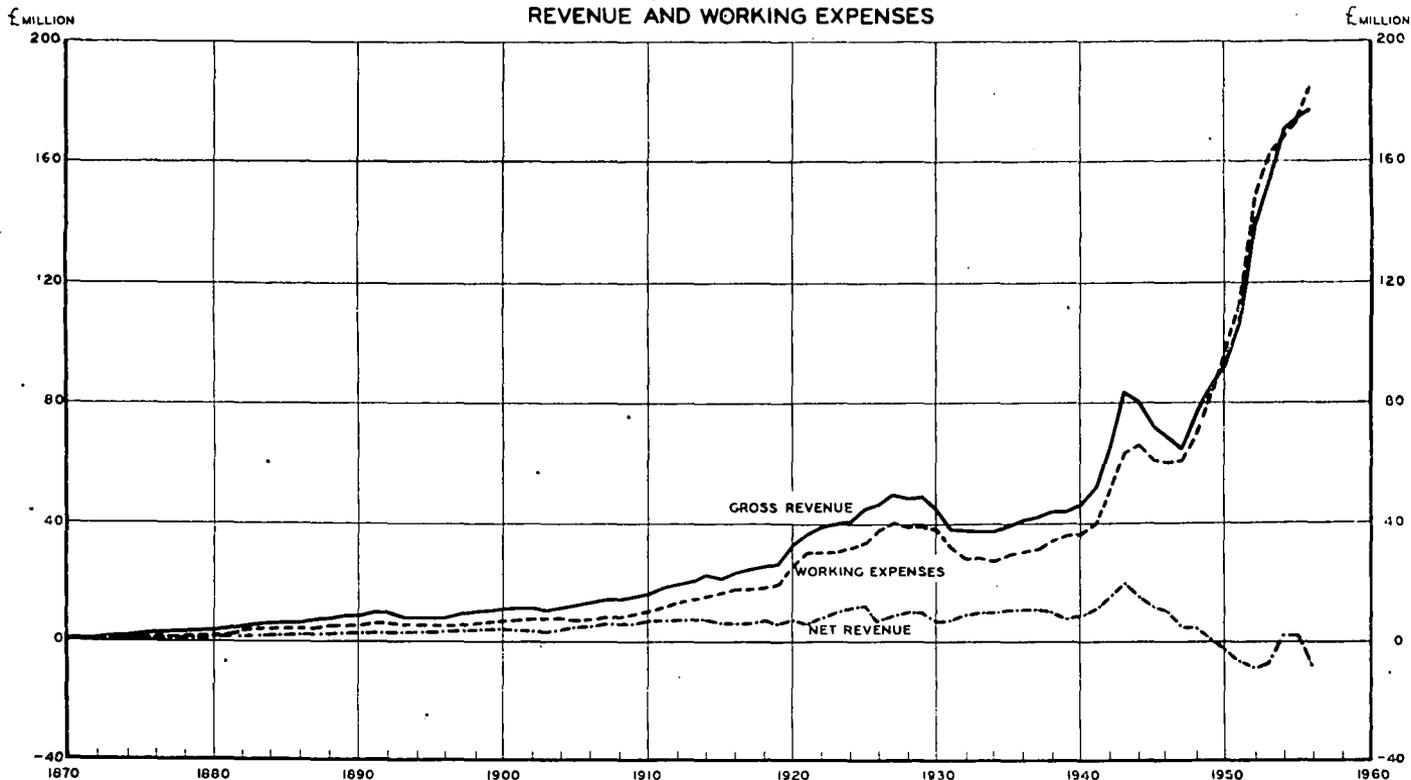
ROUTE - MILEAGE AND TRAFFIC



NOTE:— VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE. ACTUAL NUMBERS ARE INDICATED BY SCALE.

GOVERNMENT RAILWAYS: AUSTRALIA, 1870 TO 1956

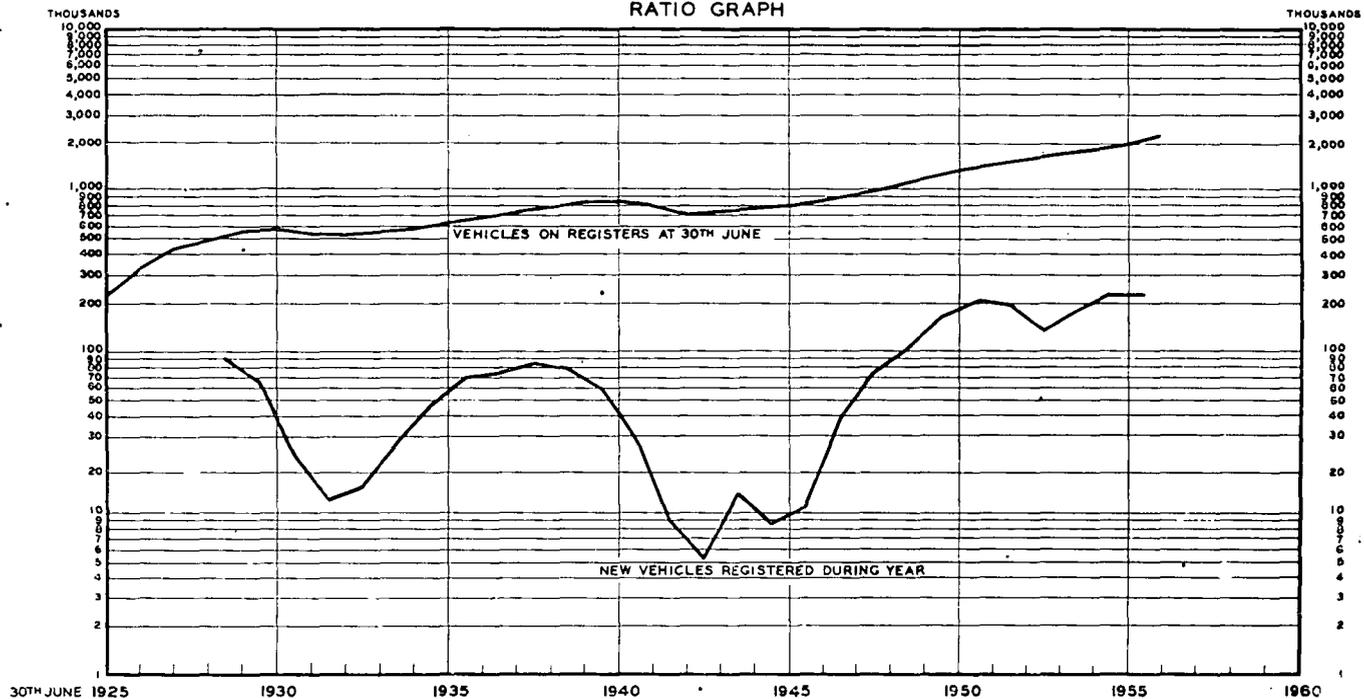
REVENUE AND WORKING EXPENSES



NOTE.—Gross Revenue excludes Government Grants.

MOTOR VEHICLE REGISTRATIONS: AUSTRALIA, 1925 TO 1956

(EXCLUDING MOTOR CYCLES)



NOTE:--VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE. ACTUAL NUMBERS ARE INDICATED BY SCALE.

(ii) *Principal Ports.* The following table shows the tonnage of oversea and interstate cargo discharged and shipped at principal ports during 1955-56.

CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1955-56.
(^{'000.})

Port.	Discharged.				Shipped.			
	Oversea.		Interstate.		Oversea.		Interstate.	
	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.
Sydney	2,646	1,340	776	324	847	435	358	285
Newcastle	469	21	1,821	2	283	5	2,596	..
Port Kembla	207	..	2,424	..	195	..	566	..
Other .. .. .	..	..	..	..	15	11	..	2
<i>Total, New South Wales</i>	<i>3,322</i>	<i>1,361</i>	<i>5,021</i>	<i>326</i>	<i>1,340</i>	<i>451</i>	<i>3,520</i>	<i>287</i>
Melbourne	2,362	1,274	2,208	368	565	550	617	372
Geelong	2,286	32	251	..	778	..	576	..
Portland	31	..	10	..	16	..	..	..
<i>Total, Victoria</i>	<i>4,679</i>	<i>1,306</i>	<i>2,469</i>	<i>368</i>	<i>1,359</i>	<i>550</i>	<i>1,193</i>	<i>372</i>
Brisbane	577	214	425	210	568	103	31	62
Cairns	80	11	41	20	123	11	95	31
Gladstone	40	..	20	..	23	3	126	..
Mackay	23	..	18	1	179	..	70	..
Townsville	86	4	68	40	199	9	88	4
Other	4	..	17	15	198	10	148	13
<i>Total, Queensland</i>	<i>810</i>	<i>229</i>	<i>589</i>	<i>286</i>	<i>1,290</i>	<i>136</i>	<i>558</i>	<i>110</i>
Port Adelaide	515	346	1,550	139	426	110	182	140
Ardrossan .. .. .	..	..	..	..	180	..	103	..
Port Pirie	40	..	212	..	477	..	233	..
Rapid Bay .. .. .	..	..	..	..	..	..	357	..
Whyalla	4	..	263	..	14	..	3,118	..
Other	85	2	47	2	277	40	203	1
<i>Total, South Australia</i>	<i>644</i>	<i>348</i>	<i>2,072</i>	<i>141</i>	<i>1,374</i>	<i>150</i>	<i>4,196</i>	<i>141</i>
Fremantle	2,596	130	271	211	836	67	1,101	58
Geraldton	34	..	10	..	150	4	49	..
Yampi .. .. .	..	..	2	..	..	..	479	..
Other	76	..	14	6	189	45	15	43
<i>Total, Western Australia</i>	<i>2,706</i>	<i>130</i>	<i>297</i>	<i>217</i>	<i>1,175</i>	<i>116</i>	<i>1,644</i>	<i>101</i>
Hobart	145	15	477	39	73	130	262	38
Burnie	40	3	41	35	27	1	65	107
Launceston	34	5	109	101	25	8	39	95
Other	5	23	71	56	1	4	150	64
<i>Total, Tasmania</i>	<i>224</i>	<i>46</i>	<i>698</i>	<i>231</i>	<i>126</i>	<i>143</i>	<i>516</i>	<i>304</i>
Darwin	46	1	38	3	3	..	5	..
<i>Total, Northern Territory</i>	<i>46</i>	<i>1</i>	<i>38</i>	<i>3</i>	<i>3</i>	<i>..</i>	<i>5</i>	<i>..</i>
<i>Australia</i>	<i>12,431</i>	<i>3,421</i>	<i>11,184</i>	<i>1,572</i>	<i>6,667</i>	<i>1,546</i>	<i>11,632</i>	<i>1,315</i>

2. Oversea Cargo by Nationality of Vessels.—The following table shows the total overseas cargo, discharged and shipped combined, according to the nationality of the vessels, during the years 1953-54 to 1955-56:—

OVERSEA CARGO DISCHARGED AND SHIPPED: NATIONALITY OF VESSELS, AUSTRALIA.

(*000.)

Vessels Registered at Ports in—	1953-54.		1954-55.		1955-56.	
	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.
Commonwealth Countries—						
Australia	218	108	357	106	250	117
Hong Kong	92	32	160	35	121	45
New Zealand	452	298	472	327	432	380
United Kingdom	7,678	2,801	8,792	3,014	9,377	2,924
Other	189	84	274	134	239	128
<i>Total, Commonwealth Countries.. .. .</i>	<i>8,629</i>	<i>3,323</i>	<i>10,055</i>	<i>3,616</i>	<i>10,419</i>	<i>3,594</i>
Proportion of Total .. %	60.41	79.75	58.88	74.97	54.56	72.36
Foreign Countries—						
Denmark	310	32	388	44	566	88
France	229	31	242	41	221	47
Germany(a)	20	4	134	69	320	96
Italy	148	52	217	71	167	67
Japan	247	17	432	63	547	83
Netherlands	862	168	1,091	198	1,131	190
Norway	1,814	168	2,499	246	2,985	294
Panama	627	10	765	27	886	47
Sweden	749	156	719	221	1,135	236
United States of America	192	188	235	174	253	161
Other	458	18	299	53	467	64
<i>Total, Foreign Countries</i>	<i>5,656</i>	<i>844</i>	<i>7,021</i>	<i>1,207</i>	<i>8,678</i>	<i>1,373</i>
Proportion of Total .. %	39.59	20.25	41.12	25.03	45.44	27.64
Grand Total	14,285	4,167	17,076	4,823	19,097	4,967

(a) Federal Republic.

Owing to war conditions the proportion of cargo carried in British Commonwealth vessels decreased from 72.43 per cent. in 1938-39 to 41.37 per cent. in 1943-44, but increased to 77.51 per cent. in 1946-47. It has since declined, and in 1955-56 was 58.23 per cent.

§ 7. Vessels Built and Registered.

1. **Vessels Built.**—The following table shows the number and tonnage of vessels built in Australia during each of the calendar years 1952 to 1956, so far as such information can be ascertained from the Shipping Registers of the various States. The Merchant Shipping Act, under which vessels are registered in Australia, does not, however, make it compulsory to register vessels under 15 tons burden if engaged in river or coastal trade. Larger vessels are also exempt from registration if not engaged in trade. Yachts and small trading vessels may be, and frequently are, registered at the request of the owners.

VESSELS BUILT AND REGISTERED IN AUSTRALIA.

Year.	Steam.		Motor.(a)			Sailing.			Total.			
	No.	Tonnage.		No.	Tonnage.		No.	Tonnage.		No.	Tonnage.	
		Gross.	Net.		Gross.	Net.		Gross.	Net.		Gross.	Net.
1952 ..	1	4,054	2,070	7	2,520	1,382	1	5	3	9	6,579	3,455
1953 ..	3	11,744	6,647	4	7,889	4,051	3	23	22	10	19,656	10,720
1954 ..	2	11,289	5,706	12	11,890	6,546	..	..	..	14	23,179	12,252
1955 ..	2	3,905	1,903	9	185	156	2	9	9	13	4,099	2,068
1956 ..	1	7,583	4,203	22	14,552	8,432	1	3	3	24	22,138	12,638

(a) Includes vessels with auxiliary motors.

2. **Vessels Registered.**—The following table shows the number and net tonnage of steam, sailing and other vessels on the register of each State and the Northern Territory at 31st December, 1955 :—

VESSELS REGISTERED, 31st DECEMBER, 1955.

State or Territory.	Steam and Motor.		Sailing.				Barges, Hulks, Dredges, etc., not Self-propelled.		Total.	
			Propelled by Sail only.		Fitted with Auxiliary Power.					
	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.
New South Wales ..	303	67,699	26	2,101	91	1,233	10	948	430	71,981
Victoria ..	188	173,460	49	595	54	1,570	36	13,432	327	189,057
Queensland ..	93	29,978	57	726	60	780	11	1,421	221	32,905
South Australia ..	77	27,600	15	307	40	2,083	39	6,172	171	36,162
Western Australia ..	82	7,092	211	3,144	59	1,475	5	478	357	12,189
Tasmania ..	43	7,622	46	1,467	95	2,478	2	513	186	12,080
Northern Territory ..	..	..	16	154	9	177	..	..	25	331
Australia ..	786	313,451	420	8,494	408	9,796	103	22,964	1,717	354,705

3. **World Shipping Tonnage.**—Issues of the Official Year Book prior to No. 39 contained tables, compiled from *Lloyd's Register of Shipping*, showing the number and gross tonnage of steam, motor and sailing vessels owned by the various maritime countries of the world. The tables are not repeated in this issue, but the following information is derived from the same source.

At 1st July, 1956, the total steamers, motorships and auxiliary sailing vessels of 100 gross tons and upwards throughout the world amounted to 33,052, with a gross tonnage of 105,200,000. Of these totals, steamers numbered 16,475 for 67,494,000 gross tons, motorships 15,554 for 37,504,000 gross tons and auxiliary sailing vessels 1,023 for 202,000 gross tons. In addition, there were 3,677 oil tankers of 100 gross tons and upwards with a gross tonnage of 28,211,000. Australian steamers, motorships and auxiliary sailing vessels, 359 for 606,000 gross tons, constituted 1.09 per cent. and 0.58 per cent. respectively of the total numbers and tonnage. There were no Australian oil tankers of 100 gross tons and upwards registered.

§ 8. Miscellaneous.

1. **Lighthouses.**—A list of the principal lighthouses on the coast of Australia, giving details of the location, number, colour, character, period, candle-power and visibility of each light so far as particulars are available will be found in *Transport and Communication*, Bulletin No. 46.

2. **Distances by Sea.**—The distances by sea between the ports of the capital cities of Australia and the most important ports in other countries which trade with Australia were shown in *Transport and Communication*, Bulletin No. 46.

3. **Shipping Freight Rates.**—The *Quarterly Summary of Australian Statistics* shows a list of the ruling freight rates for general merchandise in respect of both oversea and interstate shipments. At 31st December, 1956, the rate for general merchandise from Australia to the United Kingdom and the Continent was £8 19s. per ton weight or measurement while the rates for wheat and wool (greasy) were respectively £10 per ton weight and 2.97d. less 7 per cent. per lb. These rates, which are expressed in sterling, are subject to an adjustment of 2½ per cent. when freight is prepaid in Australia.

4. **Depth of Water at Main Ports.**—A table, compiled from information supplied by the Director of Navigation, showing the depth of water available and tides at principal ports of Australia at 1st January, 1956, was included in *Transport and Communication*, Bulletin No. 46.

5. **Shipping Losses and Casualties.**—Courts of Marine Inquiry are constituted by a magistrate assisted by skilled assessors, and, when necessary, are held at the principal port in each State and at Launceston (Tasmania). Such courts have power to deal with the certificates of officers who are found at fault. Particulars of shipping losses and casualties reported on or near the coast during each of the years 1952 to 1956 are shown in the table below. This information also was furnished by the Director of Navigation.

SHIPPING LOSSES AND CASUALTIES: AUSTRALIA.

Year.	Shipping Losses.			Other Shipping Casualties.			Total Shipping Casualties.		
	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.
1952 ..	1	197	16	152	431,654	..	153	431,851	16
1953 ..	..	..	..	85	242,972	..	85	242,972	..
1954 ..	..	..	..	149	426,878	..	149	426,878	..
1955 ..	1	53	..	220	694,847	..	221	694,900	..
1956 ..	2	529	18	237	771,418	..	239	771,947	18

6. **Commonwealth Navigation and Shipping Legislation.**—By section 51 (i) of the Commonwealth Constitution, the Parliament of the Commonwealth is empowered to make laws in respect of trade and commerce with other countries and among the States. By section 98 the power in this particular respect is further defined as extending to navigation and shipping.

A review of the introduction and development of the Navigation Act 1912–1950 was given in Official Year Book No. 40, pp. 110–2. Amendments to the Principal Act were made by the Navigation Act 1952, the provisions of which covered the settlement of maritime industrial disputes, standards of accommodation to be provided on ships and the engagement and discipline of seamen.

Other shipping Acts under the trade and commerce power of the Commonwealth are the Sea-Carriage of Goods Act 1924, the Seamen's Compensation Act 1911–1954, and the Seamen's War Pensions and Allowances Act 1940–1955.

7. **Ports and Harbours.**—A report on "The Turn-round of Ships in Australian Ports" was submitted to the Commonwealth Government by Henry Basten, C.M.G., on 4th January, 1952. The report deals with all factors affecting the turn-round of ships and congestion in Australian ports and the measures that might be taken to effect improvement on both short-term and long-term bases.

B. GOVERNMENT RAILWAYS.

1. **General.**—The first steam-operated railway in Australia, between Melbourne and Port Melbourne, a distance of two miles, was opened on 12th September, 1854. It was owned and operated by the Melbourne and Hobson's Bay Railway Co. In the next one hundred years the mileage increased greatly and at 30th June, 1956, 26,473 route-miles (excluding several hundred miles of privately-owned line) were open for traffic. The operation of Australia-wide services is, however, greatly hampered by the presence of many break-of-gauge stations, necessitated by the several gauges at present in use. The policy of government ownership and control of railways has been adopted in each State and at 30th June, 1956, 24,272 route-miles were owned by the State Governments and 2,201 route-miles by the Commonwealth Government. In the following tables details of

the four lines owned by the Commonwealth are grouped and shown with the totals for the various State-owned systems. Separate particulars for each Commonwealth line and more detailed statistics for all lines are shown in the annual bulletin, *Transport and Communication*.

In some States there are comparatively small privately-owned railway systems offering passenger and freight services to the public. Details of these private railways were included in Official Year Book No. 39 and previous issues, but owing to their relative unimportance and the incomplete nature of the statistics available the series has been discontinued.

2. Railway Communication in Australia.—An account of the progress of railway construction in Australia since the opening of the first line in 1854 will be found in Official Year Book No. 6, p. 681 and in No. 22, p. 259. The main ports on the mainland are connected by lines running approximately parallel to the coast and are the focal points of lines which radiate inland to the agricultural, mining and pastoral areas of the continent to a distance which reaches 600 miles at some points. However, Darwin in the Northern Territory is not connected by rail to any other port in Australia. A 3 ft. 6 in. gauge railway extends southward from Darwin to Birdum, a distance of 317 miles, and from Port Augusta in South Australia northwards to Alice Springs in the Northern Territory, a distance of 771 miles.

The heavy traffic of the 1939–45 War, coming after a period of depression when replacement of track and rolling stock had not been maintained at desirable levels, placed a severe strain on the railway systems, which required extensive post-war rehabilitation. Track works were restored and improved and many new items of rolling stock replaced worn-out equipment. Besides the construction of air-conditioned passenger trains and high-capacity goods rolling stock, many new locomotives were built and others purchased. In recent years there has been a significant development of diesel-electric traction and the number of diesel-electric locomotives in service has risen from two at 30th June, 1949 to 254 at 30th June, 1956. The electrification of the Gippsland line in Victoria and the Western Line in New South Wales has recently been completed.

3. Government Railways Development.—In spite of the great extensions of State railways since 1875 and the construction of various railways by the Commonwealth Government, there are still, in some States, immense areas of country which are as yet practically undeveloped, and in which little in the nature of permanent settlement has been accomplished. The general policy of the States was to extend the existing lines inland in the form of light railways as settlement increased, and while it is true that lines which were not likely to be commercially successful in the immediate future were constructed from time to time for the purpose of encouraging settlement, the general principle that the railways should be self-supporting was kept in view.

The greatest recorded route-mileage of government railways was 27,234 at 30th June, 1941. Although short lengths of line have been opened since that date, most railway construction is being confined to the duplication and electrification of existing main lines. The closure of other lines (mainly developmental branch lines whose retention would have been uneconomic), especially in Victoria and Western Australia, has resulted in a considerable decrease in route-mileage. Variations in route-mileage in each State and Territory during the ten years ended 30th June, 1956 are shown in the following table.

GOVERNMENT RAILWAYS: VARIATIONS IN ROUTE-MILEAGE, TEN YEARS ENDED 30th JUNE, 1956.

(Miles.)

State or Territory.	Route-mileage at 30th June, 1946.	Variations during Ten Years ended 30th June, 1956 due to—		Route-mileage at 30th June, 1956.
		Lines Opened.	Lines Closed.	
New South Wales	6,331	2	27	6,306
Victoria	4,545	15	318	4,242
Queensland	6,566	..	110	6,456
South Australia	3,799	17	..	3,816
Western Australia	4,835	16	278	4,573
Tasmania	641	..	56	585
Northern Territory	490	..	..	490
Australian Capital Territory	5	..	..	5
Australia	27,212	50	789	26,473

4. **Standardization of Railway Gauges.**—A summary of the report and recommendations relating to the standardization of Australia's railway gauges on the basis of a 4 ft. 8½ in. gauge, made in March, 1945, at the request of the Commonwealth Government by the late Sir Harold Clapp, then Director-General of Land Transport, Commonwealth Department of Transport, together with an outline of the agreement between the Commonwealth Government and the States of New South Wales, Victoria and South Australia regarding the standardization of railway gauges in their respective States, is contained in Official Year Book No. 37, pp. 146–9. The agreement, which was signed in 1946, was ratified by the Governments of the Commonwealth, of Victoria and of South Australia, but not by the New South Wales Government. After some time had elapsed and New South Wales had failed to ratify the agreement, the Commonwealth Government decided to enter into a separate agreement with South Australia, and the necessary legislation was enacted in 1949 by each Government concerned. Action was also taken to invite the Victorian Government to discuss the subject of a separate agreement, but to date there has been no legislative action. The Commonwealth–South Australia Agreement provides for the same standardization work to be carried out in South Australia as would have been carried out had New South Wales ratified the original Commonwealth–Three States Agreement, and that over a period of years the Commonwealth should contribute 70 per cent. and South Australia be responsible for the remaining 30 per cent. of the estimated cost.

A map showing the railway systems of Australia according to gauge appears on page 377.

5. **Grafton-South Brisbane (Uniform Gauge) Line.**—The first step towards uniform gauge railway communication between the capitals of the mainland States was effected in 1930 with the construction of the 4 ft. 8½ in. gauge line from Grafton to South Brisbane. The finance required for the construction was provided by the Commonwealth Government. For details of the agreement between the Commonwealth and New South Wales and Queensland, see Official Year Book No. 31, p. 122.

This line is operated by the New South Wales Railways and details of operations in New South Wales are included with those of the New South Wales system. Details of operations on the Queensland portion are included with Queensland railway statistics unless otherwise specified.

6. **Mileage Open for Traffic, all Lines.**—Almost all the railways open for general traffic in Australia are owned and controlled by the State or Commonwealth Governments. Private lines have been laid down for the purpose of opening up forest lands, mining districts or sugar areas. These lines are not generally used for the conveyance of passengers or the public conveyance of goods.

The following table shows the route-mileage of Commonwealth and State lines open in each State and Territory at various periods since the inauguration of railways in Australia in 1854:—

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN.

(Miles.)

At 30th June—	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1855(a) ..	14	2	..	7	..	..	..	..	23
1861(a) ..	73	114	..	56	..	..	..	..	243
1871(a) ..	358	276	218	133	..	45	..	..	1,030
1881(a) ..	996	1,247	800	832	92	45	..	..	4,012
1891 ..	2,182	2,763	2,195	1,666	198	351	145	..	9,500
1901 ..	2,846	3,237	2,801	1,736	1,355	457	145	..	12,577
1911 ..	3,762	3,523	3,868	1,935	2,376	470	145	..	16,079
1921 ..	5,043	4,267	5,752	3,408	3,992	630	199	5	23,296
1931 ..	6,247	4,514	6,529	3,898	4,634	665	317	5	26,809
1941 ..	6,368	4,518	6,567	3,809	4,835	642	490	5	27,234
1951 ..	6,354	4,445	6,560	3,805	4,682	605	490	5	26,946
1955 ..	6,305	4,248	6,553	3,816	4,565	605	490	5	26,587
1956 ..	6,306	4,242	6,456	3,816	4,573	585	490	5	26,473

(a) At 31st December.

At 30th June, 1956, 255 route-miles in Victoria and 138 route-miles in New South Wales were electrified.

The next table shows for each State the length of government lines open in relation to both population and area at 30th June, 1956.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN AT 30th JUNE, 1956.
(Miles.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Route-mileage open ..	6,306	4,242	6,456	3,816	4,573	585	490	5	26,473
Per 1,000 of population ..	1.77	1.63	4.71	4.50	6.75	1.83	26.78	0.15	2.81
Per 1,000 square miles ..	20.38	48.27	9.63	10.04	4.69	22.32	0.94	5.32	8.90

7. Classification of Lines according to Gauge, at 30th June, 1956.—The next table shows the route-mileage of government railways open in each State and Territory at 30th June, 1956, classified according to gauge.

GOVERNMENT RAILWAYS: GAUGES, AT 30th JUNE, 1956.
(Route-miles.)

Gauge.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
5 ft. 3 in. ..	(a) 203	4,208	.. 69	1,622	..	..	..	..	6,033
4 ft. 8½ in. ..	6,103	..	(b) 69	(c) 654	(c) 454	..	..	(c) 5	7,285
3 ft. 6 in. ..	..	..	6,357	(d) 1,540	4,119	585	(c) 490	..	13,091
2 ft. 6 in. ..	..	34	..	..	..	..	..	..	34
2 ft. 0 in. ..	..	..	30	..	..	..	..	..	30
Total ..	6,306	4,242	6,456	3,816	4,573	585	490	5	26,473

(a) Portion of Victorian system. (b) Queensland section of Grafton-South Brisbane Uniform Gauge Line. (c) Portion of Commonwealth system. (d) Includes 598 miles of Commonwealth system.

8. Summary of Operations.—In the following table a summary is shown of the operations of government railways open in Australia during the years ended 30th June, 1955 and 1956:—

GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS.

Particulars.	1954-55.			1955-56.		
	C'wealth Railways.	State Railways.	Total.	C'wealth Railways.	State Railways.	Total.
Route-mileage, 30th June .. miles	2,201	24,386	26,587	2,201	24,272	26,473
Gross revenue .. £'000	3,741	170,229	173,970	4,741	172,443	177,184
.. per revenue train-mile .. pence	442	440	440	487	441	442
Working expenses .. £'000	(a) 2,921	169,556	172,477	(a) 3,176	181,746	184,922
.. per revenue train-mile .. pence	346	438	436	326	465	461
Net revenue .. £'000	820	673	1,493	1,565	-9,303	-7,738
.. per revenue train-mile .. pence	97	2	4	161	-24	-19
Revenue train-miles .. '000	2,029	92,722	94,751	2,336	93,898	96,234
Passenger-journeys .. '000	215	516,642	516,857	230	514,507	514,737
Goods and livestock carried .. '000 tons	816	46,882	47,698	918	45,856	46,774
Average number of employees (b)	2,335	139,701	142,036	2,399	140,716	143,115
.. earnings per employee .. £	790	876	874	843	934	932

(a) Excludes amounts paid for Commissioner's salary, government contributions under the Superannuation Act, Accident and Insurance Fund, proportion of salaries of Auditor-General's staff and loan redemption and conversion charges—1954-55, £110,369; 1955-56, £80,834. (b) Excludes construction staff except in respect of Victoria.

A graph showing the route-mileage and traffic of government railways from 1870 to 1955-56 appears on page 378.

9. Summary, States.—The following table shows, for government railways in Australia, particulars of the mileage open, cost of construction and equipment, passengers and goods carried and train-miles run during 1954-55 and 1955-56.

GOVERNMENT RAILWAYS: SUMMARY, STATES.

Railway System.	Mileage Open.(a)		Cost of Construction and Equipment during Year. (£'000.)	Passenger-journeys. ('000.)	Goods and Livestock Carried. ('000 tons.)	Revenue Train-miles. ('000.)
	Route-miles.	Track-miles.				
1954-55.						
New South Wales ..	6,102	8,460	11,011	281,417	(b)19,386	37,294
Victoria ..	4,451	5,843	9,406	169,204	10,082	18,740
Queensland ..	6,553	7,494	3,503	35,919	8,492	19,637
South Australia ..	2,564	3,186	2,086	16,849	4,474	7,216
Western Australia ..	4,111	4,689	5,885	10,139	3,407	7,769
Tasmania ..	605	706	387	3,114	1,041	2,066
Commonwealth ..	2,201	2,366	922	215	816	2,029
Australia ..	26,587	32,744	33,200	516,857	47,698	94,751
1955-56.						
New South Wales ..	6,103	8,467	16,542	280,470	(b)18,787	38,478
Victoria ..	4,445	5,833	8,844	166,708	9,607	18,635
Queensland ..	6,456	7,494	3,502	35,647	8,180	19,289
South Australia ..	2,564	3,193	2,672	16,434	4,414	7,113
Western Australia ..	4,119	4,700	4,187	12,271	3,793	8,278
Tasmania ..	585	686	313	2,977	1,075	2,105
Commonwealth ..	2,201	2,461	748	230	918	2,336
Australia ..	26,473	32,834	36,808	514,737	46,774	96,234

(a) At 30th June. (b) Partly estimated.

10. Gross Revenue.—(i) *General.* The gross revenue is composed of (a) receipts from coaching traffic, including the carriage of mails, horses, parcels, etc., by passenger trains; (b) receipts from the carriage of goods and livestock; and (c) rents and miscellaneous items. State Government grants are excluded. Details of these grants made during 1955-56 are as follows:—£1,000,000 for the working of country development lines and £800,000 to subsidize payments from Superannuation Account in New South Wales; £10,006 recoup on operating the Kerang-Koondrook Tramway in Victoria; £3,250,000 towards working expenses and £800,000 towards debt charges in South Australia; and £10,000 for sick leave funds in Tasmania.

(ii) *Coaching, Goods and Miscellaneous Receipts.* (a) *Summary.* In the following table the gross revenue is shown for the years 1953-54 to 1955-56, together with the revenue per average route-mile worked and per revenue train-mile:—

GOVERNMENT RAILWAYS: GROSS REVENUE.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
TOTAL GROSS REVENUE. (£'000.)								
1953-54 ..	74,569	35,707	30,223	12,718	11,111	2,133	3,402	169,863
1954-55 ..	73,361	37,667	31,625	12,939	12,315	2,322	3,741	173,970
1955-56 ..	75,386	37,032	31,312	13,098	13,080	2,535	4,741	177,184

(a) Excludes government grants; see para. 10 (i) above.

GOVERNMENT RAILWAYS: GROSS REVENUE(a)—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
GROSS REVENUE PER AVERAGE ROUTE-MILE WORKED. (£.)								
1953-54 ..	12,222	7,806	4,607	4,960	2,703	3,526	1,546	6,380
1954-55 ..	12,022	8,449	4,823	5,047	2,996	3,839	1,700	6,541
1955-56 ..	12,352	8,322	5,961	5,108	3,175	4,260	2,154	6,689
GROSS REVENUE PER REVENUE TRAIN-MILE. (Pence.)								
1953-54 ..	477.16	468.21	376.98	414.78	370.17	269.72	418.09	436.18
1954-55 ..	469.78	482.39	386.52	430.34	380.43	269.72	442.47	439.80
1955-56 ..	470.21	476.94	389.60	441.92	379.21	288.98	487.04	441.88

(a) Excludes government grants ; see para. 10 (i) above.

(b) *Distribution.* The following table shows the gross revenue for the years 1954-55 and 1955-56 classified according to the main three sources of receipts.GOVERNMENT RAILWAYS: DISTRIBUTION OF GROSS REVENUE.
(£'000.)

Railway System.	1954-55.			1955-56.		
	Coaching.	Goods and Livestock.	Miscellaneous.	Coaching.	Goods and Livestock.	Miscellaneous.
New South Wales ..	17,787	51,803	3,771	19,616	51,963	3,807
Victoria ..	11,132	24,417	2,118	12,207	22,635	2,190
Queensland ..	4,651	26,106	868	4,683	25,736	893
South Australia ..	1,780	10,242	917	1,841	10,350	907
Western Australia ..	1,351	10,360	604	1,492	10,989	599
Tasmania ..	217	2,043	62	222	2,246	67
Commonwealth ..	803	2,650	288	972	3,437	332
Australia ..	37,721	127,621	8,628	41,033	127,356	8,795

11. *Working Expenses.*—(i) *General.* In order to make an adequate comparison of the working expenses as between the several States and Territories, allowance should be made for the variation of gauges and of physical and traffic conditions, not only on the different systems of the State and Commonwealth railways, but also on different portions of the same system. When traffic is light, the proportion of working expenses to revenue is naturally greater than when traffic is heavy; and this is especially true in Australia, where ton-mile rates are in many cases based on a tapering principle—i.e., a lower rate per ton-mile is charged upon merchandise from remote interior districts—and where on many of the lines there is but little back loading.

Working expenses, wherever presented in the Railways section of this chapter, exclude interest, sinking fund, exchange and certain other payments (see paras. 12 and 13 following).

During the 1939-45 War, large amounts were set aside by the railways as reserves, mainly to provide for depreciation and accrued leave, to be expended as circumstances permit. Particulars of these amounts, which were included in working expenses and which in the year 1942-43 aggregated nearly £10 million and over the whole period about £30 million, were given in Official Year Book No. 38, p. 175.

(ii) *Working Expenses.* The following table shows the total working expenses, the ratio of working expenses to gross revenue and working expenses per average route-mile worked and per revenue train-mile for the years 1953-54 to 1955-56:—

GOVERNMENT RAILWAYS: WORKING EXPENSES.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Aust.
TOTAL WORKING EXPENSES. (£'000.)								
1953-54 ..	68,197	35,951	29,103	14,934	14,298	2,804	2,897	168,184
1954-55 ..	68,397	37,032	30,946	15,414	14,690	3,077	2,921	172,477
1955-56 ..	74,904	38,026	33,873	15,761	15,920	3,262	3,176	184,922
RATIO OF WORKING EXPENSES TO GROSS REVENUE. (Per Cent.)								
1953-54 ..	91.45	100.68	96.30	117.42	128.68	131.48	85.14	99.01
1954-55 ..	93.23	98.31	97.85	119.12	119.29	132.50	78.09	99.14
1955-56 ..	99.36	102.68	108.18	120.33	121.71	128.69	66.99	104.36
WORKING EXPENSES PER AVERAGE ROUTE-MILE WORKED. (£.)								
1953-54 ..	11,178	7,860	4,436	5,825	3,478	4,635	1,316	6,317
1954-55 ..	11,209	8,307	4,720	6,012	3,574	5,086	1,327	6,485
1955-56 ..	12,273	8,545	5,247	6,146	3,864	5,482	1,443	6,981
WORKING EXPENSES PER REVENUE TRAIN-MILE. (Pence.)								
1953-54 ..	436.39	471.41	363.01	487.05	476.35	354.64	355.98	431.86
1954-55 ..	437.99	474.26	378.22	512.64	453.81	357.38	345.51	436.02
1955-56 ..	467.21	489.74	421.46	531.75	461.55	371.89	326.26	461.18

(a) See para. 8, note (a), page 387.

(iii) *Distribution.* The following table shows the total working expenses for the years 1954-55 and 1955-56 classified according to the main four expenditure headings.

GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES.
(£'000.)

Railway System.	Mainten- ance of Way and Works.	Motive Power.(a)	Traffic.	Other Charges.	Total Working Expenses.
1954-55.					
New South Wales ..	11,485	28,840	16,248	11,824	68,397
Victoria ..	7,885	12,281	9,286	7,580	37,032
Queensland ..	7,295	14,699	7,197	1,755	30,946
South Australia(b) ..	2,771	7,488	3,593	1,562	15,414
Western Australia(b) ..	2,378	6,991	3,102	2,219	14,690
Tasmania(b) ..	785	1,303	647	342	3,077
Commonwealth(c) ..	802	1,307	612	200	2,921
Australia ..	33,401	72,909	40,685	25,482	172,477
1955-56.					
New South Wales ..	13,297	31,639	17,537	12,431	74,904
Victoria ..	7,786	12,011	9,812	8,417	38,026
Queensland ..	8,162	16,091	7,747	1,873	33,873
South Australia(b) ..	2,980	7,525	3,630	1,626	15,761
Western Australia(b) ..	2,692	7,405	3,395	2,428	15,920
Tasmania(b) ..	824	1,405	669	364	3,262
Commonwealth(c) ..	1,026	1,208	695	247	3,176
Australia ..	36,767	77,284	43,485	27,386	184,922

(a) Includes maintenance of rolling stock.
(c) See para. 8, note (a), page 387.

(b) Includes provision of reserves for depreciation.

12. Net Revenue.—The following table shows for the years 1953–54 to 1955–56 the net revenue, i.e., the excess of gross revenue over working expenses, the amount of such net revenue per average route-mile worked and per revenue train-mile, the interest on railway loan expenditure and the profit or loss after paying interest:—

GOVERNMENT RAILWAYS: NET REVENUE, INTEREST, AND PROFIT OR LOSS.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
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TOTAL NET REVENUE.
(£'000.)

1953–54 ..	6,372	– 244	1,120	– 2,216	– 3,187	– 671	(a) 505	1,679
1954–55 ..	4,964	635	679	– 2,475	– 2,375	– 755	(a) 820	1,493
1955–56 ..	482	– 994	– 2,561	– 2,663	– 2,840	– 727	(a) 1,565	– 7,738

NET REVENUE PER AVERAGE ROUTE-MILE WORKED.
(£.)

1953–54 ..	1,044	– 54	171	– 865	– 775	– 1,109	(a) 230	63
1954–55 ..	813	142	103	– 965	– 578	– 1,247	(a) 373	56
1955–56 ..	79	– 223	– 397	– 1,038	– 689	– 1,222	(a) 711	– 292

NET REVENUE PER REVENUE TRAIN-MILE.
(Pence.)

1953–54 ..	40.77	– 3.20	13.97	– 72.27	– 106.18	– 84.92	(a) 62.11	4.32
1954–55 ..	31.79	8.13	8.30	– 82.30	– 73.38	– 87.66	(a) 96.96	3.78
1955–56 ..	3.00	– 12.80	– 31.86	– 89.83	– 82.34	– 82.91	(a) 160.78	– 19.30

INTEREST PAYMENTS.
(£'000.)

1953–54 ..	6,523	2,303	2,211	1,162	1,134	254	(b) 404	(c) 14,073
1954–55 ..	7,100	2,545	2,460	1,288	1,411	282	(b) 407	15,493
1955–56 ..	8,032	2,874	2,630	1,471	1,721	322	(b) 385	17,435

NET PROFIT OR LOSS.
(£'000.)

1953–54 ..	– 151	– 2,547	– 1,091	– 3,378	– 4,321	– 925	(a) 101	– 12,394
1954–55 ..	– 2,136	– 1,910	– 1,781	– 3,763	– 3,786	– 1,037	(a) 413	– 14,000
1955–56 ..	– 7,550	– 3,868	– 5,191	– 4,134	– 4,561	– 1,049	(a) 1,180	– 25,173

(a) See para. 8, note (a), page 387. (b) Includes exchange. (c) Includes Commonwealth Government share of interest on Uniform Gauge Railway, £82,375.

NOTE.—Minus sign (–) denotes loss.

A graph showing the gross and net revenue and working expenses from 1870 to 1955–56 appears on page 379.

13. Exchange.—Exchange on interest payments abroad and certain other charges are not included in the table above. These items are not charged against the railways in Queensland and Western Australia and have been excluded for the purposes of comparison..

In the remaining States the amounts paid on account of exchange during 1955–56 were:—New South Wales, £482,000; Victoria, £127,949; South Australia, £56,105; and Tasmania, £3,912.

14. Traffic.—(i) *General.* Reference has already been made to the difference in the traffic conditions on many of the lines. These conditions differ not only in the several State and Commonwealth systems, but also on different lines in the same system, and apply to both passenger and goods traffic. By far the greater part of the population of Australia is confined to a fringe of country near the coast, more especially in the eastern and southern districts. A large proportion of the railway traffic between the chief centres of population is therefore carried over lines in the neighbourhood of the coast, and is thus, in some cases, open to seaborne competition. In recent years competition from road and air transport has become an important factor.

The following table shows particulars of railway traffic for the years 1953–54 to 1955–56:—

GOVERNMENT RAILWAYS: TRAFFIC.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
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PASSENGER-JOURNEYS (SUBURBAN AND COUNTRY).

('000.)

1953–54 ..	278,904	166,106	35,879	17,605	8,678	3,285	224	510,681
1954–55 ..	281,417	169,204	35,919	16,849	10,139	3,114	215	516,857
1955–56 ..	280,470	166,708	35,647	16,434	12,271	2,977	230	514,737

PASSENGER-JOURNEYS (SUBURBAN AND COUNTRY) PER AVERAGE ROUTE-MILE WORKED. (Number.)

1953–54 ..	45,714	36,315	5,469	6,866	2,111	5,430	102	19,181
1954–55 ..	46,119	37,955	5,478	6,571	2,466	5,147	98	19,432
1955–56 ..	45,956	37,462	5,522	6,410	2,979	5,003	104	19,433

GOODS AND LIVESTOCK CARRIED.

('000 Tons.)

1953–54 ..	(a) 20,140	9,200	8,081	4,433	3,206	968	762	46,790
1954–55 ..	19,386	10,082	8,492	4,474	3,407	1,041	816	47,698
1955–56 ..	18,787	9,607	8,180	4,414	3,793	1,075	918	46,774

GOODS AND LIVESTOCK CARRIED PER AVERAGE ROUTE-MILE WORKED.

(Tons.)

1953–54 ..	3,301	2,011	1,232	1,729	780	1,600	346	1,757
1954–55 ..	3,177	2,262	1,295	1,745	829	1,721	371	1,793
1955–56 ..	3,176	2,159	1,315	1,722	921	1,807	417	1,766

(a) Partly estimated.

(ii) *Passenger Traffic.* With the exception of the Commonwealth Railway Systems which operate only country services, all systems provide both suburban and country passenger services. Traffic classed as "suburban" moves between stations within a classified suburban

area around each capital city whilst traffic classified as "country" originates or terminates at stations outside of this suburban area. Particulars of suburban and country passenger traffic are shown separately in the two tables following.

(a) *Suburban Passenger Traffic.* The following table shows for the years 1953-54 to 1955-56 a summary of suburban passenger operations. Most of the suburban services in New South Wales and Victoria are operated within electrified areas.

GOVERNMENT RAILWAYS : SUBURBAN PASSENGER SUMMARY.

Year.	Suburban Passenger-journeys. (^{'000.})	Suburban Passenger Train-miles. (^{'000.})	Total Suburban Passenger-miles. (^{'000.})	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey. (Miles.)	Suburban Passenger Earnings.			
						Gross. (£'000.)	Per Passenger-journey. (Pence.)	Per Passenger-mile. (Pence.)	Per Passenger Train-mile. (Pence.)
NEW SOUTH WALES.									
1953-54	a 266,000	11,381	(b)	(b)	(b)	(b)	(b)	(b)	(b)
1954-55	a 269,016	11,503	(b)	(b)	(b)	(b)	(b)	(b)	(b)
1955-56	a 269,000	11,886	(b)	(b)	(b)	(b)	(b)	(b)	(b)
VICTORIA.									
1953-54	159,984	8,193	1,359,415	166	8.50	6,008	9.01	1.06	176
1954-55	162,957	8,236	1,376,307	167	8.45	6,088	8.97	1.06	177
1955-56	161,124	8,298	1,379,610	166	8.56	7,005	10.43	1.22	203
QUEENSLAND.									
1953-54	29,475	2,065	(b)	(b)	(b)	755	6.15	(b)	88
1954-55	29,712	2,099	(b)	(b)	(b)	767	6.19	(b)	88
1955-56	29,748	2,019	(b)	(b)	(b)	749	6.05	(b)	89
SOUTH AUSTRALIA.									
1953-54	16,122	1,768	146,852	83	9.11	532	7.90	0.87	72
1954-55	15,450	1,772	143,003	81	8.49	526	8.17	0.88	71
1955-56	15,061	1,778	140,906	79	9.36	567	9.04	0.97	77
WESTERN AUSTRALIA.									
1953-54	7,816	731	55,916	77	7.15	238	7.31	1.02	78
1954-55	9,354	1,038	66,456	64	6.56	293	7.51	1.06	68
1955-56	11,481	1,290	80,408	52	5.79	362	7.56	1.08	67
TASMANIA.									
1953-54	2,509	208	15,654	75	6.24	53	5.05	0.81	61
1954-55	2,519	239	14,683	61	5.83	51	4.87	0.83	51
1955-56	2,443	250	13,568	54	5.55	47	4.66	0.84	46

(a) Estimated. (b) Not available.

NOTE.—Train-miles refer to revenue mileages only.

(b) *Country Passenger Traffic.* The following table shows for the years 1953-54 to 1955-56 a summary of country passenger operations.

GOVERNMENT RAILWAYS : COUNTRY PASSENGER SUMMARY.

Year.	Country Passenger-journeys. (‘000.)	Country Passenger Train-miles. (a) (‘000.)	Total Country Passenger-miles. (‘000.)	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey. (Miles.)	Country Passenger Earnings.			
						Gross. (£‘000.)	Per Passenger-journey. (Pence.)	Per Passenger-mile. (Pence.)	Per Passenger Train-mile. (Pence.)
NEW SOUTH WALES.									
1953-54	(b)12,904	10,508	(c)	(c)	(c)	(c)	(c)	(c)	(c)
1954-55	(b)12,401	10,408	(c)	(c)	(c)	(c)	(c)	(c)	(c)
1955-56	(b)11,470	10,685	(c)	(c)	(c)	(c)	(c)	(c)	(c)
VICTORIA.									
1953-54	6,121	4,591	498,544	109	81.45	3,811	149.43	1.83	199
1954-55	6,247	4,590	497,644	108	79.66	3,791	145.65	1.83	197
1955-56	5,584	4,653	459,828	98	82.34	3,789	162.83	1.98	195
QUEENSLAND.									
1953-54	6,404	4,844	(c)	(c)	(c)	2,616	98.04	(c)	114
1954-55	6,207	5,075	(c)	(c)	(c)	2,609	100.90	(c)	110
1955-56	5,899	5,147	(c)	(c)	(c)	2,524	102.68	(c)	106
SOUTH AUSTRALIA.									
1953-54	1,483	2,236	133,672	57	90.14	865	139.99	1.55	89
1954-55	1,399	2,163	126,203	56	90.21	824	141.43	1.57	87
1955-56	1,373	2,154	125,088	55	91.08	802	140.13	1.54	85
WESTERN AUSTRALIA.									
1953-54	862	1,470	79,925	54	92.72	645	179.43	1.94	104
1954-55	785	1,546	79,097	51	100.72	667	203.89	2.03	104
1955-56	790	1,677	82,813	47	104.85	678	205.95	1.96	97
TASMANIA.									
1953-54	776	652	22,097	33	28.48	121	37.51	1.32	43
1954-55	595	747	21,183	28	35.57	120	48.29	1.36	38
1955-56	534	766	19,528	25	36.59	115	51.92	1.42	35
COMMONWEALTH.(d)									
1953-54	224	633	73,370	101	327.54	605	648.15	1.98	199
1954-55	215	641	74,260	101	344.88	615	685.44	1.99	201
1955-56	230	762	86,514	103	376.97	710	742.69	1.97	203

(a) Excludes mixed train-miles. (b) Estimated. (c) Not available. (d) Railways controlled by Commonwealth Government.

NOTE.—Train-miles refer to revenue mileages only.

(iii) *Freight Traffic.* (a) *Classification.* Some indication of the differing conditions of the traffic in each system may be gained from an examination of the tonnage of the various classes of commodities carried, and of the revenue derived therefrom. The following table shows the quantities of various commodities carried during 1954-55 and 1955-56.

GOVERNMENT RAILWAYS: CLASSIFICATION OF COMMODITIES CARRIED.

('000 Tons.)

Railway System.	Coal, Coke and Shale.	Other Minerals.	Grain and Flour.	Wool.	Live-stock.	All Other Com- modities.	Total.
1954-55.							
New South Wales ..	(a)	(a)	(b)1,092	(c) 181	(c) 719	17,394	19,386
Victoria ..	2,006	114	2,647	139	574	4,602	10,082
Queensland ..	(d)1,723	(e) 693	(f)3,464	71	805	1,736	8,492
South Australia ..	492	1,077	1,030	45	208	1,622	4,474
Western Australia ..	588	157	947	48	128	1,539	3,407
Tasmania ..	243	40	(f) 41	3	25	689	1,041
Commonwealth ..	506	15	6	4	70	215	816
Australia ..	(g)	(g)	(g)	491	2,529	27,797	47,698

1955-56.

New South Wales ..	(a)	(a)	(b)1,272	(c) 203	(c) 731	16,581	18,787
Victoria ..	2,038	113	2,260	144	480	4,572	9,607
Queensland ..	(d)1,597	(e) 716	(f)3,291	64	807	1,705	8,180
South Australia ..	259	1,198	1,042	45	230	1,640	4,414
Western Australia ..	520	187	1,340	61	138	1,547	3,793
Tasmania ..	246	48	(f) 34	4	26	717	1,075
Commonwealth ..	454	34	7	4	122	297	918
Australia ..	(g)	(g)	(g)	525	2,534	27,059	46,774

(a) Included with "All Other Commodities". (b) Wheat only. (c) Estimated. (d) Excludes shale. (e) Includes shale. (f) Agricultural produce. (g) Not available.

(b) Revenue. The following table shows the revenue derived from goods and livestock traffic during 1954-55 and 1955-56:—

GOVERNMENT RAILWAYS: REVENUE FROM GOODS AND LIVESTOCK TRAFFIC.

(£'000.)

Railway System.	Coal, Coke and Shale.	Other Minerals.	Grain and Flour.	Wool.	Live-stock.	All Other Com- modities.	Total.
1954-55.							
New South Wales ..	8,185	(a)	(a)	(a)	3,522	40,096	51,803
Victoria ..	2,283	145	5,684	836	1,572	13,897	24,417
Queensland ..	(b)2,911	(c)1,915	(d)5,257	1,130	3,182	11,711	26,106
South Australia ..	327	2,855	1,498	245	649	4,668	10,242
Western Australia ..	1,159	423	1,797	296	378	6,307	10,360
Tasmania ..	513	89	(d) 88	11	66	1,276	2,043
Commonwealth ..	814	59	10	24	222	1,521	2,650
Australia ..	16,192	(e)	(e)	(e)	9,591	79,476	127,621

1955-56.

New South Wales ..	8,576	(a)	(a)	(a)	3,799	39,588	51,963
Victoria ..	2,384	142	4,671	712	1,346	13,380	22,635
Queensland ..	(b)2,675	(c)1,995	(d)5,185	1,065	3,361	11,455	25,736
South Australia ..	185	3,091	1,558	253	712	4,551	10,350
Western Australia ..	1,025	516	2,420	379	395	6,254	10,989
Tasmania ..	579	118	(d) 74	19	66	1,390	2,246
Commonwealth ..	777	143	9	23	324	2,161	3,437
Australia ..	16,201	(e)	(e)	(e)	10,003	78,779	127,356

(a) Included with revenue from "All Other Commodities". (b) Excludes revenue from shale. (c) Includes revenue from shale. (d) Agricultural produce. (e) Not available.

(c) *Freight Summary.* A summary of freight traffic on each railway system for each of the years 1953-54 to 1955-56 is shown in the following table.

GOVERNMENT RAILWAYS : FREIGHT SUMMARY.

Year.	Revenue Goods Train miles. (a)	Total Revenue Net Ton-miles.	Average Train Load (Paying Traffic).	Average Haul per Ton.	Goods and Livestock Earnings.				Density of Traffic. (b)
					Gross.	Per Average Route-mile Worked.	Per Revenue Net Ton-mile.	Per Revenue Goods Train-mile.	
	('000.)	('000.)	(Tons.)	(Miles.)	(£'000.)	(£)	(Pence.)	(Pence.)	
NEW SOUTH WALES.									
1953-54	14,811	c2,849,803 (c)	186	(c) 142	52,847	8,662	4.45	826	c 467,104
1954-55	14,571	c2,965,614 (c)	196	(c) 153	51,803	8,490	4.19	823	c 486,007
1955-56	15,104	c2,942,192 (c)	188	(c) 157	51,963	8,514	4.24	797	c 482,089
VICTORIA.									
1953-54	5,471	1,269,772	231	138	22,655	4,926	4.28	990	277,606
1954-55	5,866	1,426,415	242	141	24,417	5,477	4.11	994	319,967
1955-56	5,638	1,324,877	234	138	22,635	5,086	4.10	958	297,725
QUEENSLAND.(d)									
1953-54	10,242	1,355,948	114	173	24,217	3,756	4.27	489	208,897
1954-55	10,650	1,376,781	117	168	25,428	3,919	4.43	520	212,204
1955-56	10,340	1,387,331	121	176	25,140	3,936	4.35	527	217,212
SOUTH AUSTRALIA.									
1953-54	3,037	684,848	214	140	10,007	3,903	3.51	791	267,101
1954-55	2,959	677,128	213	151	10,242	3,995	3.63	774	264,090
1955-56	2,865	643,801	209	146	10,350	4,037	3.86	808	251,092
WESTERN AUSTRALIA.									
1953-54	4,944	537,799	108	168	9,308	2,226	4.15	440	130,819
1954-55	5,185	556,505	107	163	10,360	2,520	4.47	480	135,370
1955-56	5,311	608,418	115	160	10,989	2,668	4.33	497	147,710
TASMANIA.									
1953-54	982	87,533	86	90	1,855	3,066	5.09	437	144,683
1954-55	1,024	96,178	91	92	2,043	3,377	5.10	462	158,972
1955-56	1,031	101,210	95	94	2,246	3,774	5.32	504	170,100
COMMONWEALTH.(e)									
1953-54	1,036	167,468	138	220	2,320	1,054	3.33	459	76,087
1954-55	1,104	196,824	178	241	2,650	1,204	3.80	492	89,425
1955-56	1,340	265,790	178	289	3,437	1,561	3.10	551	120,759

(a) Excludes mixed train-miles. (b) Total ton-miles per average route-mile worked. (c) Partly estimated. (d) Excludes Queensland portion of Grafton-South Brisbane (Uniform Gauge) Line. (e) Railways controlled by the Commonwealth Government.

15. *Rolling Stock.*—The following table shows the number of rolling stock of Government railways at 30th June, 1956.

GOVERNMENT RAILWAYS : ROLLING STOCK(a) AT 30th JUNE, 1956.

Railway System.	Locomotives.				Coaching Stock.(b)	Goods Stock.	Service Stock.
	Steam.	Diesel-electric.	Other.	Total.			
New South Wales ..	1,164	37	6	1,207	3,749	25,742	1,051
Victoria ..	476	46	35	557	(c)2,379	21,232	(d)1,160
Queensland ..	791	28	4	823	1,540	26,696	1,397
South Australia ..	327	18	..	345	(c) 698	8,685	(d) 470
Western Australia ..	368	62	10	440	604	12,095	744
Tasmania ..	91	32	8	131	173	2,647	116
Commonwealth ..	149	31	..	180	192	2,040	479
Australia ..	3,366	254	63	3,683	(e)9,389	99,137	(e)5,418

(a) Included in Capital Account. (b) Includes all brake vans. (c) Excludes 54 interstate coaching stock owned jointly by Victoria and South Australia. (d) Excludes one dynamometer car owned jointly by Victoria and South Australia. (e) Includes stock owned jointly by Victoria and South Australia.

16. Accidents.—The following table shows particulars of the number of persons killed or injured through train accidents and the movement of rolling stock on the government railways of Australia during the years 1954-55 and 1955-56 :—

GOVERNMENT RAILWAYS : ACCIDENTS.(a)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	C'wth.	Aust.
1954-55.								
Persons killed ..	60	35	14	15	19	3	..	146
Persons injured ..	660	592	151	137	256	13	23	1,832
1955-56.								
Persons killed ..	84	32	20	14	17	1	..	168
Persons injured ..	812	630	122	129	177	18	..	1,888

(a) Excludes accidents to railway employees.

17. Consumption of Coal, Oil and Petrol.—The following table shows the quantities of coal, oil and petrol consumed by the various government railways during 1955-56 :—

GOVERNMENT RAILWAYS : COAL, OIL AND PETROL CONSUMED, 1955-56.

Railway System.	Coal.		Oil.				Petrol for Rail Cars.
	Locomotives.	Other Purposes.	Diesel Oil.(a)	Fuel Oil.(b)	Lubrication.	Other Purposes.	
	'000 tons.	'000 tons.	'000 gal.	'000 gal.	'000 gal.	'000 gal.	'000 gal.
New South Wales ..	1,523	18	3,898	12,025	477	647	68
Victoria ..	207	14	6,885	11,370	344	1,431	5
Queensland ..	696	8	2,665	..	424	831	143
South Australia ..	170	8	2,064	20,915	(c)	(c)	156
Western Australia ..	317	5	2,693	1,711	314	1,130	62
Tasmania ..	38	..	1,141	..	44	127	..
Commonwealth ..	12	1	2,783	458	76	501	5
Australia ..	2,963	54	22,129	46,479	(c)	(c)	439

(a) Used in internal combustion engines of locomotives and rail cars. (b) Used in oil-fired furnaces of steam locomotives. (c) Not available.

18. Staff Employed and Salaries and Wages Paid.—The following table shows details of the average staff employed and the salaries and wages paid by the government railways of Australia during 1954-55 and 1955-56.

GOVERNMENT RAILWAYS : AVERAGE NUMBER OF EMPLOYEES AND SALARIES AND WAGES PAID.

Railway System.	Operating Staff.			Construction Staff.(a)			Total Salaries and Wages Paid. (£'000.)	Average Earnings Per Em- ployee. (£.)
	Salaried.	Wages.	Total.	Salaried.	Wages.	Total.		
1954-55.								
New South Wales ..	9,490	45,844	55,334	46	378	424	49,485	887
Victoria ..	(b)5,123	(b)25,079	(b)30,202	(c)	(c)	(c)	27,433	908
Queensland ..	4,385	23,393	27,778	23	547	570	23,800	840
South Australia ..	1,897	8,491	10,388	10	1,196	1,206	10,530	908
Western Australia ..	2,094	11,256	13,350	2	30	32	10,969	820
Tasmania ..	355	2,394	2,649	25	225	250	2,285	788
Commonwealth ..	353	1,982	2,335	6	198	204	2,006	790
Australia ..	d 23,697	d 118,339	d 142,036	112	2,574	2,686	126,508	874
1955-56.								
New South Wales ..	9,580	45,511	55,091	45	335	380	54,447	982
Victoria ..	(b)5,177	(b)24,469	(b)29,646	(c)	(c)	(c)	28,188	951
Queensland ..	4,483	24,926	29,409	33	804	837	26,083	862
South Australia ..	1,886	8,348	10,234	11	1,157	1,168	10,846	951
Western Australia ..	2,081	11,629	13,710	..	8	8	11,910	868
Tasmania ..	375	2,251	2,626	13	255	268	2,395	828
Commonwealth ..	347	2,052	2,399	4	213	217	2,204	843
Australia ..	d 23,929	d 119,186	d 143,115	106	2,772	2,878	136,073	932

(a) In Victoria, Queensland and Western Australia a considerable amount of construction work is carried out by private contractors and the staff engaged is therefore not under the control of the Railways Commissioners. (b) Includes construction staff. (c) Included with operating staff. (d) Includes construction staff, Victoria.

C. TRAMWAY AND TROLLEY-BUS SERVICES.

1. **Systems in Operation.**—(i) *General.* Tramway systems are in operation in all the State capital cities and in a number of the larger towns of Australia. Since 1st April, 1947, all systems have been operated by government or municipal authorities. Tramway systems are located in the following cities—New South Wales, Sydney; Victoria, Melbourne, Bendigo and Ballarat; Queensland, Brisbane; South Australia, Adelaide; Western Australia, Perth; and Tasmania, Hobart. In Sydney, Brisbane, Adelaide, Perth and Hobart, tramway systems are supplemented by trolley-bus services. All systems are electric.

In many parts of Australia private lines used for special purposes in connexion with the timber, mining, sugar, or other industries are often called tramways, but they are more properly railways and the traffic on them has nothing in common with that of the street tramways for the conveyance of passengers, which are dealt with in the present section.

(ii) *Total Mileage Open and Classification of Lines.* The following table shows, for each State, the total route-mileage of tramway lines open for general passenger traffic at 30th June, 1956, classified (a) according to the controlling authority; (b) according to gauge. Trolley-bus route-mileage also is shown.

TRAMWAY AND TROLLEY-BUS SERVICES : ROUTE-MILEAGE OPEN AT 30th JUNE, 1956.

(Miles.)

Particulars—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
ACCORDING TO CONTROLLING AUTHORITY.							
Government ..	113	173	..	..	34	30	350
Municipal ..	..	..	85	83	..	..	168
Total ..	113	173	85	83	34	30	518
ACCORDING TO GAUGE.							
Tramways—							
5 ft. 3 in. ..	..	5	..	..	..	..	5
4 ft. 8½ in. ..	107	168	66	60	..	..	401
3 ft. 6 in. ..	..	..	..	..	12	9	21
Trolley-buses ..	6	..	19	23	22	21	91
Total ..	113	173	85	83	34	30	518

2. Summary of Operations, Australia.—The following table gives a summary of the working of all tramway systems in Australia for the years 1951-52 to 1955-56 :—

TRAMWAY AND TROLLEY-BUS SERVICES : SUMMARY OF OPERATIONS, AUSTRALIA.(a)

Particulars.	Unit.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Average mileage open for traffic ..	route-mile	543	530	529	527	528
	track-mile	990	990	992	994	991
Tramcars(b) .. .. .	..	2,996	2,833	2,714	2,626	2,619
Net increase in capital equipment during year(c)	£'000	2,075	911	861	910	1,034
Gross revenue(c)(d) .. .. .	..	15,121	15,968	15,780	15,267	15,878
Working expenses(c)(e) .. .. .	..	17,109	18,420	18,181	17,797	18,558
Net revenue(c) .. .. .	..	- 1,988	- 2,452	- 2,401	- 2,530	- 2,680
Interest(c) .. .. .	..	536	628	656	714	846
Ratio of working expenses to gross revenue(c)	per cent.	113.15	115.36	115.22	116.57	116.88
Car-miles	'000	68,036	66,185	64,186	60,878	58,881
Gross revenue per car-mile(c) ..	pence	53.43	58.16	59.40	60.79	65.69
Working expenses per car-mile(c) ..	pence	60.45	67.09	68.43	70.86	76.78
Net revenue per car-mile(c) ..	pence	- 7.02	- 8.93	- 9.03	- 10.07	- 11.09
Passenger-journeys	'000	688,800	652,987	637,289	619,279	593,284
Passenger-journeys per car-mile(c) ..	..	10.12	9.87	9.93	10.17	10.08
Average gross revenue per passenger-journey(c)	pence	5.29	5.92	6.01	6.01	6.55
Persons employed at end of year(c)(f) ..	..	18,309	16,051	15,743	15,030	14,499
Accidents—						
Persons killed .. .. .	..	(c) 72	(c) 72	(c) 59	(c) 58	42
" injured .. .. .	..	c 5,448	c 3,255	c 2,993	c 3,177	3,077

(a) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services. (b) Includes trolley-buses. (c) Excludes Queensland trolley-buses. (d) Excludes government grants. (e) Includes provision of reserves for depreciation, etc. (f) Includes motor omnibus employees in South Australia, but excludes a number of employees in New South Wales and Western Australia who cannot be distributed between tramways and omnibuses.

NOTE.—Minus sign (—) denotes loss.

3. Traffic and Accidents.—Particulars of the traffic of electric tramways and the accidents which occurred in the movement of rolling stock during 1955-56 are shown for each State in the following table :—

TRAMWAY AND TROLLEY-BUS SERVICES : TRAFFIC AND ACCIDENTS, 1955-56.

State.	Average Mileage Open for Traffic.		Tram-cars. (a)	Car-miles. ('000.)	Pas-senger-journeys. ('000.)	Pas-senger-journeys per Car-mile.	Accidents.	
	Route-miles.	Track-miles.					Persons—	
							Killed.	Injured.
New South Wales ..	115	221	789	12,002	174,954	14.58	(b) 11	(b) 869
Victoria	177	329	880	24,082	222,524	9.24	17	1,100
Queensland	85	154	438	10,208	106,959	10.48	10	590
South Australia ..	88	170	255	7,225	48,152	6.66	(c) 4	(c) 204
Western Australia ..	33	60	130	2,039	15,862	7.78	..	263
Tasmania	30	57	127	(d) 3,325	(d) 24,833	(d) 7.47	..	(d) 51
Australia ..	528	991	2,619	58,881	593,284	10.08	42	3,077

(a) Includes trolley-buses. (b) Excludes accidents to employees. (c) Includes particulars for municipal-owned omnibus services. (d) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services.

4. State Details.—The following table shows a summary of the operations of electric tramways in each State for the years 1953-54 to 1955-56.

TRAMWAY AND TROLLEY-BUS SERVICES : SUMMARY OF OPERATIONS.

Year ended 30th June—	Mileage Open for Traffic at 30th June. (Route-miles.)	Net Increase in Capital Equipment during Year. (£'000.)	Gross Revenue. (a) (£'000.)	Working Expenses. (b) (£'000.)	Net Revenue. (£'000.)	In-terest. (£'000.)	Ratio of Working Expenses to Gross Revenue. (Per cent.)	Car-miles. ('000.)	Passenger-journeys. ('000.)	Persons Employed at end of Year.
NEW SOUTH WALES.										
1954..	126	-135	5,056	6,883	-1,827	183	136.15	16,542	203,508	(c)4,656
1955..	117	-829	4,731	6,416	-1,685	194	135.61	14,663	191,958	(c)4,073
1956..	113	-206	4,231	6,136	-1,905	192	145.03	12,002	174,954	(d)3,923
VICTORIA.										
1954..	175	667	5,441	5,588	-147	114	102.70	24,130	222,541	5,408
1955..	175	1,389	5,345	5,692	-347	132	106.48	23,173	220,095	5,409
1956..	173	886	6,324	6,715	-391	217	106.18	24,082	222,524	5,264
QUEENSLAND.										
1954..	74(e)	63(e)	2,293	2,237	(e) 56	(e) 105	e 97.55	10,303	112,522	(e)2,420
1955..	80(e)	140	(e)2,306	e 2,317	e -11	(e) 111	e100.46	10,245	111,910	(e)2,481
1956..	85(e)	116	(e)2,431	e 2,389	(e) 42	(e) 110	e 98.29	10,208	106,959	(e)2,291
SOUTH AUSTRALIA.										
1954..	92(f)	161	1,776	2,236	-460	190	125.93	7,916	56,966	(g)2,216
1955..	92	130	1,787	2,133	-346	206	119.39	7,646	54,909	(g)2,054
1956..	83	142	1,797	2,012	-215	256	111.94	7,225	48,152	(g)1,981
WESTERN AUSTRALIA.										
1954..	30	33	509	610	-101	37	119.82	2,307	18,743	470
1955..	31	32	487	573	-86	34	117.63	2,205	17,289	445
1956..	34	24	436	554	-118	33	126.94	2,039	15,862	427
TASMANIA.(h)										
1954..	(i) 30	72	705	627	78	27	88.94	2,988	23,009	573
1955..	(i) 30	48	611	666	-55	37	109.14	2,946	23,118	568
1956..	(i) 30	72	659	752	-93	38	114.16	3,325	24,833	613
AUSTRALIA.(j)										
1954..	527	861	15,780	18,181	-2,401	656	115.22	64,186	637,289	15,743
1955..	525	910	15,267	17,797	-2,530	714	116.57	60,878	619,279	15,030
1956..	518	1,034	15,878	18,558	-2,680	846	116.88	58,881	593,284	14,499

(a) Excludes government grants. (b) Includes provision of reserves for depreciation, etc. (c) Excludes administrative staff not distributable between omnibus and tramway services. (d) Excludes 1,430 administrative staff and 585 salaried staff who cannot be distributed between omnibus and tramway services. (e) Excludes trolley-bus services, particulars of which are included with omnibus services. (f) Includes capital expenditure on motor omnibus services. (g) Includes motor omnibus employees of Adelaide Municipal Tramways Trust. (h) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services. (i) Tramway and trolley-bus mileage only. At 30th June, 1956, Hobart and Launceston Municipal Council Omnibus route-mileage was 45 miles. (j) See notes (a) to (i).

D. MOTOR OMNIBUS SERVICES.

1. General.—Motor omnibus services have been in operation for some years in the capital cities and many of the larger towns of Australia. Government and municipal authorities operate certain services and the others are run by private operators; in the States the former are run in conjunction with the existing electric tramway systems.

2. Government and Municipal Services.—(i) *Summary of Operations, States.* The following table gives a summary, for the years 1954-55 and 1955-56, of the operations of omnibus systems controlled by government and municipal authorities.

MOTOR OMNIBUS SERVICES : GOVERNMENT AND MUNICIPAL.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	A.C.T.	Aust.
1954-55.								
Length of route .. miles	484	64	423	38	2,873	564	46	4,492
Omnibuses	1,314	215	257	140	226	84	65	2,301
Net increase in capital equipment during year .. £'000	184	-26 (a)	-85	408	48 (b)	16	..	545
Gross revenue(c) .. £'000	5,686	1,415 (a)	879	347	954 (b)	205	127	9,613
Working expenses .. £'000	7,769	1,452 (a)	1,003	512	949 (b)	187	191	12,063
Omnibus-miles .. '000	33,106	7,241	5,533	2,592	6,978 (b)	1,137	926	57,513
Passenger-journeys .. '000	217,882	56,511	29,496	11,538	25,813 (b)	1,809	(d)3,700	346,749
Persons employed	(e) 5,090	1,055 (a)	711	(f)	(e) 151 (b)	76	142	(g)7,225
1955-56.								
Length of route .. miles	490	63	426	54	2,886	606	46	4,571
Omnibuses	1,294	292	254	162	227	98	65	2,392
Net increase in capital equipment during year .. £'000	432	-4 (a)	113	251	31 (b)	-78	20	765
Gross revenue(c) .. £'000	5,731	1,135 (a)	938	537	945 (b)	177	129	9,592
Working expenses .. £'000	8,457	1,283 (a)	1,104	752	1,013 (b)	166	195	12,970
Omnibus-miles .. '000	33,987	5,859	5,328	3,517	7,204 (b)	992	922	57,809
Passenger-journeys .. '000	220,543	37,509	29,410	15,363	25,825 (b)	1,186	(d)3,925	333,761
Persons employed	(e) 5,203	890 (a)	694	(f)	(e) 141 (b)	60	142 (g)	7,130

(a) Includes particulars of trolley-bus services. (b) Excludes Hobart and Launceston Municipal Council Services. (c) Excludes government grants. (d) Estimated. (e) Excludes staff not distributable between omnibus and tramway services. (f) Not available; employees are interchangeable with electric tramway employees and are included therewith (see p. 400). (g) See notes applicable to individual States.

NOTE.—Minus sign (-) denotes decrease.

(ii) *Summary of Operations, Australia.* The following table gives a summary of the working of motor omnibus services in Australia under government and municipal control during each of the years 1951-52 to 1955-56.

MOTOR OMNIBUS SERVICES : GOVERNMENT AND MUNICIPAL, AUSTRALIA.

Particulars.	Unit.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Length of route	mile	4,490	4,562	4,612	4,492	4,571
Omnibuses .. ..	..	2,141	2,258	2,302	2,301	2,392
Net increase in capital equipment during year (a)(b) ..	£'000	(c) 2,287	(c) 1,494	(c) 711	545	765
Gross revenue (a)(b) ..	£'000	8,542	9,320	8,853	9,613	9,592
Working expenses (a)(b) ..	£'000	10,298	11,465	11,387	12,063	12,970
Net revenue(a)(b)	£'000	-1,756	-2,145	-2,534	-2,450	-3,378
Ratio of working expenses to gross revenue (a)(b) ..	per cent.	120.56	123.01	128.61	125.48	135.22
Omnibus-miles(a)	'000	54,011	55,382	56,894	57,513	57,809
Gross revenue per omnibus-mile(a)(b)	pence	37.87	40.18	37.07	39.70	39.23
Working expenses per omnibus-mile(a)(b)	pence	45.66	49.43	47.68	49.81	53.05
Net revenue per omnibus-mile (a)(b)	pence	-7.79	-9.25	-10.61	-10.11	-13.82
Passenger-journeys(a) ..	'000	330,124	334,907	339,578	346,749	333,761
Passenger-journeys per omnibus-mile(a) .. ..	..	6.11	6.05	5.97	6.03	5.77
Average gross revenue per passenger-journey (a)(b) ..	pence	6.15	6.57	6.12	6.47	6.68
Persons employed(d) .. ..	..	8,174	7,663	7,308	7,225	7,130

(a) Excludes Hobart and Launceston Municipal Council Services. (b) Includes Brisbane City Council trolley-bus services. (c) Excludes South Australia. (d) See relevant notes to table above.

NOTE.—Minus sign (-) denotes loss.

3. *Private Services.*—(i) *General.* Particulars of motor omnibus services under the control of private operators are recorded in the States of New South Wales, South Australia and Western Australia only.

In New South Wales, particulars are compiled for the Metropolitan and Newcastle Transport districts only, but in South Australia and in Western Australia particulars of all services throughout the State are included.

(ii) *Summary of Operations.* The following table shows the operations of motor omnibus services under the control of private operators in New South Wales, South Australia and Western Australia during each of the years 1953–54 to 1955–56 :—

MOTOR OMNIBUS SERVICES : PRIVATE.

Year.	Number of Omnibuses.	Omnibus-miles. (‘000.)	Passenger-journeys. (‘000.)	Value of Plant and Equipment. (£’000.)	Gross Revenue. (£’000.)	Persons Employed.
NEW SOUTH WALES.(a)						
1953–54..	806	20,195	88,639	990	2,426	1,369
1954–55..	836	20,587	89,508	1,032	2,536	1,340
1955–56..	851	20,630	85,177	1,119	2,707	1,345
SOUTH AUSTRALIA.						
1953–54..	(b) 112	5,845	13,373	} (c)	{ 658	} (c)
1954–55..	114	6,213	14,058			
1955–56..	113	6,082	13,508			
WESTERN AUSTRALIA.						
1953–54..	423	12,550	34,211	1,124	1,661	971
1954–55..	388	13,190	33,860	1,024	1,674	906
1955–56..	372	12,172	32,607	1,125	1,581	827

(a) Metropolitan and Newcastle Transport districts only. (b) Metropolitan area only.
(c) Not available.

E. FERRY (PASSENGER) SERVICES.

1. *General.*—Ferry services to transport passengers are operated in the following States—New South Wales, at Sydney and Newcastle ; Western Australia, on the Swan River at Perth ; Tasmania, on the Derwent River at Hobart, on the Mersey River at Devonport and across D’Entrecasteaux Channel to Bruny Island. Control is exercised both by governmental authorities and by private operators. In Victoria and Queensland the services operated are not extensive, and there are no ferry services in South Australia.

2. *Summary of Operations.*—The operations of ferry passenger services in New South Wales, Western Australia and Tasmania during the years 1953–54 to 1955–56 are summarized in the following table. Particulars of passengers carried on vehicular ferries are not included.

FERRY (PASSENGER) SERVICES.

Year.	Number of Vessels.	Passenger Accommodation.	Passenger-journeys. (^{000.})	Gross Revenue. (£.)	Persons Employed.
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NEW SOUTH WALES—SYDNEY AND NEWCASTLE.

1953-54	38	21,388	19,464	771,697	366
1954-55	38	22,055	18,936	785,827	350
1955-56	39	22,696	18,056	741,695	346

WESTERN AUSTRALIA—PERTH.

1953-54	4	785	530	10,754	12
1954-55	4	785	469	11,480	11
1955-56	4	785	437	9,944	10

TASMANIA—HOBART AND DEVONPORT.

1953-54	5	1,512	1,253	29,165	25
1954-55	6	1,607	1,355	33,863	35
1955-56	5	1,582	1,034	29,531	33

F. MOTOR VEHICLES.

1. **Motor Industry.**—Chapter VII.—Manufacturing Industry contains summarized information on the motor industry of Australia and includes therein some data on the imports of motor bodies and chassis. Chapter X.—Trade contains further data on imports, including those of petroleum products.

2. **Taxi-cabs and Other Hire Vehicles.**—In the capital cities and in many of the provincial centres taxi-cabs and other vehicles ply for hire under licence granted by either the *Commissioner of Police* or the *local government authority concerned*. As most of these vehicles are independently controlled by individuals or small companies, it has not been possible to obtain complete data in respect of their operations.

3. **Motor Omnibuses.**—In both urban and provincial centres motor omnibus traffic has assumed considerable proportions during recent years and in some States the railway and tramway systems run motor services complementary to their main services. There has been a considerable replacement also, during the last few years, of existing tramway services by trolley-bus and motor omnibus services. (*See Divisions C. and D. of this chapter.*)

4. **Motor Vehicles on the Register, etc.**—(i) *Registrations and Revenue.* The following table shows particulars of the registration of motor vehicles, licences issued and revenue received for 1955-56 and a summary for Australia for each of the years 1951-52 to 1955-56. It should be noted that in Victoria registration is made on the basis of the purpose for which the vehicle is to be used; consequently, motor car registrations are overstated by the inclusion of commercial vehicles registered for private use.

A graph showing for all motor vehicles other than motor cycles the registrations in force at 30th June of each year from 1925 to 1956 will be found on p. 380.

MOTOR VEHICLES : REGISTRATIONS AND REVENUE.

State or Territory, and Year.	Number of Motor Vehicles Registered at 30th June.(a)				Per 1,000 of Population at 30th June.	Number of Drivers' and Riders' Licences in force at 30th June.	Gross Revenue derived from—			
	Motor Cars.(b)	Commercial Vehicles.(c)	Motor Cycles.	Total.			Vehicle Registrations and Motor Tax. (£'000.)	Drivers' and Riders' etc., Licences. (£'000.)	Other Sources. (£'000.)	Total. (£'000.)
STATES AND TERRITORIES, 1955-56.										
N.S.W. ..	483,397	242,514	37,039	762,950	215	1,048,901	9,211	824	1,072	11,107
Victoria(d)	498,584	151,657	27,675	677,916	260	801,852	5,604	401	1,048	7,053
Queensland	179,190	127,393	20,394	326,977	239	(e)	4,363	136	889	5,388
S. Aust. ...	154,358	63,630	20,713	238,701	281	292,793	3,123	398	22	3,543
W. Aust. ...	98,875	65,626	13,873	178,374	264	202,495	1,296	119	144	1,559
Tasmania	48,973	22,380	4,800	76,153	238	89,659	734	45	148	927
Nor. Terr.	1,904	3,077	566	5,547	303	7,541	35	5	1	41
A.C.T. ...	6,978	2,580	515	10,073	292	14,005	72	7	1	80
Australia ..	d1,472,259	d 678,857	125,575	2,276,691	241	f2457246	24,438	1,935	3,325	29,698

SUMMARY, AUSTRALIA.

	(d)	(d)			(g)					
1951-52 ..	1,030,992	580,502	153,933	1,765,427	205	2,194,167	15,996	1,336	3,607	20,939
1952-53 ..	1,107,659	579,444	147,639	1,834,742	208	2,288,370	18,780	1,403	3,708	23,891
1953-54 ..	1,199,833	606,899	140,614	1,947,346	218	2,148,119	20,450	1,635	4,326	26,411
1954-55 ..	1,347,082	649,609	133,029	2,129,720	231	2,295,854	22,951	1,814	3,760	28,525
1955-56 ..	1,472,259	678,857	125,575	2,276,691	241	2,457,246	24,438	1,935	3,325	29,698

(a) Excludes, at 30th June, 1956, trailers (137,507), road tractors, etc. (29,426), and dealers' plates (8,794). Excludes Northern Territory registrations prior to 1953-54. (b) Includes taxis and hire cars. (c) Includes lorries, vans, omnibuses and utilities. (d) See para. 4 on previous page. (e) As from 1st October, 1952, drivers' and riders' licences have not been issued on an annual basis in Queensland. (f) Excludes Queensland. (g) Excludes Queensland from 1953-54.

NOTE.—All Commonwealth-owned vehicles are included except those belonging to the Defence Services. Prior to 31st January, 1956, Department of the Navy vehicles were also included.

(ii) *Relation to Population.* The table hereunder shows the number of vehicles (excluding motor cycles) registered per 1,000 of population in each State and Territory at 31st December, 1921, and at 30th June for each of the years 1939 and 1952 to 1956.

MOTOR VEHICLES (EXCLUDING MOTOR CYCLES) REGISTERED PER 1,000 OF POPULATION.

Date.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
31st Dec., 1921	..	15	16	8	24	12	13	(a)	b 15
30th June, 1939	..	107	125	118	137	133	96	218	174 b 118
.. 1952	..	163	212	184	224	195	167	(a)	223 b 187
.. 1953	..	168	211	188	234	204	180	(a)	226 b 192
.. 1954	..	179	215	199	245	217	193	206	241 201
.. 1955	..	193	241	216	257	238	212	269	267 220
.. 1956	..	204	250	224	257	243	223	272	277 228

(a) Not available. (b) Excludes Northern Territory.

NOTE.—See NOTE to previous table.

5. *New Vehicles Registered.*—(i) *States and Territories, 1955-56.* The following table shows the number of new vehicles registered in each State and Territory during 1955-56. A graph showing the number of new motor vehicles (excluding motor cycles) registered during each of the years 1928-29 to 1955-56 will be found on page 380.

NEW MOTOR VEHICLES REGISTERED, 1955-56.

Vehicles.	N.S.W.	Vic. (a)	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total.
Motor cars(b) ..	56,074	53,511	19,629	17,461	10,115	5,461	214	1,133	163,598
Commercial vehicles, etc.(c) ..	25,994	16,882	11,371	6,510	5,258	2,632	343	322	(a)69,312
Motor cycles ..	2,971	2,360	1,689	1,925	1,089	332	63	101	10,530
Total	85,039	72,753	32,689	25,896	16,462	8,425	620	1,556	243,440

(a) See para. 4 on page 403. (b) Includes taxis and hire cars. (c) Includes lorries, vans omnibuses and utilities.

NOTE.—See NOTE to table at top of page 404.

(ii) *Australia.* Particulars of the number of new vehicles registered in Australia during each of the years 1951-52 to 1955-56 are shown in the following table :—

NEW MOTOR VEHICLES REGISTERED: AUSTRALIA.

Vehicles.	1951-52. (a)	1952-53.	1953-54.	1954-55.	1955-56.
Motor cars (b)(c)	125,760	93,417	125,595	166,801	163,598
Commercial vehicles, etc.(c)(d)	73,020	52,290	57,402	67,188	69,312
Motor cycles	22,155	(e)11,289	10,860	11,282	10,530
Total	220,935	e.156,996	193,857	245,271	243,440

(a) Excludes Northern Territory. (b) Includes taxis and hire cars. (c) See para. 4 on page 403. (d) Includes lorries, vans, omnibuses and utilities. (e) Excludes motor cycles registered in the Northern Territory.

NOTE.—See NOTE to table at top of page 404.

6. *World Motor Vehicle Statistics, 1956.*—Particulars of motor vehicle registrations throughout the world were included in issues of the Official Year Book prior to No. 39. This information was derived from the results of the World Motor Census, conducted by the *American Automobile* magazine. Detailed particulars are not repeated in this issue, but information derived from *Automobile Facts and Figures* shows that there were 96,001,316 motor cars, trucks and omnibuses registered in various countries of the world at 1st January, 1956. This was an increase of 9 per cent. on the figure for the previous year, 88,472,163, and was the highest figure attained to that date. Of these vehicles, 62,793,749 or 56 per cent. of the world total were in the United States of America, and Australian registrations amounted to 2 per cent.

7. *Survey of Motor Vehicles, 1947-48.*—A survey of motor vehicles (excluding motor cycles) registered at 30th June, 1948 was carried out by the Commonwealth Statistician in collaboration with the Government Statisticians and Road Transport authorities in the States. Results were published in a series of bulletins dealing with each State separately and with Australia as a whole, and summarized particulars were included in *Transport and Communication*, Bulletin No. 40. For subsequent periods similar surveys have been carried out in respect of new vehicles only. The results have been published by this Bureau in the annual bulletin, *Transport and Communication* and, since July, 1951, in the *Monthly Bulletin of Registrations of New Motor Vehicles*. Information contained in the latter includes the make, type and R.A.C. horsepower of new motor vehicles registered in each State and Territory.

A census has been taken of motor vehicles registered at 31st December, 1955 and results are being published in separate bulletins for each State, the Territories and the Commonwealth.

G. ROAD TRAFFIC ACCIDENTS.

NOTE.—Information relating to road traffic accidents for 1955–56, except that for total accidents and casualties, became available too late for inclusion in this section. Detailed statistics have therefore been restricted to the year 1954–55.

1. General.—Prior to the year 1949–50, it was not possible to make proper comparisons between States of the number of accidents recorded, because of the differences in legislation regarding the reporting of accidents and the degree to which the legislation could be enforced. However, arrangements were made, in co-operation with the Australian Road Safety Council and the various police and transport authorities concerned, to obtain the numbers of road traffic accidents on a comparable basis from all States in respect of the year ended 30th June, 1950 and subsequent years. This was achieved by restricting the statistics so that they related only to those accidents which resulted in death or bodily injury to any person, or in damage in excess of £10 to property. It is considered that there was little difference in the recording of accidents as between States for the years 1949–50 to 1953–54, except in the case of Western Australia, where statistics shown relate to all accidents which occurred in the metropolitan area and, in the remainder of the State, for periods prior to 1st January, 1953, only to those which involved fatal or "near-fatal" injury. Statistics are now collected on a comparable basis for all States except Tasmania, where, under legislation passed on 10th August, 1954, it is no longer obligatory to report accidents involving only damage to property. It should be noted, however, that the comparability of the statistics between States even on this basis still depends on the degree to which accidents so defined are in fact recorded by the police.

2. Total Accidents Recorded.—(i) 1954–55. The following table gives a summary of accidents recorded and casualties in each State and the Australian Capital Territory for the year 1954–55.

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: ACCIDENTS RECORDED AND CASUALTIES, 1954-55.

State or Territory.	Total Accidents Recorded. (a)	Accidents Involving Casualties. (b)	Persons Killed.			Persons Injured.(c)		
			Number.	Per 100,000 of Mean Population.	Per 10,000 Motor Vehicles Registered.	Number.	Per 100,000 of Mean Population.	Per 10,000 Motor Vehicles Registered.
New South Wales	35,315	12,557	798	23	11	15,959	457	225
Victoria ..	15,093	10,217	528	21	8	12,833	509	204
Queensland ..	21,438	6,586	273	20	9	8,421	626	274
South Australia ..	12,304	3,098	173	21	8	3,926	479	171
W. Australia ..	10,715	3,149	206	31	12	4,036	613	239
Tasmania ..	2,642	864	57	18	8	1,111	353	155
Aust. Cap. Terr.	251	131	7	22	8	179	552	203
Total ..	97,758	36,602	2,042	22	10	46,465	506	219

(a) Total accidents causing death or injury to persons or damage exceeding £10 to property. See reference to Tasmanian legislation above. (b) Accidents involving persons killed, and persons injured to an extent requiring surgical or medical treatment. (c) Persons injured to an extent requiring surgical or medical treatment.

(ii) Summary, 1951–52 to 1955–56. A summary for Australia of accidents recorded in each of the years 1951–52 to 1955–56 is shown in the following table.

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: ACCIDENTS RECORDED, AUSTRALIA.

Particulars.	1951–52.	1952–53.	1953–54.	1954–55.	1955–56.
Total accidents recorded(a)	68,110	75,295	87,224	97,758	105,638
Accidents involving casualties(b)	31,144	31,635	35,523	36,602	37,766

(a) Total accidents causing death or injury or damage exceeding £10 to property. See reference to Tasmanian legislation in para. 1. (b) Accidents involving persons killed, and persons injured to an extent requiring surgical or medical treatment.

A summary for persons killed or injured will be found on page 408.

ROAD TRAFFIC ACCIDENTS.

407

(iii) *Riders, Drivers, Pedestrians, etc., Killed or Injured.* The following table shows the number of persons killed and the number injured during 1954-55 in each State and the Australian Capital Territory, classified into riders, drivers, pedestrians, etc.

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: RIDERS, DRIVERS, PEDESTRIANS, ETC., KILLED OR INJURED, 1954-55.

Riders, Drivers, Pedestrians, etc.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
PERSONS KILLED.								
Drivers of Motor Vehicles	147	125	52	38	41	8	1	412
Motor Cyclists ..	116	62	55	30	37	10	1	311
Pedal Cyclists ..	44	37	17	9	15	2	..	124
Passengers (all types) (a) ..	223	117	69	44	60	19	5	537
Pedestrians ..	268	183	73	52	53	17	..	646
Other Classes(b) ..	..	4	7	..	..	1	..	12
Total ..	798	528	273	173	206	57	7	2,042
PERSONS INJURED.(c)								
Drivers of Motor Vehicles	3,567	2,812	1,691	923	766	237	41	10,037
Motor Cyclists ..	2,040	1,338	1,596	943	772	191	24	6,904
Pedal Cyclists ..	1,105	1,547	1,022	316	431	107	31	4,559
Passengers (all types) (a) ..	5,970	4,554	2,967	1,336	1,452	398	75	16,752
Pedestrians ..	3,241	2,536	1,118	404	608	175	8	8,090
Other Classes (b) ..	28	46	27	2	7	3	..	113
Not Stated ..	8	..	..	2	..	..	..	10
Total ..	15,959	12,833	8,421	3,926	4,036	1,111	179	46,465

(a) Includes pillion riders. (b) Includes tram drivers, riders of horses and drivers of animal-drawn vehicles. (c) Persons injured to an extent requiring surgical or medical treatment.

(iv) *Ages of Persons Killed or Injured.* The following table shows the age groups of persons killed or injured in traffic accidents in each State and the Australian Capital Territory during 1954-55:—

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: AGES OF PERSONS KILLED OR INJURED, 1954-55.

Age Group (Years).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
PERSONS KILLED.								
Under 5 ..	30	18	11	6	11	4	..	80
5 and under 7 ..	17	5	8	4	1	2	..	37
7 " " 17 ..	69	26	17	8	11	4	1	136
17 " " 21 ..	94	53	44	17	26	8	..	242
21 " " 30 ..	148	114	51	31	32	6	1	383
30 " " 40 ..	96	65	34	28	19	13	2	257
40 " " 50 ..	98	52	34	15	19	6	2	226
50 " " 60 ..	82	79	31	17	21	6	..	236
60 and over ..	159	113	43	35	57	8	1	416
Not Stated ..	5	3	..	12	9	..	..	29
Total ..	798	528	273	173	206	57	7	2,042
PERSONS INJURED.(a)								
Under 5 ..	480	538	225	111	126	36	5	1,521
5 and under 7 ..	382	373	168	85	91	35	4	1,138
7 " " 17 ..	1,841	1,633	1,117	418	497	152	32	5,690
17 " " 21 ..	2,221	1,485	1,572	613	638	162	16	6,707
21 " " 30 ..	3,689	2,895	1,954	1,059	866	232	49	10,744
30 " " 40 ..	2,441	2,074	1,189	727	481	136	38	7,086
40 " " 50 ..	1,832	1,460	893	426	371	114	16	5,112
50 " " 60 ..	1,156	1,065	613	209	254	58	14	3,369
60 and over ..	1,471	1,040	655	245	260	60	3	3,734
Not Stated ..	446	270	35	33	452	126	2	1,364
Total ..	15,959	12,833	8,421	3,926	4,036	1,111	179	46,465

(a) Persons injured to an extent requiring surgical or medical treatment.

(v) *Accidents Recorded and Casualties, classified according to Type of Vehicle, Road User, etc., Involved.* The following table shows, for the year 1954-55, the number of accidents in which each of several classes of vehicles, road users, etc., was involved. The accidents involving casualties and persons killed and injured are similarly classified.

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: ACCIDENTS RECORDED AND CASUALTIES, CLASSIFIED ACCORDING TO TYPE OF VEHICLE, ROAD USER, ETC., INVOLVED, AUSTRALIA, 1954-55.(a)

Particulars.	Motor Vehicle.	Motor Cycle.	Pedal Cycle.	Tram.	Animal and Animal-drawn Vehicle.	Pedestrian.	Fixed Object.	Other Vehicle.
Total Accidents Recorded ^b	92,116	11,384	5,285	2,013	2,852	8,310	8,794	439
Accidents Involving Casualties	31,743	8,321	4,922	833	643	8,183	2,253	193
Persons Killed	1,813	381	150	45	28	627	146	45
Persons Injured ^(c) ..	40,944	9,595	5,087	981	729	8,165	3,089	284

(a) It should be noted that, as accidents and casualties classified according to one type of road user, etc., may also be classified according to another, these totals cannot be added across to obtain grand totals. The table excludes 190 accidents recorded for which no cause was stated, of which 26 involved casualties—4 persons killed and 26 persons injured. (b) Total accidents causing death or injury to persons or damage exceeding £10 to property. See reference to Tasmanian legislation on p. 406. (c) Persons injured to an extent requiring surgical or medical treatment.

It will be seen, therefore, that motor vehicles were involved in 92,116 accidents, of which 31,743 involved casualties (1,813 persons killed and 40,944 persons injured). The 92,116 accidents in which motor vehicles were involved comprised 47,335 collisions with other motor vehicles, 7,490 with motor cycles, 4,045 with pedal cycles, 1,353 with trams, 2,324 with animals and animal-drawn vehicles, 7,048 with pedestrians, 8,276 with fixed objects, 386 with vehicles other than those mentioned, 13,190 instances of overturning or leaving the roadway, and 669 accidents to passengers only. The particulars of accidents in which motor cycles, pedal cycles, etc. were involved with motor vehicles are also included under their respective headings in the table above. Consequently, since the figures in each column refer to the *total* accidents in which the particular type of vehicle, etc., was involved, any aggregation across would result, through duplication, in considerable overstatement of the actual totals.

3. **Persons Killed or Injured in Road Traffic Accidents.**—The following table shows the number of persons killed or injured in road traffic accidents in each State and the Australian Capital Territory during each of the years 1951-52 to 1955-56:—

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: PERSONS KILLED OR INJURED.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.	
								Number.	Per 10,000 Motor Vehicles Registered.
PERSONS KILLED.									
1951-52 ..	741	603	251	172	194	87	6	2,054	12
1952-53 ..	663	515	301	136	182	56	3	1,856	10
1953-54 ..	728	569	278	153	175	67	6	1,976	10
1954-55 ..	798	528	273	173	206	57	7	2,042	10
1955-56 ..	808	582	298	167	185	72	7	2,119	9
PERSONS INJURED.(a)									
1951-52 ..	12,637	12,531	6,561	2,497	^b 2,771	1,215	164	38,376	217
1952-53 ..	12,459	12,564	7,152	2,449	^b 3,373	1,246	162	39,405	215
1953-54 ..	14,660	13,351	7,933	3,420	3,935	1,156	174	44,629	230
1954-55 ..	15,959	12,833	8,421	3,926	4,036	1,111	179	46,465	219
1955-56 ..	17,047	13,483	9,170	3,709	4,098	1,046	220	48,773	215

(a) Persons injured to an extent requiring surgical or medical treatment. (b) Includes all persons injured (i.e., requiring surgical or medical treatment) in the metropolitan area but in the remainder of the State, prior to 1st January, 1953, only those suffering "near-fatal" injuries.

H. AVIATION.

1. **Historical.**—A short review of the progress of civil aviation in Australia up to the date of foundation of a Civil Aviation Administration was published in Official Year Book No. 16, pp. 334-5.

2. **Foundation and Administration of Civil Aviation.**—A brief account of the foundation and objects of this Administration will be found in Official Year Book No. 19, p. 299. Official Year Book No. 38 and earlier issues contain information on the control of civil aviation by the Board (1936) and later (1939) by the Department of that name. The Acts defining the broad principles of operation of the administration of civil aviation and the Regulations amplifying them, and the principal functions of the administration are also described.

The Department was partially re-organized in June, 1954, to provide for the more effective distribution of duties and responsibilities among senior officers. This included the appointment of an additional Assistant Director-General to the executive staff to control all ground facilities. The number of Divisions was increased from six to nine—the three administrative Divisions (Air Transport and External Relations; Administration, Personnel and Establishments; and Finance and Stores) remained unchanged, while in the technical field the Division of Airports remained unchanged; the Division of Air Navigation became the Division of Flying Operations; the Division of Airways was divided into two—Division of Airways Operations and Division of Airways Engineering; and the status of two Branches—Aviation Medicine and Accident Investigation and Analysis—was raised to that of Divisions.

In 1956 the Division of Airports was divided into two separate Divisions, namely, Airport Engineering and Aviation Buildings and Property. This latter Division became responsible for the implementation of the new organization to provide an efficient aviation fire service.

3. **International Activity.**—(i) *International Organizations.* A full report of the formation of the International Civil Aviation Organization, the Commonwealth Air Transport Council and the South Pacific Air Transport Council appeared in Official Year Book No. 37 and particulars of subsequent activity in the international field were included in issue No. 38. The International Civil Aviation Organization had a membership of 70 nations at 13th December, 1956. Australia has continued her representation on the council, a position which she has held since the organization was established in 1947. The Commonwealth was represented at the tenth International Civil Aviation Organization Assembly meeting at Caracas, Venezuela, in June, 1956. The tenth meeting of the South Pacific Air Transport Council was held at Melbourne in October, 1956. Further details will be found in Official Year Book No. 39 and earlier issues.

(ii) *International Air Services.* Major changes in the organization of trans-Pacific and trans-Tasman airline operations were outlined in Official Year Book No. 41. Qantas Empire Airways continues to operate services to the United Kingdom through the Middle East, to Japan via Hong Kong and Manila, to South Africa across the Indian Ocean, to North America, to the British Solomon Islands, to New Guinea, to Norfolk Island and through Noumea to the New Hebrides. Qantas Empire Airways has re-equipped these services with fourteen Super Constellation aircraft which are now operating on the Pacific, United Kingdom, South Africa and Japan services. A summary of the operations of oversea services wholly or partly Australian-owned appears on page 415.

In 1955 Douglas DC4 land planes were substituted for flying-boats on the Pacific Islands service. No Australian international services are now operated by flying-boats. DC6 aircraft now link Sydney with both Auckland and Christchurch and Melbourne with Christchurch.

4. **Regular Air Services within Australia.**—Under the Government's rationalization plan, introduced in 1954, it was agreed that services on competitive routes such as in Queensland and the Riverina (New South Wales), should be regulated to avoid wasteful operations. Trans-Australia Airlines withdrew from operations in the Riverina but continued to serve Corowa. In Queensland this operator took over the Townsville—Mt. Isa service which was previously operated by Townsville and Country Airways.

A summary of the operations of regular air services within Australia appears on page 412 and a map showing air routes on pp. 413–4.

5. **Air Ambulance Services.**—A brief statement of the foundation and objects of the Air Ambulance Services will be found in Official Year Book No. 32, pp. 145 and 146.

During the year 1955–56 the Air Ambulance and Royal Flying Doctor Services continued to provide medical aid for the outback regions of Australia. The Commonwealth Department of Health operates the Northern Territory Aerial Medical Service with three Drover aircraft. The Royal Flying Doctor Service of Australia, operating from Cloncurry, Queensland (one Drover), Broken Hill, New South Wales (two Drovers), and Port Hedland, Western Australia (one Cessna and one Anson), covers a wide area of inland Australia. The Bush Church Aid Society for Australia and Tasmania, supported by funds from the Church of England, maintains two aircraft (one DH84A and one Percival Proctor III) at Ceduna, South Australia. The Federal Methodist Inland Mission (one DH82A) operates services from Meekatharra, Western Australia, and the Queensland Ambulance Transport Brigade operates a service from Cairns (one DH89A and one Auster J5B).

6. Training of Air Pilots.—A brief statement of the pre-war policy of the Commonwealth Government regarding assistance to Aero Clubs was given in Official Year Book No. 32, p. 146. A summary of the assistance granted during the years 1951 to 1956 will be found in Official Year Book No. 42, p. 253.

Under a new contract initiated in January, 1957, payments to clubs, subject to certain limitations, are made as follows:—(i) Maintenance grant of £1 10s. per hour flown at home base; (ii) maintenance grant of £2 per hour flown at other centres; (iii) licence issue bonuses of £100 for each private pilot licence gained, £150 for each commercial pilot licence gained and £50 for each initial instructor rating gained. In addition, the Commonwealth continues to accept a contingent liability to contribute at the rate of 10s. per hour flown towards each club's replacement reserve, in order to supplement the club's reserve for the purchase of specifically approved replacement aircraft.

During the year 1955–56, 294 issue and 899 renewal bonuses were gained by the assisted flying training organizations (non-profit aero clubs and commercial flying schools). Subsidized hours flown by aero clubs numbered 50,275 and the total earnings of all organizations amounted to £132,435. There were 24 aero clubs and 7 commercial flying training schools in operation during the year. In addition to civil flying training the aero clubs carried out 8,415 hours of service training and the commercial flying schools 4,114 hours.

7. Gliding Clubs.—For the year 1955–56 a total subsidy of £2,000 was distributed among the gliding associations in the various States. Of this amount, £1,500 was distributed among member clubs on an active membership basis, and £500 according to the number of gliding certificates issued.

8. Aeronautical Telecommunications.—During the year 1955–56 development and modernization of the aeronautical telecommunications system within Australia advanced in accordance with the communications plan which was developed and approved at the beginning of 1955. The aim of this plan is to standardize the equipment used in the telecommunications service, to close stations made redundant by improved range achieved by new equipment and to permit operation of the overall system with considerably reduced staff. Sixteen stations will be closed. Several short-haul teletype circuits were established, in addition to which radioteletype circuits were opened as follows:—Townsville–Port Moresby, Sydney–Darwin, Sydney–Perth, Perth–Cocos Island and Perth–Port Hedland. The tape relay system was further developed by the establishment of tape relay centres at Darwin, Perth, and Port Moresby. Instrument Landing Systems were fully commissioned at Sydney and Melbourne, while work was proceeding on similar installations at Adelaide and Hobart and a second installation at Sydney. The Distance Measuring Equipment programme was well advanced, and at the end of 1955–56 there were 61 operational units and four on test while nine more were proposed. The Visual Aural Range programme is also proceeding satisfactorily, and V.A.R. units are in operation at Singleton (New South Wales) and Rosebud (Victoria). Some non-directional beacon frequencies were changed to eliminate interference.

9. Air Traffic Control.—Work in the Air Traffic Control Branch covered the commissioning of new facilities, the introduction of procedures and standards to take full advantage of new navigation aids, and planning for greater efficiency and to meet the challenge of high-speed, high-altitude aircraft. At Sydney Air Traffic Control centre modern control presentation equipment of Australian design was commissioned, aerodrome control towers at Tamworth (New South Wales), Wynyard (Tasmania) and Wewak (New Guinea) were brought into operation and the control tower at Devonport (Tasmania) was decommissioned. Positive anti-collision service was introduced along the controlled routes between Brisbane and Melbourne to a height of 22,500 feet, increasing the previous area of responsibility by 10,000 feet; vertical separation of 2,000 feet was introduced above 15,000 feet and the I.C.A.O. altimetry procedures were tested and rejected. Plans were developed to extend the application of Distance Measuring Equipment to increase flexibility along the airways. In continuation of efforts to oversee the safety of individual aircraft, improved procedures for the dissemination of significant weather information were brought into operation, flight planning was simplified and route specifications were reviewed and re-issued. An Aeronautical Information Services Branch, created at the end of 1955, produced and issued the Australian Aeronautical Information Publication which won high praise from the industry and international aviation authorities. A complete review of the Search and Rescue organization was commenced with the object of providing the service in a manner which placed a lesser burden on the Royal Australian Air Force.

10. Meteorological Aids to Civil Aviation.—The development of working arrangements between the newly constituted Bureau of Meteorology and the Department was commenced. A review of the present scale of meteorological aids to civil aviation, now in progress, will

be finalized in the form of a plan covering all aspects of the provision of meteorological services to civil aviation. At fifty aerodromes in Australia and its Territories officers of the Bureau of Meteorology provide forecasting and observing services for civil aviation.

11. **Aircraft Parts and Materials.**—At 30th June, 1956, the number of firms and organizations approved by the Department of Civil Aviation to trade in the aircraft industry was 444. With the introduction of gas turbine engines and pressurized aircraft, certain firms have been approved to undertake the specialized work of overhaul, repair and maintenance of these engines and of accessories. The major fuel and oil companies have been brought under a system of quality control.

12. **Aircraft Overhaul and Repair.**—Aircraft overhaul and repair is carried out in workshops approved by the Director-General of Civil Aviation. Components and accessories are now certified on release notes signed by approved members of the firm's inspection organization.

13. **Test and Examination of Aircraft Parts and Materials.**—In the past the Department adopted the practice of approving laboratories for this work, but these approvals have now been terminated in favour of test houses and laboratories registered by the National Association of Testing Authorities, except when production is for the manufacturer's own use. Certificates issued under registration by the Association are acceptable to any Commonwealth Government Department.

14. **Statistical Summaries.**—(i) *Registrations, Licences, etc.* The following table provides a summary of the civil aviation registrations and licences in force in Australia at 30th June of each of the years 1952 to 1956.

CIVIL AVIATION: REGISTRATIONS, LICENCES, ETC., AUSTRALIA.(a)

Particulars.	At 30th June—				
	1952.	1953.	1954.	1955.	1956.
Registered aircraft owners ..	343	369	384	414	437
Registered aircraft	786	821	845	887	934
Pilots' Licences—					
Private	1,444	1,677	2,035	2,245	2,453
Commercial	470	518	552	582	578
Senior Commercial .. ..	..	..	..	..	76
Student	2,644	2,639	2,831	3,193	3,272
Helicopter (Commercial) ..	..	..	..	..	11
1st Class Airline Transport	513	495	515	548	600
2nd „ „ „ ..	35	45	34	25	9
3rd „ „ „ ..	400	371	368	390	394
Navigators' Licences—					
Flight Navigator	155	163	166	161	177
Radio Operators' Licences—					
1st Class Flight Radio Tele- graphy Operator	98	93	88	78	75
Flight Radio Telephony Operator—					
1st Class	825	850	834	820	} (b) 1,386
2nd „	258	243	275	309	
3rd „	41	70	113	137	
Flight Engineers' Licences ..	53	58	67	98	94
Aircraft Maintenance Engineers' Licences	1,720	1,790	1,757	1,747	1,818
Aerodromes—					
Government	189	186	198	185	188
Public	269	260	262	303	301
Flying Boat Bases(c)	11	15	16	13	13

(a) Except for aerodromes and flying-boat bases, includes the Territory of Papua and New Guinea.
 (b) Now only one category (Flight Radiotelephone Operator). (c) Includes alighting areas.

(ii) *Aircraft on the Australian Register.* A summary of aircraft on the Australian register at 31st December, 1956, classified according to the principal types of operation in which they are engaged, is shown in the following table.

AIRCRAFT ON THE AUSTRALIAN REGISTER(a), 31st DECEMBER, 1956.

Type of Aircraft.	Number.	Type of Aircraft.	Number.
<i>(i) Aircraft Engaged in Regular Public Transport—</i>		<i>(iii) Aircraft used for Private Purposes—</i>	
Douglas DC3	71	Auster (all Types)	91
Douglas DC4 (Skymaster)	17	DH82, DH82A (Tiger Moth)	57
Lockheed 1049 (Super Constellation)	13	Percival Proctor	14
Vickers Viscount 720, 747, 756	11	Avro Anson MKI	13
Douglas DC6, DC6B	6	DH94 (Moth Minor)	10
Avro Anson	7	Wackett Trainer CA-6	10
Convair Liners (Types 240 and 340)	5	DH87A and B (Hornet Moth)	10
DH104 (Dove)	5	DH60 G and M Moth	8
DHA-3 (Drover MKII)	5	Cessna (170B and 180)	10
Other Types	19	Ryan ST-M	9
<i>Total</i>	<i>159</i>	Miles M65 Gemini	7
<i>(ii) Aircraft Available for Air Charter—</i>		Fairchild 24 W-41 A (Argus)	7
Auster (All Types)	51	Other Types	81
Avro Anson	16	<i>Total</i>	<i>327</i>
Percival Proctor	16	<i>(iv) Aircraft used for other Purposes(b)—</i>	
DH82, DH82A (Tiger Moth)	14	DH82, DH82A (Tiger Moth)	206
DH84 (Dragon)	12	Auster (all Types)	35
Cessna	10	DHC1 (Chipmunk)	24
Other Types	45	Other Types	49
<i>Total</i>	<i>164</i>	<i>Total</i>	<i>314</i>
		Grand Total	964

(a) Includes those based in the Territory of Papua and New Guinea.

(b) Flying School training, aerial top-dressing, etc.

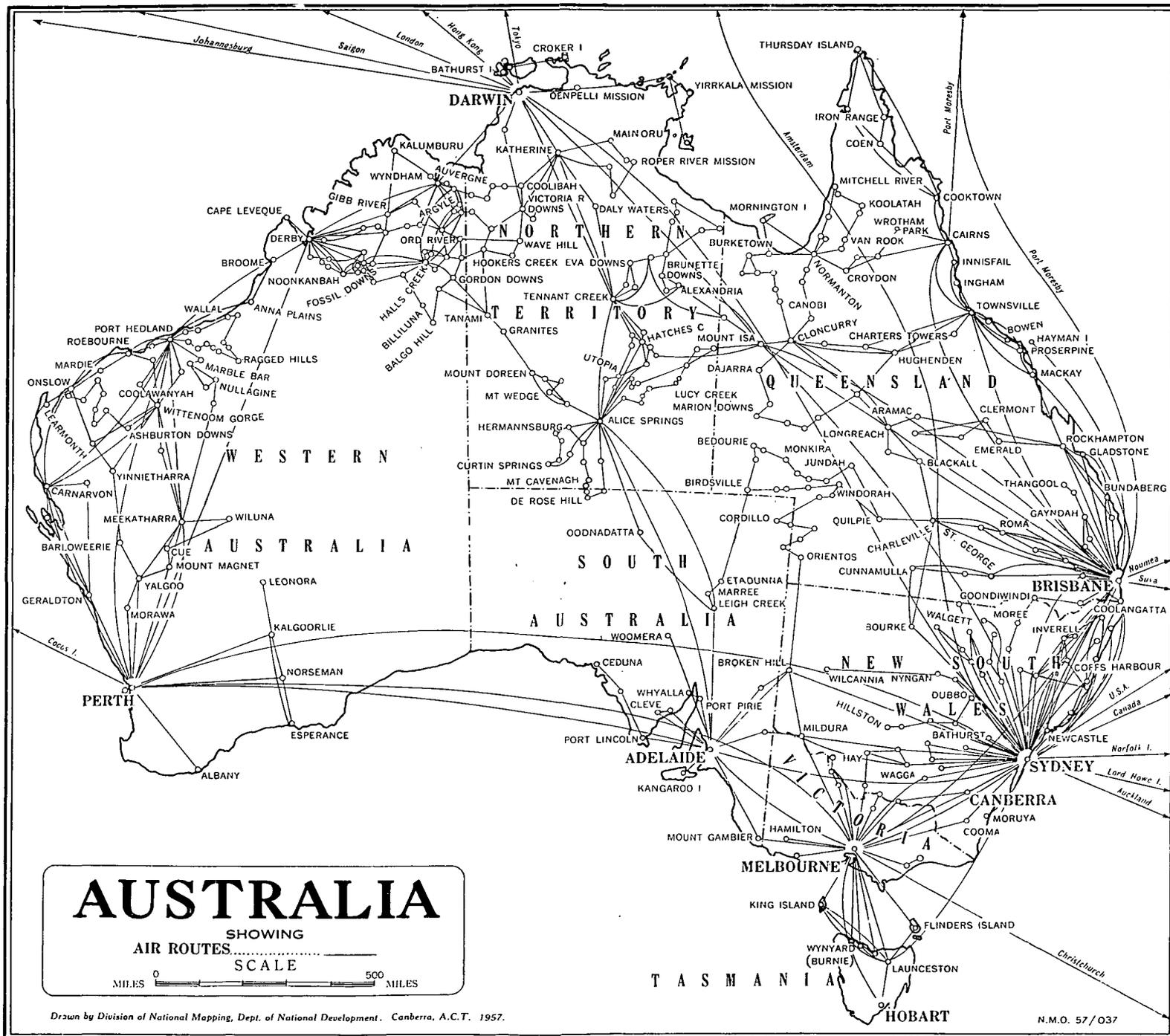
(iii) *Operations of Regular Internal Services.* The next table summarizes the flying activities of regular internal services operating within Australia during each of the years 1951-52 to 1955-56.

CIVIL AVIATION : OPERATIONS OF REGULAR INTERNAL SERVICES, AUSTRALIA.

Particulars.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Hours flown	260,947	237,640	251,019	257,787	251,900
Miles	41,831	39,059	41,014	43,513	43,701
Paying passengers	1,828,506	1,706,446	1,772,357	1,918,125	2,020,380
Paving passenger-miles	721,573	667,321	702,139	765,652	827,885
Freight—					
Tons(a)	57,464	57,635	69,479	78,711	84,446
Ton-miles(a)	26,684	27,167	32,650	36,984	38,909
Mail—					
Tons(a)	2,681	2,311	2,316	2,317	2,478
Ton-miles(a)	1,285	1,166	1,225	1,257	1,357

(a) In terms of short tons (2,000 lb.).

(iv) *Operations of Oversea Services wholly or partly Australian-owned.* The following table furnishes a summary of oversea services, wholly or partly owned by Australian interests, operating between Australia and oversea countries, including Pacific islands and the Territory of Papua and New Guinea, during the years 1951-52 to 1955-56. The operations of Qantas Empire Airways, Tasman Empire Airways Ltd. and British Commonwealth Pacific Airlines are included, but those of Canadian Pacific Airlines, K.L.M. and Pan-American Airways are excluded.





CIVIL AVIATION: OPERATIONS OF OVERSEA SERVICES.(a)

Particulars.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Route miles (unduplicated) at 30th June ..	43,455	66,558	64,250	63,774	58,618
Hours flown	50,336	54,148	53,580	49,326	50,665
Miles '000	10,664	11,565	11,464	11,128	12,028
Paying passengers	95,134	97,753	102,965	114,371	131,934
Paying passenger-miles '000	265,756	275,206	290,603	317,565	383,930
Freight—					
Tons(b)	2,138	1,957	2,295	2,662	2,990
Ton-miles(b).. .. . '000	6,716	7,401	8,331	9,372	10,494
Mail—					
Tons(b)	1,141	1,168	1,379	1,442	1,491
Ton-miles(b).. .. . '000	6,162	6,122	7,718	7,927	8,458

(a) Airlines wholly or partly owned by Australian interests.

(b) In terms of short tons (2,000 lb.).

(v) *Accidents and Casualties.* The number of accidents involving aircraft on the Australian register in which persons were killed or injured is shown in the following table for the years 1951-52 to 1955-56.

CIVIL AVIATION: ACCIDENTS INVOLVING AUSTRALIAN AIRCRAFT.(a)

Particulars.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Number(b)	25	16	26	22	31
Persons killed	37	5	36	27	22
Persons injured	22	19	27	19	27

(a) Includes accidents and casualties in the Territory of Papua and New Guinea. All accidents irrespective of whether involving death or injury.

(b) Includes

15. *Territory of Papua and New Guinea.*—In this area there were, at 30th September, 1956, 25 aerodromes, 2 water airports, 19 water aerodromes and 5 alighting areas under the control of the Department of Civil Aviation; 47 aerodromes under the control of the Territory Administration; and 20 aerodromes, 6 water aerodromes and 2 alighting areas under private control. Ten cleared heliports and approximately 300 helicopter clearings were also in existence.

Five companies conduct regular services between the major aerodromes. Charter flights can be arranged to almost any locality. Further information may be found in Chapter V.—The Territories of Australia.

During the year 1955-56, three accidents occurred in which one person was killed and five persons were injured. These figures are included in the total accidents for Australia in the table above.

PART II.—COMMUNICATION.

A. POSTS; TELEGRAPHS; TELEPHONES; CABLE AND RADIO COMMUNICATION.

NOTE.—The statistics in this Division have been advanced two years since the previous issue but, owing to the exigencies of space, it has been impossible in some cases to show figures for both 1954-55 and 1955-56 in the tables. More detailed figures for 1954-55 will be found in *Transport and Communication*, Bulletin No. 46. In all the tables in this Division particulars for the Australian Capital Territory are included with those for New South Wales, while the South Australian figures include particulars for the Northern Territory.

§ 1. General.

1. *The Postmaster-General's Department.*—Under the provisions of the Post and Telegraph Act 1901, the Department was placed under the control of the Postmaster-General. The Director-General of Posts and Telegraphs controls the Department under the Postmaster-General, whilst the principal officer in each State is the Deputy-Director of Posts and Telegraphs.

2. *Postal Facilities.*—(i) *Relation to Area and Population.* The following statement shows the number of post offices, the area in square miles and the number of inhabitants to each post office (including non-official offices) and the number of inhabitants to each 100 square miles in each State and in Australia at 30th June, 1956. In order to judge clearly the relative postal facilities provided in each State, the area of country to each office as well as the number of inhabitants per office should be taken into account.

POSTAL FACILITIES : RELATION TO AREA AND POPULATION AT 30th JUNE, 1956.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of post offices(a)	2,572	2,344	1,259	898	635	514	8,222
Number of square miles of territory per office	120	37	533	1,006	1,537	51	362
Number of inhabitants per office	1,395	1,111	1,089	965	1,067	622	1,147
Number of inhabitants per 100 square miles	1,156	2,964	204	96	69	1,219	317

(a) Includes "official," "semi-official," and "non-official" offices.

The foregoing table does not include "telephone" offices at which there is no postal business.

(ii) *Number of Offices.* The following table shows the number of post offices (exclusive of telephone offices) in each State at 30th June, 1955 and 1956.

NUMBER OF POST OFFICES.

Type of Office.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Aust.
30TH JUNE, 1955.							
Official and Semi-official	502	304	212	165	150	52	1,385
Non-official	2,063	2,058	1,047	726	488	467	6,849
Total	2,565	2,362	1,259	891	638	519	8,234
30TH JUNE, 1956.							
Official and Semi-official	507	305	211	168	151	53	1,395
Non-official	2,065	2,039	1,048	730	484	461	6,827
Total	2,572	2,344	1,259	898	635	514	8,222

(iii) *Employees and Mail Contractors.* The number of employees and mail contractors in the Central Office and in each of the States at 30th June, 1955 and 1956 are given in the following table :—

NUMBER OF POSTAL EMPLOYEES AND MAIL CONTRACTORS.

Particulars.	Central Office.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
30TH JUNE, 1955.								
Employees	1,006	33,860	24,221	13,160	8,101	5,841	3,397	89,586
Mail Contractors(a) .. ..	..	2,001	1,085	1,274	378	284	280	5,302
30TH JUNE, 1956.								
Employees	1,054	34,180	24,588	13,411	8,364	6,070	3,505	91,172
Mail Contractors(a) .. ..	..	2,175	1,041	1,292	372	291	278	5,449

(a) Includes persons employed to drive vehicles.

3. **Gross Revenue, Branches—Postmaster-General's Department.**—The gross revenue (actual collections) in respect of each branch of the Department during the years 1954–55 and 1955–56 is shown in the table hereunder :—

POSTMASTER-GENERAL'S DEPARTMENT : GROSS REVENUE.(a)
(£'000.)

Sources.	N.S.W.	Vic.(b)	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1954–55.							
Postage	9,644	7,003	3,196	2,052	1,588	656	24,139
Money order commission and poundage on postal notes ..	376	234	99	80	49	24	862
Private boxes and bags	62	42	33	21	14	8	180
Miscellaneous	823	673	406	183	145	78	2,308
Total, Postal	10,905	7,952	3,734	2,336	1,796	766	27,489
Telegraphs	1,708	1,253	884	514	452	123	4,934
Telephones	15,947	11,924	5,510	3,632	2,296	1,093	40,402
Grand Total	28,560	21,129	10,128	6,482	4,544	1,982	72,825
1955–56.							
Postage	10,302	7,355	3,359	2,228	1,664	672	25,580
Money order commission and poundage on postal notes ..	416	242	107	89	56	25	935
Private boxes and bags	63	43	33	22	15	9	185
Miscellaneous	840	1,767	324	177	166	56	3,330
Total, Postal	11,621	9,407	3,823	2,516	1,901	762	30,030
Telegraphs	1,611	1,305	906	538	473	127	4,960
Telephones	17,216	13,236	6,112	4,033	2,541	1,213	44,351
Grand Total	30,448	23,948	10,841	7,087	4,915	2,102	79,341

(a) The figures in this table relate to revenue actually collected during the year as recorded for Treasury purposes. (b) Includes Central Office collections.

For each of the years 1951–52 to 1953–54 the gross revenue for Australia was £59,371,000, £64,398,000 and £67,797,000 respectively.

Gross revenue for the year 1955–56 increased by 8.9 per cent. compared with that for the previous year. Revenue of the Postal, Telegraph and Telephone branches increased by 9.2 per cent., 0.5 per cent. and 9.8 per cent. respectively.

4. **Expenditure, Postmaster-General's Department.**—(i) *Distribution.* The following table shows, as far as possible, the distribution of expenditure (actual payments) in each State during the years 1954–55 and 1955–56, as shown by records kept for Treasury purposes. The table must not be regarded as a statement of the working expenses of the Department, since items relating to new works, interest, etc., are included therein.

POSTMASTER-GENERAL'S DEPARTMENT : DISTRIBUTION OF EXPENDITURE.(a)

(£'000.)

Particulars.	Central Office.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1954-55.								
Expenditure from Ordinary Votes—								
Salaries and payments in the nature of salary ..	366	13,017	9,112	5,055	3,139	2,069	1,228	33,986
General expenses ..	67	1,417	881	392	266	213	101	3,337
Stores and material ..	17	760	428	193	147	113	55	1,713
Mail services ..	(b)2,946	1,333	638	708	322	225	104	6,276
Engineering services (other than capital works) ..	583	9,782	6,517	3,568	2,126	1,612	823	25,011
Other services ..	211	..	..	..	..	..	..	211
Total ..	4,190	26,309	17,576	9,916	6,000	4,232	2,311	70,534
Rent, repairs, maintenance	..	434	248	120	94	68	13	977
Proportion of audit expenses ..	..	14	9	5	3	2	1	34
Capital works and services(c)—								
Telegraph and telephone	26	9,449	6,909	3,449	1,924	1,366	960	24,083
New buildings, etc. ..	..	1,068	1,124	333	273	240	218	3,256
Other expenditure, not allocated to States ..	(d)4,702	..	..	..	..	..	..	4,702
Grand Total ..	8,918	37,274	25,866	13,823	8,294	5,908	3,503	103,586

1955-56.

Expenditure from Ordinary Votes—								
Salaries and payments in the nature of salary ..	447	14,354	9,998	5,605	3,441	2,318	1,356	37,519
General expenses ..	64	1,652	1,030	431	306	236	134	3,853
Stores and material ..	20	773	432	276	142	120	72	1,835
Mail services ..	(e)3,860	1,715	809	827	449	275	118	8,053
Engineering services (other than capital works) ..	779	11,185	7,546	4,308	2,416	1,926	984	29,144
Other services ..	200	..	..	..	..	..	..	200
Total ..	5,370	29,679	19,815	11,447	6,754	4,875	2,664	80,604
Rent, repairs, maintenance	..	427	307	120	103	73	24	1,054
Proportion of audit expenses ..	3	15	10	6	3	2	1	40
Capital works and services(c)—								
Telegraph and telephone	33	10,285	6,848	3,075	2,063	1,567	975	24,846
New buildings, etc. ..	..	1,580	1,200	312	228	405	199	3,924
Other expenditure, not allocated to States ..	(f)3,929	..	..	..	..	..	..	3,929
Grand Total ..	9,335	41,986	28,180	14,960	9,151	6,922	3,863	114,397

(a) The figures in this table represent actual payments made during the year as recorded for Treasury purposes. (b) Expenditure on air-mail services, £2,795,000 and conveyance of mails in other countries, £151,000. (c) Includes expenditure from loan fund. (d) Includes expenditure not apportioned to States, i.e., interest on loans, £1,304,000; sinking fund, £1,655,000; superannuation contributions, £1,475,000; transferred officers' pensions and allowances, £6,000; pensions and retiring allowances, £10,000; and loans redemption and conversion, £252,000. (e) Expenditure on air-mail services. (f) Includes expenditure not apportioned to States, i.e., interest on loans, £885,000; sinking fund, £1,438,000; superannuation contributions, £1,592,000; transferred officers' pensions and allowances, £5,000; and pensions and retiring allowances, £9,000.

(ii) *Totals.* Actual payments made for each of the years 1951-52 to 1953-54, respectively, were :—£93,109,000, £98,344,000 and £99,478,000. Total expenditure increased by 10.4 per cent. during 1955-56, compared with that during 1954-55.

5. *Profit or Loss, Postmaster-General's Department.*—The foregoing statements of gross revenue and expenditure represent actual collections and payments made and cannot be taken to represent the actual results of the working of the Department for the year. The net results for each branch, after providing for working expenses (including superannuation, pensions and depreciation) and interest charges including exchange, are shown in the following table for the years 1951-52 to 1955-56.

POSTMASTER-GENERAL'S DEPARTMENT : PROFIT OR LOSS, BRANCHES.
(£'000.)

Branch.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Postal	— 544	— 2,417	— 1,849	— 2,254	— 2,402
Telegraph	— 900	— 1,453	— 1,219	— 800	— 1,202
Telephone	2,107	2,932	3,221	2,905	3,179
All Branches	663	— 938	153	— 149	— 425

NOTE.—Minus sign (—) indicates loss.

6. *Fixed Assets.*—(i) *Details, 1955-56.* The following table shows particulars of the fixed assets of the Postmaster-General's Department from 1st July, 1955 to 30th June, 1956 :—

POSTMASTER-GENERAL'S DEPARTMENT : FIXED ASSETS.
(£'000.)

Particulars.	Net Value, 1st July, 1955.	Capital Expendi- ture, 1955-56.	Gross Value, 30th June, 1956.	Deprecia- tion, etc., 1955-56. (a).	Net Value, 30th June, 1956.
Telephone service plant (excluding trunk lines)	200,695	27,574	228,269	2,940	225,329
Joint trunk and telegraph plant (aerial wires, conduits, and cables)	33,310	3,722	37,032	333	36,699
Telegraph service plant	2,139	253	2,392	80	2,312
Postal service plant	1,120	78	1,198	25	1,173
Sites, buildings, furniture and office equipment	35,085	4,364	39,449	126	39,323
Miscellaneous plant	12,856	2,453	15,309	454	14,855
Total	285,205	38,444	323,649	3,958	319,691

(a) Includes dismantled assets, depreciation written off, and assets transferred.

(ii) *Net Value.* The net value of the fixed assets of the Postmaster-General's Department at 30th June in each of the years 1952 to 1954, respectively, was :—£194,749,000, £222,981,000 and £253,627,000.

§ 2. Posts.

1. *Postal Matter Dealt With.*—(i) *States, 1955-56.* The following table shows a summary of the postal matter dealt with in each State during the year 1955-56. Mail matter posted in Australia for delivery therein is necessarily handled at least twice, but only the number of distinct articles handled is included in the following table.

POSTAL MATTER DEALT WITH(a) : STATES, 1955-56.

('000.)

State.	Letters.	Papers and	Parcels.	Registered	Letters.	Papers and	Parcels.	Registered
	(b)	Packets.	(d)	Articles.	(b)	Packets.	(d)	Articles.
	(b)	(c)	(d)	(e)	(b)	(c)	(d)	(e)
	Posted for delivery within Australia.				Posted for delivery Overseas.			
New South Wales ..	502,661	106,182	6,393	6,514	15,754	9,545	351	638
Victoria ..	381,778	62,499	4,315	4,829	8,965	3,999	174	247
Queensland ..	171,935	27,903	2,479	2,060	5,506	1,086	50	71
South Australia ..	120,096	11,794	1,426	1,145	3,861	705	50	67
Western Australia ..	90,928	9,734	1,179	908	5,315	1,544	36	62
Tasmania ..	41,455	7,852	232	570	339	18	18	32
Australia ..	1,308,853	225,964	16,024	16,026	39,740	16,897	679	1,117
	Received from Overseas.				Total postal matter dealt with.			
New South Wales ..	41,346	23,124	317	852	559,761	138,851	7,061	8,004
Victoria ..	10,155	8,485	141	207	400,898	74,983	4,630	5,283
Queensland ..	4,509	4,438	59	31	181,950	33,427	2,588	2,162
South Australia ..	4,298	5,066	50	30	128,255	17,565	1,526	1,242
Western Australia ..	3,786	5,413	48	60	100,029	16,691	1,263	1,030
Tasmania ..	1,535	1,661	16	53	43,329	9,531	266	655
Australia ..	65,629	48,187	631	1,233	1,414,222	291,048	17,334	18,376

(a) See explanation in para. 1. (i) above. (b) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters. (c) Includes newspapers and postal articles not included in letter mail. (d) Includes registered, cash on delivery and duty parcels. (e) Includes registered articles other than parcels.

(ii) *Australia*. The next table shows the total postal matter dealt with in Australia during each of the years 1951-52 to 1955-56.

TOTAL POSTAL MATTER DEALT WITH : AUSTRALIA.

Year.	Letters, Postcards and Letter-cards.		Newspapers and Packets.		Parcels.(a)		Registered Articles other than Parcels.	
	Total. ('000.)	Per 1,000 of Mean Population.	Total. ('000.)	Per 1,000 of Mean Population.	Total. ('000.)	Per 1,000 of Mean Population.	Total. ('000.)	Per 1,000 of Mean Population.
1951-52 ..	1,197,990	140,467	249,678	29,275	16,670	1,955	17,948	2,104
1952-53 ..	1,228,685	140,675	244,363	27,978	16,313	1,868	16,479	1,887
1953-54 ..	1,309,099	147,084	261,180	29,345	16,639	1,869	16,703	1,877
1954-55 ..	1,344,642	147,922	274,158	30,160	16,765	1,844	17,628	1,939
1955-56 ..	1,414,222	151,811	291,048	31,243	17,334	1,861	18,376	1,973

(a) Includes registered, cash on delivery and duty parcels.

2. **Cash on Delivery Parcels Post.**—(i) *General*. The Postmaster-General's Department undertakes, upon prepayment of a prescribed commission, to deliver registered articles sent by parcels post within Australia, or between Australia and Lord Howe Island, Norfolk Island, Nauru, Territory of Papua and New Guinea, or Fiji, to recover from the addressee on delivery a sum of money specified by the sender, and to remit the sum to the sender. The object of the system is to meet the requirements of persons who wish to pay at the time of receipt for articles sent to them, and of traders and others who do not wish their goods to be delivered except on payment.

(ii) *States*. The next table shows particulars regarding the cash on delivery parcels posted in each State for the years 1954-55 and 1955-56.

CASH ON DELIVERY PARCELS POST : STATES.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1954-55.							
Parcels posted '000	369	167	176	59	71	3	845
Value .. £'000	1,311	585	567	178	153	10	2,804
Revenue(a) £'000	97	50	43	16	18	1	225

1955-56.

Parcels posted '000	344	137	157	55	65	4	762
Value .. £'000	1,240	420	526	177	151	12	2,526
Revenue(a) £'000	90	49	39	11	16	1	206

(a) From commission and postage.

(iii) *Australia.* In the following table particulars of cash on delivery parcels posted in Australia are shown for the years 1951-52 to 1955-56.

CASH ON DELIVERY PARCELS POST : AUSTRALIA.

Particulars.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Parcels posted .. '000	899	837	888	845	762
Value £'000	2,876	2,656	2,876	2,804	2,526
Revenue(a) .. £'000	236	221	239	225	206

(a) From commission and postage.

3. **Total Cost of Carriage of Mails.**—During 1955-56 the total amounts paid for the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Branch, were as follows:—Inland mails—departmental transport £873,000, road £2,441,000, railway £1,193,000, air £650,000; Coastwise mails—£33,000; Oversea mails—sea £135,000, air £3,036,000; Grand total—£8,361,000.

4. **Transactions of the Dead Letter Offices.**—During the year 1955-56, 1,844,000 letters were returned to writers or delivered, 353,000 were destroyed in accordance with the Act, and 254,000 were returned to other countries as unclaimed—a total of 2,451,000. Corresponding particulars for packets were—636,000, 238,000, 40,000 and 914,000. There were 3,365,000 articles handled in all.

5. **Money Orders and Postal Notes.**—(i) *General.* The issue of money orders and postal notes is regulated by sections 74-79 of the Post and Telegraph Act 1901-1949. The maximum amount for which a single money order payable within Australia may be obtained is £40, but additional orders will be issued upon request when larger amounts are to be remitted. The maximum amount permitted to be sent to any person in the dollar area is £A.5 per month and for remittances to countries outside the dollar area, £A.10 per week. A postal note cannot be issued for a sum larger than twenty shillings.

(ii) *States.* Particulars regarding the business transactions in each State for the years 1954-55 and 1955-56 are shown hereunder:—

MONEY ORDERS AND POSTAL NOTES : TRANSACTIONS, STATES.
(£'000.)

State.	1954-55.					1955-56.				
	Money Orders.			Postal Notes.		Money Orders.			Postal Notes.	
	Issued.	Paid.	Net Commission.	Issued.	Pound-age.	Issued.	Paid.	Net Commission.	Issued.	Pound-age.
New South Wales	30,641	30,970	213	4,400	168	35,175	34,866	215	4,590	181
Victoria ..	14,136	14,400	110	2,980	125	16,374	16,287	127	2,791	115
Queensland ..	7,569	7,160	62	955	36	8,338	7,869	69	998	38
South Australia ..	4,149	3,844	32	1,106	48	4,774	4,407	37	1,223	53
Western Australia	3,334	3,219	27	569	24	3,659	3,485	31	628	25
Tasmania ..	1,870	1,669	15	216	9	1,900	2,671	16	220	9
Australia ..	61,699	61,262	459	10,226	410	70,220	69,585	495	10,450	421

(iii) *Australia.* The next table shows the number and value of money orders and postal notes issued and paid in Australia in each of the years 1951-52 to 1955-56.

MONEY ORDERS AND POSTAL NOTES : TRANSACTIONS, AUSTRALIA.

Year.	Money Orders.				Postal Notes.			
	Issued.		Paid.		Issued.		Paid.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
	'000.	£'000.	'000.	£'000.	'000.	£'000.	'000.	£'000.
1951-52 ..	5,404	49,495	5,362	49,439	26,476	11,608	26,590	11,675
1952-53 ..	5,666	53,088	5,578	53,075	26,793	11,658	26,658	11,614
1953-54 ..	6,080	56,175	5,960	56,082	26,168	11,465	26,082	11,441
1954-55 ..	6,755	61,699	6,617	61,262	21,816	10,226	21,867	10,249
1955-56 ..	7,638	70,220	7,337	69,585	23,128	10,450	22,124	9,959

(iv) *Classification of Money Orders Issued and Paid.* Of the total money orders issued in Australia during 1955-56, 7,337,000 valued at £69,083,000 were payable in Australia, 12,000 (£35,000) in New Zealand, 219,000 (£771,000) in the United Kingdom and 70,000 (£331,000) in other countries. Of the total money orders paid in Australia during 1955-56, 7,195,000 (£68,838,000) were issued in Australia, 41,000 (£116,000) in New Zealand, 63,000 (£335,000) in the United Kingdom and 38,000 (£296,000) in other countries.

Money orders payable or issued in foreign countries, and which have been sent from or to Australia through the General Post Office in London, are included in those payable or issued in the United Kingdom.

(v) *Postal Notes Paid.* The following table shows the number and value of postal notes paid in each State during the years 1954-55 and 1955-56. The number and value of postal notes issued and paid in each of the years 1951-52 to 1955-56 have been given in the previous table.

POSTAL NOTES PAID : STATE OF ISSUE.

Postal Notes Paid in—	1954-55.				1955-56.			
	Issued in Same State.		Issued in Other States.		Issued in Same State.		Issued in Other States.	
	'000.	£'000.	'000.	£'000.	'000.	£'000.	'000.	£'000.
New South Wales	7,225	3,651	1,293	575	8,217	3,801	1,474	631
Victoria ..	5,568	2,425	1,942	768	5,242	2,312	2,270	876
Queensland ..	1,436	704	697	348	1,457	736	690	367
South Australia ..	897	481	106	54	943	492	103	51
Western Australia	738	373	225	62	1,014	419	181	54
Tasmania ..	315	136	1,425	672	293	127	240	93
Australia ..	16,179	7,770	5,688	2,479	17,166	7,887	4,958	2,072

§ 3. Telegraphs.

1. *General.*—A review of the development of telegraph services in Australia up to 1921 appeared in Official Year Book No. 15, p. 625, and subsequent developments of importance have been dealt with in later issues. During the past few years substantial improvements in both the speed and grade of telegraph services throughout Australia have been effected, the entire system being subjected to intensive re-organization. The external circulation system of the Australian telegraph service has been considerably modified, and direct communication has been established between cities and towns which formerly were served through intermediate repeating centres.

Telephone subscribers may telephone telegrams for onward transmission, or have messages telephoned to them. The fee for the service is small, and the system means, in effect, that the telegraph system is brought into the home of every telephone subscriber. The number of telegrams lodged by telephone during the year 1955-56 (details for 1954-55 in parentheses) was about 8.6 (8.2) million or approximately 36 (34) per cent. of the total lodgments. The number of telegrams telephoned to subscribers totalled 4.5 (4.2) million.

A radiogram service is provided to certain isolated places throughout Australia and a number of privately-operated wireless transceiver stations have been established at various centres throughout the Commonwealth, enabling telegrams to be exchanged with departmental telegraph offices. Stations sponsored by the Royal Flying Doctor Service of Australia can communicate by wireless with base stations.

The picturegram service between Melbourne and Sydney, which was established in 1929, but which was suspended during 1942, was restored and extended to Brisbane and Adelaide in 1949, to Perth in 1950 and to Hobart and Newcastle in 1951. The equipment installed at these points also permits the direct transmission and reception of oversea photo-telegrams. Portable picture-transmitting apparatus has been provided for use at country centres in New South Wales and Victoria and was first used for the opening of the 19th Federal Parliament at Canberra on 21st February, 1950. In 1955-56 (1954-55 details in parentheses) 6,445 (9,660) picturegrams were lodged for destinations within Australia, 1,382 (1,295) were transmitted to oversea destinations and 3,775 (2,959) were received from other countries. Between 30th June, 1954 and 30th June, 1956, service between Australia and overseas was extended by the establishment of facilities for the transmission of pictures to and from Japan.

As from 20th May, 1953, the Department authorized the connexion of privately-owned picturegram equipment to the public telephone trunk line network for the transmission of pictures. The new facilities are provided subject to certain restrictions where Departmental picturegram services operate and to payment of appropriate charges to cover the use of trunk line channels and equipment. Pictures from overseas may now be routed direct to private receivers.

Teleprinter services (i.e., typewriting over electrical circuits), affording the great advantage of direct and instantaneous communication between points within the same building or separated by distances up to thousands of miles, and printergram services, that is, leased teleprinter channels between the premises of subscribers and chief telegraph offices for the transmission and reception of telegrams, are available. The number of printergram services rose from 143 to 193 during 1955–56. Messages transmitted over these services totalled 1,252,000 during 1954–55 and 750,000 during 1955–56.

2. **Telegraph and Telephone Mileage.**—At 30th June, 1956 the combined single-wire mileages for both telegraph and telephone purposes were:—aerial, underground and submarine cables—exchange 6,202,000 miles, trunk telephone and telegraph 213,000 miles; aerial wires—telephone, trunk and/or telegraph purposes 538,000 miles, exchange and non-exchange service lines 713,000 miles. The mileages of conduits and pole routes were 10,800 duct miles and 117,000 miles respectively. Conduits now include only ducts and conduits with an internal diameter of 2 inches or over. Those with a diameter of less than 2 inches are not recorded separately and are included with underground cables. The mileages in each State may be found in *Transport and Communication*, Bulletin No. 47.

3. **Telegraph Offices.**—(i) *States.* The numbers of telegraph offices, including railway telegraph offices, in the various States at 30th June, 1956 were:—New South Wales, 3,282; Victoria, 2,344; Queensland, 1,748; South Australia, 955; Western Australia, 994; Tasmania, 573.

(ii) *Australia.* The numbers of telegraph offices in Australia at 30th June of each of the years 1952 to 1956 respectively were:—9,830, 9,902, 9,909, 9,907 and 9,896.

4. **Telegrams Dispatched within Australia.**—(i) *States.* The following table shows the number of telegrams dispatched to places within the Commonwealth and to adjacent islands and to ships at sea, according to the class of message transmitted:—

TELEGRAMS DISPATCHED, 1955-56.
(‘000.)

State.	Paid and Collect.						Unpaid.			Total Telegrams.
	Ordinary.	Urgent.	Press.	Letter-gram.	Radio-gram.	Total.	Service.	Meteorological.	Total.	
New South Wales	7,432	461	68	19	68	8,048	345	176	521	8,569
Victoria ..	4,531	165	22	16	7	4,741	151	107	258	4,999
Queensland ..	3,650	147	34	13	71	3,915	193	184	377	4,292
South Australia	1,693	71	29	12	46	1,851	60	95	155	2,006
Western Australia	1,737	56	22	17	63	1,895	63	142	205	2,100
Tasmania ..	512	25	6	6	1	550	34	50	84	634
Australia, 1955-56	19,555	925	181	83	256	21,000	846	754	1,600	22,600
1954-55	19,691	960	197	86	240	21,174	847	692	1,539	22,713

(ii) *Australia.* Telegrams dispatched to destinations within Australia and to adjacent islands and to ships at sea, during each of the years 1951–52 to 1953–54 respectively, numbered:—27,080,000, 23,407,000 and 22,536,000.

§ 4. Telephones.

1. **General.**—Particulars of the total mileage of lines used exclusively for telephone purposes are not available, but are combined with all other line mileage. Particulars of the total single wire mileage used for telephone, trunk and/or telegraph purposes are shown in § 3, para. 2, above.

During 1955–56, 79,239 telephone subscribers' lines and 116,540 telephones were added to the system, compared with 77,760 lines and 111,569 telephones in 1954–55. With an average at 30th June, 1956, of one telephone to every six persons, Australia had a telephone density exceeded by that of only six other countries. The trunk line network was increased by 65,570 channel miles and at 30th June, 1956, had reached 926,717 miles;

52,171 of these additional channel miles were obtained by the installation of carrier-wave equipment, some of which was installed on radio-telephone bearers. Carrier-wave facilities enable several speech paths to be obtained from one pair of wires or, in the case of radio-telephone systems, without wires at all, and are designed to transmit the voice with greater fidelity than the wire pairs on which they are based. An alternative aerial route between Melbourne and Sydney has been completed and work is in progress to provide a direct route for traffic from Sydney to Adelaide and Perth. Sixteen additional trunk line channels are being provided between Tasmania and the mainland.

Ten automatic exchanges were brought into operation in metropolitan areas during the year, together with 15 country and 93 rural automatic exchanges. At 30th June, 1956, there were 274 automatic exchanges in the metropolitan areas and 940 in country districts, to which 1,192,000 telephones were connected, representing 70 per cent. of the total number in use in Australia.

2. **Summary.**—Particulars relating to the telephone services in each State at 30th June, 1956, are shown in the following table:—

TELEPHONE SERVICES: SUMMARY, 30th JUNE, 1956.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Exchanges	2,325	1,764	1,334	694	756	398	7,271
Telephone Offices (including Exchanges)	3,459	2,557	1,835	1,020	981	554	10,406
Lines connected .. '000	449	382	164	107	69	36	1,207
Instruments connected .. '000	648	544	218	149	96	49	1,704
(i) Subscribers' instruments '000	634	533	212	144	93	47	1,663
(ii) Public telephones '000	7.4	4.9	3.1	1.7	1.3	0.8	19.2
(iii) Other local instruments '000	6.9	6.1	3.3	2.6	1.8	1.0	21.7
Instruments per 1,000 of population	181	209	159	171	141	154	181

Of the total telephones (1,704,000) in service at 30th June, 1956, 627,000 or 37 per cent. were connected to exchanges situated beyond the limits of the metropolitan telephone networks.

3. **Subscribers' Lines and Calling Rates.**—The next table shows the number of subscribers' lines and the daily calling rates at central, suburban and country telephone exchanges in the several States for 1955-56:—

TELEPHONES: SUBSCRIBERS' LINES AND DAILY CALLING RATES, 1955-56.

State.	Central Exchanges.		Suburban Exchanges.		Country Exchanges.	
	Subscribers' Lines Connected.	Average Outward Calls Daily per Line.	Subscribers' Lines Connected.	Average Outward Calls Daily per Line.	Subscribers' Lines Connected.	Average Outward Calls Daily per Line.
New South Wales ..	32,209	10.00	233,500	3.59	160,546	1.84
Victoria ..	21,465	10.00	215,605	3.22	130,880	1.25
Queensland ..	10,166	10.82	66,034	2.49	77,131	1.80
South Australia ..	8,721	9.27	52,632	2.66	38,213	1.24
Western Australia	10,337	7.41	31,870	3.07	22,232	1.32
Tasmania ..	6,103	4.46	6,220	2.37	20,792	1.63

A comparison of the average daily calling rates for each class of exchange shows that Queensland registered the greatest number of calls per line at central exchanges, and New South Wales at both suburban and country exchanges.

4. **Effective Paid Local Calls.**—The numbers of effective paid local calls from subscribers' and public telephones in the various States during the years 1954-55 and 1955-56 appear hereunder.

TELEPHONES: NUMBER OF EFFECTIVE PAID LOCAL CALLS.

(Million.)

Calls.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1954-55.							
Subscribers'	408	300	119	75	57	22	981
From public telephones	56	33	13	10	8	2	122
Total	464	333	132	85	65	24	1,103
1955-56.							
Subscribers'	447	329	127	82	63	23	1,071
From public telephones	52	32	12	10	7	2	115
Total	499	361	139	92	70	25	1,186

5. **Trunk Line Calls and Revenue.**—In the next table the number of telephone trunk line calls recorded, the amount of revenue received, and the average revenue per call are shown for each State and Australia for the years 1954-55 and 1955-56.

TELEPHONES: TRUNK LINE CALLS AND REVENUE.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1954-55.							
Total calls .. '000	30,056	26,019	15,671	8,767	5,099	4,284	89,896
Total revenue £'000	4,946	3,604	2,442	1,387	789	479	13,647
Average revenue per call .. pence	39.49	33.24	37.40	37.96	37.15	26.82	36.43
1955-56.							
Total calls .. '000	33,013	28,683	17,346	9,532	5,614	4,924	99,112
Total revenue £'000	5,574	4,050	2,749	1,527	860	554	15,314
Average revenue per call .. pence	40.52	33.88	38.04	38.45	36.77	27.01	37.08

The number of trunk line calls during 1955-56 increased by 9.2 million, or 10 per cent., compared with the figure for the previous year, whilst the average revenue per call increased by 1.8 per cent.

6. **Oversea Telephone Services.**—During the years 1954-55 and 1955-56, radio-telephone services were established between Australia and Chile, Greece, Poland, Uruguay and the Virgin Islands, bringing the number of countries with which radio-telephone communication is available to 77. Service is also provided to certain trans-Atlantic liners, ships off the Australian coast, H.M.A. ships, and H.M.N.Z. ships when cruising in Australian waters.

The amount of traffic handled over the radio-telephone services increased by 21 per cent. over that handled in 1954-55. During 1955-56 (1954-55 details in parentheses), the number of calls connected was 60,633 (49,937), comprising 31,569 (25,180) originating in Australia and 29,064 (24,757) incoming calls.

7. Revenue from Telephones.—Particulars regarding the revenue from telephone services are included in tables in § 1 (*see pp. 417-9*).

8. World Telephone Statistics, 1956.—Information derived, in the main, from statistics compiled by the American Telephone and Telegraph Company shows that at 1st January, 1956, there were more than 101 million telephones in use throughout the world. The United States of America, with over 56 million, possessed by far the greatest proportion of these (56 per cent.). The United States of America also had the highest recorded number of instruments per 100 population, namely, 34. Figures for other leading countries were as follows:—Sweden 30, Canada 26, New Zealand 25, Switzerland 24, Denmark 20. At June, 1956, the number of telephones in Australia per 100 persons was 18.

§ 5. Cable and Radio Communication.

1. General.—Descriptions of the various cable services between Australia and other countries were given in Official Year Book No. 22, pp. 335-6 and earlier issues.

2. Merging of Cable and Wireless Interests.—Following upon the recommendations of the Imperial Wireless and Cable Conference in London in 1928, which examined the situation that had arisen as the result of the competition of the beam wireless with the cable services, Imperial and International Communications Limited (since renamed Cable and Wireless Ltd.) was formed and took over the operations of the Pacific Cable Board and the control of the Eastern Extension Cable Company and the Marconi Wireless Company. For subsequent developments, leading eventually to the establishment of the Overseas Telecommunications Commission, *see Official Year Book No. 37, pp. 220-4*.

3. Oversea Cable and Radio Traffic.—(i) *States*. The number of telegrams received from and dispatched overseas in each State during 1954-55 and 1955-56 is shown hereunder:—

INTERNATIONAL TELEGRAMS: STATES. (‘000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1954-55.							
Received	677	522	69	63	71	20	1,422
Dispatched	662	461	83	77	72	21	1,376
Total	1,339	983	152	140	143	41	2,798
1955-56.							
Received	689	519	74	65	74	20	1,441
Dispatched	653	461	87	79	74	20	1,374
Total	1,342	980	161	144	148	40	2,815

(ii) *Australia*. (a) *Number of Telegrams*. The following table shows the number of international telegrams received from and dispatched overseas during the years 1951-52 to 1955-56:—

INTERNATIONAL TELEGRAMS: AUSTRALIA. (‘000.)

Particulars.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Received	1,357	1,238	1,308	1,422	1,441
Dispatched	1,329	1,207	1,283	1,376	1,374
Total	2,686	2,445	2,591	2,798	2,815

(b) *Number of Words.* Particulars of the international business, originating and terminating in Australia, transacted over the cable and radio services during the years 1954-55 and 1955-56 are shown in the following table:—

INTERNATIONAL TELEGRAMS: NUMBER OF WORDS, AUSTRALIA.(a)
(*000 Words.)

Class of Telegram.	Number of Words Transmitted to—			Number of Words Received from—		
	United Kingdom.	Other Places.	Total.	United Kingdom.	Other Places.	Total.
Ordinary	4,972	7,352	12,324	4,204	6,111	10,315
Letter	5,673	9,228	14,901	5,617	7,609	13,226
Press	2,547	1,807	4,354	8,994	3,268	12,262
Government	395	978	1,373	1,104	1,733	2,837
Greetings	1,021	701	1,722	889	832	1,721
Other .. ..	..	16	16	..	93	93
Total, 1955-56 ..	14,608	20,082	34,690	20,808	19,646	40,454
1954-55 ..	17,862	19,654	37,516	22,163	18,493	40,656

(a) International business, originating and terminating in Australia, transacted over the cable and radio services.

Words transmitted to "Other places" included 3,163,696 to the United States of America and 4,565,939 to New Zealand and the Pacific Islands. Words received from "Other places" included 3,424,321 from the United States of America and 4,112,922 from New Zealand and the Pacific Islands.

4. *Coast Stations.*—At 30th June, 1956, there were 54 wireless stations established at points around the Australian coast and 12 about the coast of Papua and New Guinea. During the year ended 31st March, 1956, these stations handled 580,254 messages (498,358 paying, 13,972 free traffic and 67,924 meteorological) with a total of 12,081,193 paying words.

5. *Radio-communication Stations Authorized.*—(i) *States and Territories, 30th June, 1956.* The following table shows particulars of the different classes of radio-communication stations authorized in Australia and the External Territories at 30th June, 1956. Figures relate to radio-communication (radio telegraph and radio telephone) stations only; particulars of broadcasting stations and of broadcast listeners' licences are shown on pp. 430 and 434.

RADIO-COMMUNICATION STATIONS AUTHORIZED, 30th JUNE, 1956.

State or Territory for which Authorized.	Transmitting and Receiving.							Receiving Only.			Grand Total.
	Ama-teur.	Aero-nauti-cal.(a)	Coast. (b)	Land. (c)	Mobile (General) (d)	Miscel-laneous.	Total.	Land. (c)	Mobile (General) (d)	Total.	
N.S.W. ..	1,078	12	15	789	4,224	45	6,163	79	1	80	6,243
Vic. ..	1,043	7	7	480	3,128	31	4,696	184	34	218	4,914
Q'land. ..	330	20	8	594	1,457	8	2,417	61	26	87	2,504
S. Aust. ..	370	7	5	251	1,196	7	1,836	8	..	8	1,844
W. Aust. ..	207	17	7	388	704	7	1,330	34	..	34	1,364
Tas. ..	124	6	10	96	233	5	474	1	..	1	475
Nor. Terr. ..	10	5	2	181	29	..	227	4	..	4	231
A.C.T. ..	26	1	..	11	81	1	120	..	..	..	120
Total, Aust.	3,188	75	54	2,790	11,052	104	17,263	371	61	432	17,695
Ext. Terr. ..	53	12	12	302	77	..	456	..	..	..	456
Grand Total ..	3,241	87	66	3,092	13,212	104	19,802	371	61	432	20,234

(a) Ground stations (aeradio stations) for communication with aircraft stations. (b) Ground stations for communication with ship stations. (c) Stations established at fixed locations on land for the conduct of point-to-point services and for communication with mobile stations. (d) Stations installed in motor vehicles and small harbour vessels not falling within the definition of ship stations or aircraft stations, and stations comprising small portable apparatus used for various purposes. (e) Includes 277 aircraft stations, 1,322 ship stations and 484 "other" stations which cannot be classified according to States, etc.

(ii) *Australia and External Territories, 30th June, 1952 to 1956.* The following table shows the total number of radio-communication stations authorized in Australia and External Territories at 30th June of the years 1952 to 1956.

RADIO-COMMUNICATION STATIONS AUTHORIZED: AUSTRALIA AND EXTERNAL TERRITORIES.

At 30th June—	Transmitting and Receiving.								Miscellaneous.	Receiving Only.		Grand Total.
	Ama-teur.	Aero-nautical. (a)	Coast. (b)	Land. (c)	Mobile. (d)					Land. (c)	Mobile (General). (d)	
					General.	Air-craft.	Ship.	Other.				
1952 ..	2,937	70	39	1,835	3,063	230	708	177	66	387	181	9,693
1953 ..	2,977	84	42	2,107	4,144	230	755	247	72	390	165	11,213
1954 ..	2,980	91	49	2,359	5,327	232	808	266	83	382	73	12,650
1955 ..	3,144	91	54	2,675	7,987	261	1,059	412	98	398	50	16,229
1956 ..	3,241	87	66	3,092	11,129	277	1,322	484	104	371	61	20,234

See notes to previous table.

B. BROADCASTING AND TELEVISION.

§ 1. Introductory.

1. **General.**—Broadcasting and television services in Australia operate under the Broadcasting and Television Act 1942–1956 and comprise the National Broadcasting Service, the National Television Service, the Commercial Broadcasting Service and the Commercial Television Service. General control of these services is a function of the Australian Broadcasting Control Board (*see* para. 3 below). Details of each service will be found on pp. 430–4.

2. **Legislation.**—The Broadcasting and Television Act 1956 came into force on 1st July, 1956, with the exception of the provisions relating to television viewers' licences, which have operated from 1st January, 1957. The Broadcasting Act 1942–1954, as amended by the new Act, is now cited as the Broadcasting and Television Act 1942–1956.

The effect of the new legislation was to prescribe, in detail, the conditions upon which television services would be established and conducted in the Commonwealth (in this respect, the Minister in his second reading speech on the Bill stated that it was intended to give effect, to a very large extent, to the recommendations contained in the report of the Royal Commission on Television) and to amend the existing legislation in relation to broadcasting in the light of the experience of broadcasting administration since the previous major amendment to the broadcasting legislation in 1948. The Bill provided for the repeal of the Television Act 1953, and, generally speaking, integrated the broadcasting and television provisions, with considerable amendments, into one legislative structure.

A separate Act, the Broadcasting and Television Stations Licence Fees Act 1956, became law on 1st July, 1956. It prescribes the fees payable annually by licensees of commercial broadcasting stations and commercial television stations.

3. **The Australian Broadcasting Control Board.**—The Board, which was constituted on 15th March, 1949, operates under the Ministerial jurisdiction of the Postmaster-General, and its principal functions, as set out in section 16 of the Broadcasting and Television Act 1942–1956, are to ensure:—(a) that services by broadcasting stations and television stations are provided in accordance with plans from time to time prepared by the Board and approved by the Minister; (b) that the technical equipment and operation of such stations are in accordance with such standards and practices as the Board considers to be appropriate; and (c) that adequate and comprehensive programmes are provided by the stations to serve the best interests of the general public.

In addition, the Board may exercise such other functions as are prescribed in relation to broadcasting stations and television stations.

The Board is empowered to make recommendations to the Minister as to the exercise by the Minister of any power under Part IV. of the Act which relates to the Commercial Broadcasting Service.

The Board has power, subject to the direction of the Minister:—(a) to determine the situation and operating power of a broadcasting or television station; (b) to determine the frequencies of broadcasting and television stations within bands of frequencies notified to the Board by the Postmaster-General as being available; (c) to regulate the establishment and operation of networks of commercial broadcasting or television stations and the making of arrangements by licensees for the provision of programmes or the broadcasting or televising of advertisements.

The Board also has power:—(a) to determine the conditions subject to which advertisements may be broadcast or televised by licensees; (b) to determine the hours during which programmes may be broadcast or televised; and (c) to conduct examinations as to the competency of persons to operate the technical equipment of broadcasting and television stations and to charge appropriate fees.

The Board is obliged to hold public inquiries into applications made to the Minister for licences for commercial broadcasting and television stations in areas for which the Minister proposes to grant licences and into any other matter within its functions if the Board thinks it necessary or desirable, or the Minister so directs. The Board, in exercising its powers and functions in relation to commercial broadcasting and television stations, is obliged to consult representatives of those stations.

Subject to the approval of the Minister and of the Treasurer, the Board may provide financial and other assistance to commercial broadcasting stations for the purpose of ensuring that programmes of adequate extent, standard and variety are provided in the areas served by these stations.

Section 8 of the Act provides that the Board shall consist of five members (including two part-time members) appointed by the Governor-General, one of whom, other than a part-time member, shall be chairman. No person shall be appointed as a member of the Board who:—(a) has any financial interest whether direct or indirect, in any company which is the licensee of, or an applicant for a licence for, a commercial broadcasting or television station or manufactures or deals in equipment for the transmission or reception of broadcasting or television programmes; (b) is a member of the governing body of any company or other association of persons which is the licensee of, or an applicant for a licence for, a commercial broadcasting or television station; or (c) is the licensee of, or an applicant for a licence for, a commercial broadcasting or television station.

§ 2. Broadcasting.

1. *General.*—Broadcasting services in Australia are provided by the National Broadcasting Service and the Commercial Broadcasting Service. The former also operates in the Territory of Papua and New Guinea. The following table shows the number of broadcasting stations in operation at 30th June, 1956:—

BROADCASTING STATIONS, 30th JUNE, 1956.

Type of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Papua and New Guinea.	Total.
National—										
Medium										
Frequency ..	14	5	12	6	7	4	2	2	1	53
Short-wave ..	1	3	2	..	2	..	..	..	1	9
Commercial ..	36	20	20	8	14	8	..	..	..	107

2. *The National Broadcasting Service.*—(i) *General.* In sound broadcasting, the programmes of the National Broadcasting Service are provided by the Australian Broadcasting Commission and the provision and operation of transmitters and technical facilities in the studios are the responsibility of the Postmaster-General's Department.

(ii) *The Australian Broadcasting Commission.* The Broadcasting and Television Act 1942–1956 provides that the Commission shall consist of seven members, one of whom shall be a woman.

Under the provisions of the Act the Commission shall provide, and shall broadcast from transmitting stations made available by the Postmaster-General, adequate and comprehensive programmes and shall take in the interests of the community all such measures as, in the opinion of the Commission, are conducive to the full development of suitable broadcasting programmes.

The Commission prepares estimates of its receipts and expenditure for each financial year and submits these estimates to the Minister. Appropriations are made by Parliament for the purposes of the Commission and these, together with all other moneys received by the Commission, are paid into an account in the Commonwealth Bank of Australia. From this account are defrayed all costs, charges, expenses, etc., incurred by the Commission in the exercise of its powers and functions under the Act. For particulars of the financial operations of the Commission see Chapter XXI.—Public Finance.

(iii) *Technical Facilities.* At 30th June, 1956, the National Broadcasting Service comprised 62 transmitting stations as follows :—

Medium-wave Stations—

New South Wales—

2BL and 2FC Sydney, 2BA Bega, 2CO Corowa, 2CR Cumnock, 2KP Smithtown, 2LG Lithgow, 2ML Murwillumbah, 2NA and 2NC Newcastle, 2NB Broken Hill, 2NR Grafton, 2NU Manilla, 2TR Taree.

Victoria—

3AR and 3LO Melbourne, 3GI Sale, 3WL Warrnambool, 3WV Doon.

Queensland—

4QG and 4QR Brisbane, 4AT Atherton, 4GM Gympie, 4QA Mackay, 4QB Pinalba, 4QL Longreach, 4QN Townsville, 4QS Dalby, 4QY Cairns, 4RK Rockhampton, 4SO Southport.

South Australia—

5AN and 5CL Adelaide, 5CK Crystal Brook, 5LN Port Lincoln, 5MG Mt. Gambier, 5WM Woomera.

Western Australia—

6WF and 6WN Perth, 6AL Albany, 6GF Kalgoorlie, 6GN Geraldton, 6NM Northam, 6WA Wagin.

Tasmania—

7ZL and 7ZR Hobart, 7NT Kelso, 7QN Queenstown.

Northern Territory—

5AL Alice Springs, 5DR Darwin.

Australian Capital Territory—

2CN and 2CY Canberra.

Papua—

9PA Port Moresby.

Short-wave Stations—

VLI Sydney, New South Wales, VLG, VLH and VLR Lyndhurst, Victoria, VLQ and VLM Brisbane, Queensland, VLW and VLX Perth, Western Australia, VLT Port Moresby, Papua.

The medium-wave transmitters operate in the medium frequency broadcast band 540 to 1,600 kilocycles per second. From the short-wave stations, using frequencies within the band 3 to 30 megacycles per second, service is given to listeners in sparsely populated parts of Australia such as the north-west of Western Australia, the Northern Territory, and northern and central Queensland and in Papua and New Guinea and adjacent islands.

Programmes for country stations are normally relayed from the control studio of the nearest capital city, high-quality programme transmission lines being used for the purpose. A number of programme channels are utilized to link national broadcasting stations in the capital cities of Australia, and when necessary this system is extended to connect both the national and commercial broadcasting stations.

In June, 1956, 39 of the medium-wave stations were situated outside the six State capital cities and additional country stations are to be constructed. When these additions have been made, the medium-wave and short-wave stations together will provide for clear reception of the programmes of the National Broadcasting Service in practically every part of Australia.

(iv) *Programme Facilities.*—(a) *General.* The programmes of the Australian Broadcasting Commission cover a wide range of activities which are indicated briefly in the following paragraphs. The proportion of broadcasting time allocated to the various types of programme during 1955–56 was as follows :—Classical Music, 22.3 per cent. ; Light Music, 15.1 per cent. ; Variety, 18.2 per cent. ; News, 7.8 per cent. ; Talks, 6.8 per cent. ; Sport, 4.8 per cent. ; Parliament, 4.5 per cent. ; Drama and Features, 3.9 per cent. ; Youth Education, 3.7 per cent. ; Religion, 3.5 per cent. ; Children's Session, 2.3 per cent. ; Rural Broadcasts, 1.7 per cent. ; Non-departmental, 5.4 per cent.

(b) *Music.* The A.B.C. is to-day the biggest concert-giving organization in the Commonwealth, and the immense growth of interest in music in this country is illustrated by the fact that Australian listeners in increasing numbers now welcome the opportunity of hearing fine music on the air and in the concert hall and have magnificently supported the presentation of orchestral concerts and of recitals by the best musicians from their own country and from overseas. In 1936 small regular orchestras were formed by the A.B.C. in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart, and from these foundations have grown our present orchestras. Those in Sydney and Melbourne measure up to first-class orchestras overseas, whilst those in the other capital cities are showing rapid improvement and are now the equal of orchestras in many places of comparable size in Europe or America. Until 1946 the cost of these orchestras was met solely by the A.B.C., but since then State Governments and major municipal bodies in all States have agreed to contribute towards the expense.

The close co-operation between a broadcasting organization, city authorities and State Governments to establish and maintain symphony orchestras is unique in the world.

In 1955-56, the A.B.C. organized 551 public orchestral concerts (including 159 free concerts for school children and 45 free concerts for adults and 189 public recitals by famous artists throughout the Commonwealth. Of these concerts, 203 were given outside the State capitals, including 72 free orchestral concerts for school children.

The policy of the A.B.C. so far as individual artists are concerned has always been to develop local talent and at the same time to give its audiences the opportunity of hearing famous international musicians.

(c) *Drama and Features.* Drama programmes are designed to give listeners opportunities, which they might not otherwise have, of hearing the great plays of all nations as well as adaptations of the best modern stage plays and also those written specially for broadcasting. The main regular drama programmes are broadcast on Saturday and Monday evenings, and special series of longer plays are also given at various times during the year.

In recent years the technique of the feature programme has also been developed in this country. The feature is a form of entertainment which is unique to radio, consisting of specially written programmes designed to present information in an interesting way, and it may deal with a very wide variety of subjects ranging from history and current events to science and the arts. A number of Australian writers have become interested in this form of entertainment and about 97 per cent. of the features broadcast are written by Australians. Local writers also contribute a large proportion of the plays broadcast and every effort is made to assist and encourage their work.

(d) *Youth Education.* The A.B.C. provides a regular series of broadcasts to schools as an addition to normal class-room education. The total number of listening schools at the end of June, 1956 was 8,116 or about 82 per cent. of all schools, State and private, throughout the Commonwealth. Many of the school broadcasts are presented in dramatized form, as this method makes the material more vivid and interesting to the young listener. For the very young children, the Commission broadcasts every week-day the "Kindergarten of the Air", a type of broadcast which originated in Australia. (See also Chapter XII.—Education, on this subject.)

(e) *Talks.* The aim of the Talks Department is to provide programmes which will keep the listener well informed on current affairs and on general topics. Many of the talks in the first category are now presented in a magazine type of session consisting of a number of short items linked by a narrator. An extension of this type of programme is the documentary, in which radio goes into the field to analyse or to describe, using the actual sounds and voices recorded on location.

Major controversial topics are covered in the "Nation's Forum of the Air", using the debating technique with questions in person from the studio audience and telephoned from listeners. Another outstanding session is "News Review", containing at least five comments on the news of the day recorded over landline from all States of the Commonwealth and, in the case of significant world events, from overseas by radio-telephone.

(f) *Rural Broadcasts.* The Rural Broadcasts Department was commenced in 1945 to serve the needs of country listeners. It has proved to be of great value to men and women on the land throughout Australia, by giving them the latest market reports and information on general conditions, and by keeping them informed on rural development overseas. The interstate market report is the only Australia-wide market service available to the Australian rural population. Programmes are exchanged with radio organizations in England, Canada, the United States of America and elsewhere, and several visits to Australia by well-known farm radio personalities have also been arranged. The department has encouraged the work of Junior Farmers' Clubs in Australia, and has sponsored competitions for members in connexion with the Royal Agricultural Shows in Sydney and Melbourne.

(g) *News.* On 1st June, 1947, the Australian Broadcasting Commission's independent news service came into full operation. Since that date the Commission has collected the Australian news for its bulletins independently of the press and it has, in addition to a large staff throughout Australia, a London news room for the selection and transmission of news secured from the major overseas news agencies. Nine national news bulletins are broadcast daily, and are followed by State bulletins of news of State interest. In addition, two or more regional bulletins are broadcast by local stations in country areas on most days of the week, and for remote country districts special bulletins are broadcast on short-wave. For overseas listeners 22 bulletins daily are broadcast through the Radio Australia transmitters. These bulletins, which are given in English, French, Mandarin, Indonesian and Thai, are directed to every continent, but concentrate on the Pacific and Asian areas. The A.B.C. also rebroadcasts for Australian listeners, by arrangement with the British Broadcasting Corporation, two B.B.C. news bulletins each day.

(h) *Other Activities.* The broadcasting of the proceedings of Federal Parliament commenced as a regular service in July, 1946. At present these broadcasts are confined to one of the two national transmitters in each capital city and to one domestic short-wave station (VLR), but it is hoped that more country listeners will eventually be able to hear them.

The National Children's Hour, presented seven days a week, is composed of over 40 programme items, including stories, music, games, and items about art, literature, natural history and sport. There is a children's newsreel and a Brains Trust, discussing, through children, topics of wide general interest. The Argonauts' Club is an important part of the session and encourages children between the ages of 7 and 17 in self-expression and the appreciation of cultural subjects, but the provision of entertainment suitable for children is the main purpose of the session.

In co-operation with the various religious denominations, the A.B.C. broadcasts several religious sessions each week-day in addition to those given on Sundays. These religious broadcasts include relays of normal church services and a variety of special programmes of talks and sacred music. The modern trend towards the use of religious drama is also followed.

The variety and sporting programmes of the A.B.C. provide the lighter side of the service. In its variety sessions the A.B.C. does everything possible to assist local artists in order to increase the amount of first-class talent in this country, and encouragement is also given to Australian composers of light music. The A.B.C. dance bands in Sydney and Melbourne are regarded as being two of the most outstanding bands in Australia.

The coverage of sport at home and abroad by the A.B.C. is comprehensive. On Saturday afternoons the sporting panel provides listeners with progress results, scores and descriptions from half a dozen or more fields of sport. Events of international interest such as Test matches, the Davis Cup, etc., are covered by simultaneous descriptions from A.B.C. commentators. In covering events overseas, the A.B.C. is indebted to the B.B.C. for its collaboration in Great Britain, to the New Zealand Broadcasting Service for events in New Zealand and to broadcasting organizations in many other countries.

3. The Commercial Broadcasting Service.—Commercial broadcasting stations are operated under licences granted and renewed by the Postmaster-General after taking into consideration any recommendations which have been made by the Board. The maximum initial period of a licence is five years and renewals are granted for a period of one year. The fee payable for a licence is £25 on the grant of the licence, and thereafter annually, £25 plus one per cent. of the gross earnings of the station from the broadcasting of advertisements or other matter during the preceding financial year. Licensees of these stations rely for their income on the broadcasting of advertisements and other publicity.

At 30th June, 1956, there were 107 commercial broadcasting stations in operation. A table showing the call sign, location, frequency and aerial power of each of these stations may be found in *Transport and Communication*, Bulletin No. 47.

4. Overseas Broadcasting Service.—There are four short-wave stations at Shepparton, Victoria (VLA, VLB, VLC, VLD) for use only in the overseas service known as "Radio Australia". As in the case of the National Broadcasting Service, these stations are maintained by the Postmaster-General's Department and their programmes are arranged by the A.B.C. During certain periods station VLG Lyndhurst, a unit of the National Broadcasting Service, is also used for the purpose of overseas transmissions. The programmes, which give news and information about Australia, presented objectively, as well as entertainment, are directed mainly to South-East Asia and the Pacific. Twenty-two of the regular transmissions are in foreign languages. The overseas audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

5. **Broadcast Listeners' Licences.**—(i) *General.* Broadcast listeners' licences are issued at post offices in accordance with section 96 of the Broadcasting and Television Act 1942–1956. A single licence authorizes every broadcast receiver which is:—(a) in the possession of the holder of a licence, or of a member of his family, at the address specified in the licence and/or ordinarily kept at that address; (b) installed in a vehicle which is ordinarily in the possession of the holder, or of a member of his family, and is ordinarily kept at that address while not in use.

The fee for a broadcast listener's licence or a renewal thereof is:—Zone 1, £2 15s.; Zone 2, £1 8s. Zone 1 is the area within approximately 250 miles of specified broadcasting stations and Zone 2 is the remainder of the Commonwealth.

A licence may be granted at one-quarter of the ordinary fee to any person who (a) is in receipt of a pension under Part III. or Part IV. of the Social Services Act 1947–1956 or a service pension, or a pension in respect of total and permanent incapacity, under the Repatriation Act 1920–1956 or the Repatriation (Far East Strategic Reserve) Act 1956; and (b) lives alone or with any person whose income does not exceed the maximum amount of income and pension allowed under Part III. or Part IV. of the Social Services Act 1947–1956 or section 87 of the Repatriation Act 1920–1956.

Licences are granted free of charge to blind persons over 16 years of age and also to schools.

(ii) *Licences in Force.* The following table shows the number of broadcast listeners' licences in force at five-year intervals from 1925 to 1956.

BROADCAST LISTENERS' LICENCES IN FORCE.

At 30th June—	N.S.W.(a)	Vic.	Qld.	S.A.(b)	W.A.	Tas.	Aust.
1925	34,857	20,290	1,267	3,331	3,562	567	63,874
1930	111,253	140,072	23,335	25,779	5,755	6,048	312,192
1935	279,166	237,247	67,546	76,515	41,257	20,121	721,852
1940	458,256	348,264	151,152	124,928	87,790	42,191	1,212,581
1945(c)	548,074	394,315	180,089	146,611	98,210	47,930	1,415,229
1950(c)	683,271	505,078	260,033	195,261	133,199	64,369	1,841,211
1955	746,050	549,690	293,542	223,593	150,199	71,602	2,034,676
1956	776,284	554,339	301,371	228,625	153,445	74,729	2,088,793

(a) Includes Australian Capital Territory. (b) Includes Northern Territory. (c) Excludes licences for receivers in excess of one. These licences were introduced in July, 1942 and were abolished on 31st December, 1951.

Of the 2,088,793 broadcast listeners' licences in force at 30th June, 1956, 1,206,698 or 57.7 per cent. were held by persons situated in metropolitan areas and 882,095 or 42.3 per cent. by persons in country areas. Of the latter, only 12,600 were in respect of Zone 2.

6. **Radio-inductive Interference.**—In each State of the Commonwealth, the Postmaster-General's Department maintains a staff of experts with suitable equipment and transport, for the purpose of investigating complaints of radio-inductive interference to the reception of broadcast programmes and to defence and civil radio-communication services.

During the year 1955–56, 10,948 sources of trouble were eliminated as a result of Departmental efforts or by other action. About 4,000 suppressors were fitted to offending appliances as recommended by investigating officers, who carried out 43,195 inspections in metropolitan and country areas.

7. **Prosecutions under the Broadcasting Act.**—Persons convicted during the year ended 30th June, 1956 for operating unlicensed broadcast receivers numbered 4,386. Fines and costs amounting to £20,036 were imposed.

§ 3. Television.

1. **General.**—Television services in Australia operate under the Broadcasting and Television Act 1942–1956 and comprise the National Television Service and the Commercial Television Service. A brief review of the relevant legislation is given in para. 2, page 429.

2. **The National Television Service.**—Under the Broadcasting and Television Act 1942–1956 the A.B.C. provides the programmes for the National Television Service from stations made available for the purpose by the Postmaster-General. Two stations have been established, ABN Sydney and ABV Melbourne, both operating on Channel 2.

3. **The Commercial Television Service.**—Licences for commercial television stations have been granted as follows:—Sydney—ATN (Channel 7), TCN (Channel 9); Melbourne—HSV (Channel 7), GTV (Channel 9).

CHAPTER XII.

EDUCATION.

§ 1. *Evolution of Educational Systems in Australia.*

An account of the development of the Australian school system up to 1929 is to be found in Official Year Books Nos. 1, 2, 17 and 22, and in Official Year Book No. 40 a reasonably complete review of changes which had occurred up to 1951 and of the practices then current was presented from material furnished in the main by the Commonwealth Office of Education.

In the sections which follow, the information relating to the educational programme applies mainly to the year 1956. The statistics given in the tables, however, relate to 1954 for schools and technical colleges and to 1955 for universities.

§ 2. *Government Schools.*

1. *Administration.*—Education is the responsibility of the State Governments. The Commonwealth is, however, empowered to provide financial assistance to students and meets the full cost of education in Commonwealth Territories, although staff and facilities are largely provided by State education authorities.

Although there is a tendency towards regional administration, State educational administration is centralized. The permanent head of the Department of Education or Public Instruction in each State is responsible to the Minister for Education (or Public Instruction). Contact with the schools is maintained principally through Inspectors, called Superintendents in Western Australia and Tasmania. Departments are usually divided into primary, secondary and technical divisions. Some technical colleges are, however, in a large measure autonomous. Universities are independent foundations although much of their income is derived from State and Commonwealth grants.

Examination Boards, representative of the universities, the Education Departments and non-government schools, control public examinations and syllabuses, and curriculum committees prepare primary and secondary curricula. State Ministers for Education meet periodically as the Australian Education Council, to discuss matters of common interest, and Directors of Education meet annually as a Standing Committee of this Council.

2. *The School System.*—(i) *Compulsion.* In all States, there is legislation for compulsory school attendance. The original Victorian Education Act was passed in 1872, followed by similar Acts in Queensland (1875), South Australia (1878), New South Wales (1880), and Tasmania and Western Australia (1893).

In 1956, the ages between which children were legally required to attend school were as follows:—New South Wales, 6 to 15 years; Victoria, 6 to 14 years; Queensland, 6 to 14 years; South Australia, 6 to 14 years (children may not leave school until the end of the term during which they reach the age of 14 years); Western Australia, 6 to 14 years; and Tasmania, 6 to 16 years.

In Victoria, South Australia, and Western Australia, amendments to the Acts have provided for the raising of the school leaving age to 15 years, but to date this legislation has not been implemented.

Schooling may be given in government schools (including correspondence and special schools) or non-government schools and in a small minority of cases by private tuition.

The employment of children of school age is prohibited by law.

(ii) *Beyond compulsion.* In recent years, the development of large-scale industry and scientific farming has demanded a diversity of skills and a general raising of the educational level of the population. The raising of the school leaving age in two States and the tendency everywhere for children to stay longer at school have been expressions of public realization of this. In recent years, less than half of all children left school when they reached the age limit for compulsory attendance. Indeed, almost half now proceed to some form of further education beyond secondary school, either as full-time students, as part-time apprentices or trainees released during the day by their employers, or as part-time evening students.

In the early years of government provision of education, the main emphasis was on the primary school, which catered for children under compulsion and offered a course largely confined to the tool subjects, reading, writing and arithmetic. However, a process of extension and differentiation both at the bottom—infants' schools and kindergartens—and at the top—secondary schools—was well under way during the early years of this century.

3. *The Educational Ladder.*—(i) *Infants' Schools.* It is now customary, although not compulsory, for children to begin school when they are five years old. In larger primary schools, they enter the infants' school, and in smaller schools infants' classes, which occupy two or three years, the first year in some States being called "Kindergarten" or "Preparatory". The emphasis in the infants' classes is very much on general development, on play activities and on the informal aspects of the educational processes. In some cases the first two grades of primary education, together with any "Preparatory" or "Kindergarten" classes, are to be found in separate infants' schools or departments. But whether in a separate establishment or as a part of a primary school, there is a gradual move towards formal instruction. At the end of the period, most children are able to read with some fluency, carry out simple arithmetical operations founded on the basic number facts, and can write in pencil. In addition, they have acquired skills with art materials and the like. A good deal of the instruction is carried on through activity methods, involving, for example, dramatic work, puppetry, and school "shops". Children then pass at about the age of 8 or 9 to the more formal primary school, in which they normally spend four or five years.

(ii) *Primary Schools.* The main emphasis in the primary school as distinct from the infants' school still lies on the tool subjects (reading, writing and arithmetic) and, in more recent years, on oral language, but the methods of teaching have undergone considerable changes. Changes in the purpose and outlook of educationists, and the raising of the professional standards of teachers, have made for greater freedom for pupils and teachers, some departure from the methods of mass instruction, and the closer linking of the curriculum with the child's social environment.

In general, it is true to say that there is now less emphasis on results, and that basic skills are taught at a somewhat later stage. At the same time, the curriculum has been broadened. More individual instruction has led to a reduction of minimum standards of achievement for the less able and a stress on curriculum enrichment for the bright. Retardation, i.e., the repeating of grades, has been considerably reduced, the aim being for each child to remain with his age group. In all States, "opportunity classes" exist for backward children, and in one State "opportunity classes" are provided for the especially bright.

(iii) *Secondary Schools.* At the age of 12 or 13 (in Queensland, 14), children transfer to a secondary school course. In the cities and larger country centres, this is provided in a separate school, but in less densely populated areas secondary classes share the same buildings as primary classes. In rural areas, secondary pupils may share teachers or classrooms with primary pupils, and even in one-teacher schools a few secondary students may carry out correspondence assignments under the supervision of the primary teacher-in-charge.

Secondary curricula have developed from the matriculation requirements of the universities. English grammar and literature, mathematics, including algebra, geometry and trigonometry, were the core. Languages, chiefly Latin and French, or science, chiefly physics and chemistry, and history had an important place. Geography and drawing were often taken in the first two or three years.

As a result of changes in the academic course for matriculation, greater emphasis has been placed on oral language and written expression in the English course; Latin has waned in popularity and modern languages other than French and German are being taught in a few schools. A general science course has been introduced in some States, and social studies, a synthesis of history, geography and civics, is a subject to matriculation level in two States. More emphasis has been placed on art, music and physical education. In recent years, the provision of a secondary education for all has gained ground rapidly, although the entrance requirements of tertiary institutions are still provided for.

Consequently, alongside the academic course, other courses have grown up. In country areas, they may be offered in the same school or the academic course may even be largely abandoned. In the city, it is usual to offer non-academic courses in separate schools. The academic schools and multi-lateral country schools are usually known as High Schools, while the other types are generally distinguished by such names as Junior Technical Schools and Home Science Schools.

Particular mention should be made of the recent development of the all-age consolidated school sometimes with an agricultural bias, found under various names in different States. Tasmania and South Australia adapted the idea of the English village area schools to Australian conditions and established "Area Schools", some of which have farms attached.

The courses followed in the non-academic schools are in general broader than in the academic schools. There is less concentration on establishing an academic discipline and method peculiar to each subject, but more attention to correlation between fields of knowledge, sometimes expressed by projects involving them all. Less time is generally devoted to mathematics and the formal sciences, more time to practical work and to art and musical appreciation. In English, oral language is emphasized rather more and grammar much less than in the academic schools.

(iv) *State Details.* Very brief particulars of the position in each of the States were given on pp. 432-3 of Official Year Book No. 40.

4. **Examinations and Accrediting.**—(i) *Examinations.* In earlier years, most States had three examinations for school children. The first came at the end of primary school and was variously known as the "Qualifying Certificate" or "Scholarship". These examinations were regarded as a qualification for secondary education. The third came at the end of the secondary course, at the age of sixteen or seventeen, and was known as the "Leaving" or "Senior Public" Examination, which qualified students for university matriculation. Between these came the "Intermediate Certificate" or "Junior Public Certificate", usually one or two years before the end of the full course of secondary schooling. A pass in this examination was a useful entrance qualification for clerical occupations, nursing, some Public Service positions, and other callings requiring academic training.

The entrance examination for secondary schools was administered by the Education Departments, although students from private schools also sat for it. The two higher examinations were generally under the control of a board, on which universities, Education Departments and non-government schools were represented.

The external examination for secondary school entrance has now been abolished in every State except Queensland, where the age of transition is fourteen and the "Scholarship" Examination must be passed to entitle the student to free secondary education and, if necessary, boarding allowances. The external Intermediate Examination has declined in importance, some States substituting internal examinations in some, or all, schools, other States providing a variety of internal certificates from different types of schools. The Leaving Certificate in most States has not been supplanted, but has been modified to provide a greater variety of subjects and, as for example in mathematics, the opportunity of choosing several specialized courses or a broad course.

The length of the secondary course has been increased in two States from two to three years for the Intermediate Certificate and from a further one to a further two for the Leaving. South Australia has a further year beyond the Leaving Certificate for a separate examination known as "Leaving Honours". Only the "Leaving Certificate" is necessary for matriculation, but good results—credits as distinct from passes—in the Leaving Honours Examination may carry exemption from some subjects of the first-year university course. In Victoria, the optional Leaving Honours year has been replaced by adding a further year after the Leaving Examination for a course leading to a special matriculation examination. Separate matriculation examinations also exist in New South Wales, Western Australia and Tasmania, but successful Leaving candidates are not required to sit.

(ii) *Accrediting.* The system of granting certificates, or credit for subjects passed, without external examination is a major development and now operates in four States. Credit is assessed on the student's record of work for the year, together with performance in internal examinations. Syllabuses can be less rigidly controlled and can be more freely adapted to local conditions, although standards are maintained by the supervision of the central authority. All States have an external examination for matriculation.

(iii) *State Details.* The details of accrediting in each State were given on pp. 433-4 of Official Year Book No. 40.

5. **Health Services to Schools.**—Information relating to school medical and dental services is given in Chapter XIV.—Public Health and Related Institutions.

6. **Guidance.**—Each of the Australian States has now a comprehensive system of educational guidance administered by trained and experienced educational psychologists and backed by a system of school record cards. In general, the functions of these services are:—selection and differentiation for secondary education, diagnosis and guidance of atypical children, preliminary vocational guidance and, in some States, research. The weight given to each of these functions varies considerably from State to State, but the aim is the provision of thorough educational guidance services for all children.

The Vocational Guidance Division of the Commonwealth Employment Service co-operates with State Education Departments by giving post-school vocational guidance, using the data obtained and made available by the Education Departments during the school career of the children.

7. **Research.**—(i) *State Education Departments.* All State Education Departments have set up research branches which function as integral parts of head offices. In several States, the officer who directs research is also responsible for the guidance service offered by his Department. The research undertaken is directed towards departmental activities and the findings of research are examined carefully in the determination of policy and procedures; in addition, many problems of immediate importance are handled. In the majority of States, too, the Research Branch supervises the collation of statistics; it also plays an important part in curriculum revision and modification of examinations.

(ii) *Australian Council for Educational Research.* Research in education is also carried out by a non-governmental body called the Australian Council for Educational Research. It is engaged on educational research in a wide variety of fields, ranging from tertiary to pre-school education. It conducts surveys and enquiries, makes grants to approved educational investigators, serves as a centre to disseminate educational information, provides training for research workers, and standardizes and distributes educational and psychological tests for use in Australia. Although this Council is an autonomous body, the Commonwealth and State Governments contribute some financial support to it.

8. **Atypical Children.**—Pupils who, for one reason or another, cannot progress to their best advantage in an ordinary school are catered for by special schools or classes. Among groups given special attention are the mentally backward, the gifted, the physically handicapped, the blind, deaf and dumb, the epileptic, the cerebral palsied, the partially sighted, the hard of hearing and the delinquent. The provision of special schools and classes has involved the appointment of departmental specialists, special training courses and close liaison with school health services. In some States, special clinics attached to hospitals or functioning as an independent child-welfare service handle cases of personality maladjustment; they work in co-operation with the psychological services of the Education Departments.

9. **Education of Native Children in Australia.**—The Commonwealth Government is responsible for the education of full-blood native children in the Northern Territory. Each State has responsibility for the welfare and education of native children within its boundaries.

Native children are admitted to government schools in all States except in areas where separate facilities are provided for the natives. In those States where natives are more numerous, special schools are located at or near aboriginal reserves, settlements and stations. The schools are for the most part staffed by teachers from the Education Departments, and the curriculum is similar to that in ordinary government schools with a bias towards handicrafts. Numbers of native children also attend the mission schools conducted in several States by the various denominations. The standard of education in these schools generally is similar to that in the government schools.

10. **Provision for Rural Areas.**—(i) *General.* The population of Australia is so scattered that there is a problem in providing primary, and more especially secondary, education for all eligible pupils. One method of meeting this problem was the establishment of a wide network of one-teacher primary schools, staffed in the main with trained teachers. The practice of sending itinerant teachers to outlying areas has been introduced in the far north of Western Australia, and mobile railway cars are used for technical education in New South Wales and domestic science in Queensland. In general, however, it has been the practice to bring the child to the educational facilities rather than vice versa.

(ii) *Subsidized Schools.* Where there is a group of children too few in number to warrant the establishment of a one-teacher school, a "subsidized school" may be opened. The Education Department pays part of the cost, and in some States appoints a teacher. Some States also administer "provisional schools", which are completely financed by the Government but which are not large enough, or sufficiently assured of adequate continued attendance of pupils, to warrant classification as permanent schools.

(iii) *Consolidation.* As early as 1904, the policy of transporting pupils to larger and more central schools began to come into operation. Trains, bicycles and horses were first employed, but the use of buses has led to a very great development of school transport systems. This policy, known as "consolidation", has been responsible for a substantial reduction in the number of small schools, and is one of the most striking developments of the past twenty years. The consolidated school is usually not merely a larger primary or secondary school; it generally provides a curriculum specially adapted to the needs of the rural area it serves. Organized transport for children attending country primary and secondary schools has been developed considerably.

(iv) *Special Assistance.* Another way of bringing children and schools together has been the provision of financial assistance for children who have to live away from home in order to attend school. Most of these board in private homes but there are eight government hostels and 67 private ones (excluding private boarding schools), many of which are government-subsidized, which cater for more than 1,800 children of secondary school age and a small number of primary school children also. Special scholarships for country children, giving allowances for living away from home, and substantial fare concessions for vacation travel are provided by all States.

(v) *Correspondence.* For children who are still unable to attend school, systems of correspondence tuition have been established in every State. The Education Departments provide tuition through primary and secondary school levels and up to matriculation standard if required. In addition, the Technical Correspondence Schools conducted by the senior technical college of each state provide correspondence tuition at secondary level up to matriculation standard for students over the school leaving age. Further reference to the work of the Technical Correspondence Schools is made in § 5 of this chapter, which deals with technical education.

11. *School Broadcasting in Australia.*—Over the years, an extensive school broadcasting system has been developed in Australia by the co-operative efforts of the Australian Broadcasting Commission and education authorities. The School and Youth Education Department of the A.B.C. is responsible for the broadcasting of the programmes, but it draws freely on the advice and services of teachers and maintains permanent liaison officers with the Education Department. More than two-thirds of Australian schools are equipped with radio receivers.

School broadcasts are presented as part of the regular A.B.C. programmes without separate stations or wave lengths. Special efforts are made, however, to relate the broadcasts to the actual work in the schools by the extensive distribution of booklets giving details of programmes in advance and subject notes accompanied by picture sheets, work books, and teachers' notes.

Broadcasting has proved to be a most effective way of reaching the outback children of Australia, and radio lessons have been designed to supplement correspondence lessons. The success of the first School of the Air, which has been in operation at Alice Springs in the Northern Territory since 1950 and serves correspondence pupils of the South Australian Education Department, has led to the opening of similar schools in other isolated areas. One of these is based at Ceduna on the west coast of South Australia; the other is at Broken Hill, in the far west of New South Wales. These schools serve a total of many thousands of square miles. By means of special two-way radio equipment, children hundred of miles apart can participate in the same lesson and teachers and pupils can talk directly with each other.

The "Kindergarten of the Air" is described in § 4 (page 448) of this chapter, which deals with pre-school education.

12. *Teacher Training and Recruitment.*—(i) *General.* The training of government school teachers is carried out by the State Education Departments, but in most States persons who wish to train for teaching in private schools may attend government training colleges on payment of a fee. Many non-government school teachers have been drawn from the government teaching services; others have been recruited at the university graduate level. Private training institutions also provide some teachers.

An account of the early growth of teacher training systems is to be found in Official Year Book No. 22 and subsequent developments were reviewed extensively in Official Year Book No. 40. The pupil-teacher system has been abandoned as the chief method of training teachers and teacher students are now recruited at matriculation level and given a professional course of training at colleges controlled by Education Departments or by university Departments of Education. The raising of entrance standards and prolongation of training has led to a close association between the Education Departments and universities. The trend has been towards placing teacher training on the same basis as other professional training.

There is at present a shortage of teachers in Australia. Measures taken to overcome this shortage include substantial increases in teachers' salaries and liberalization of promotion systems, publicity drives to attract recruits and increases in living allowances to departmental teachers' college students. In some States, these allowances amounted to more than £300 a year per student in 1956.

(ii) *Training Colleges.* Every State maintains at least one teachers' training college. Most students are trained at colleges in the capital cities, although there has been a movement towards the establishment of colleges in the country. In 1956, there were in Australia 21 teachers' colleges conducted by Departments of Education and professional training for teachers was provided by seven universities.

(iii) *Training of Primary Teachers.* In most States, teachers for government primary schools are trained in teachers' training colleges controlled and administered by the State Education Departments. Colleges are conducted on a co-educational basis, and departmental trainees are given a monetary allowance while in training and are required to enter into a bond to serve for a specified period or to repay all or portion of the cost of training.

The entrance standard is generally at the Leaving Certificate level at about the age of seventeen. In some States, intending teachers can obtain a scholarship at the Intermediate Certificate level to enable them to complete teachers' college entrance requirements. In return, they are required to enter into a bond of service additional to that normally required of departmental teachers' college trainees.

In general, the duration of courses is two years for primary teachers, including infants' teachers. There is a variety of subject detail in training courses in the different States. The basic subjects taken in the various courses are principles, history and general methods of teaching, special methods of teaching primary school subjects and educational psychology. In addition, students undertake courses in physical education, art, music, school hygiene and handicrafts as well as lectures designed to widen their own cultural background.

In South Australia, primary teacher trainees attend certain university courses, including Education, as part of their training. In Tasmania, while there is a government teachers' college giving a special short course designed to train female primary and infant teachers, the university is responsible for training most teachers for government schools on behalf of the Education Department.

In some States, separate courses are provided for infants' teachers and for teachers in small one-teacher schools. In Victoria, an extension course of one year following the primary course is designed to train teachers of home crafts for primary schools.

(iv) *Training of Secondary Teachers.* Prospective secondary teachers are required to undertake a degree course followed by a one-year post-graduate course leading to a university Diploma in Education. The year's professional training in education includes lectures and seminars on subjects associated with educational theory and practice, study of methods and techniques appropriate to secondary school subjects, periods of practice teaching and the observation of classroom techniques in the teaching of special subjects. In some States, the teachers' colleges provide special courses of training for teachers of junior secondary schools or classes.

(v) *Training of Specialist Teachers.* Teachers of specialist subjects such as music, art, manual arts, domestic science and commercial subjects receive from two to five years' training varying according to the institution concerned and the type of secondary school in which the teacher is to teach. In several States, the shorter courses are provided wholly by the teachers' colleges. Where the specialist course is given at an institution other than the teachers' college—for example, at a university, technical college or conservatorium of music—as is usual for teachers of specialist subjects in high schools, trainees are required to attend teachers' college or university lectures in education and in some cases the specialist course is followed by a year of professional training.

Courses designed to train Physical Education teachers are offered in five States, in one at a teachers' college and in the others by the universities.

Training of teachers in agricultural subjects in secondary schools is available in five States and consists of either an agricultural college diploma or a university degree course together with professional training. In Victoria, the two-year agricultural college diploma course follows the normal two-year primary teachers' course. In New South Wales, in addition to the three-year university agricultural course followed by one year's professional training, there is a two-year teachers' college agricultural course.

(vi) *Training of Technical Teachers.* Teachers of general subjects in technical schools and colleges generally receive their training either as primary or as secondary teachers and after some experience in either or both fields are transferred to a technical institution.

Teachers of specialist subjects in technical schools are in the main recruited from the ranks of qualified tradesmen engaged in either industry or commerce. Upon appointment, teachers of technical subjects usually receive instruction in classroom teaching techniques and procedures. A Technical Teachers' College has been established in Victoria.

(vii) *In-service Training.* As almost all teachers now enter the profession by way of teachers' training colleges, where they receive basic professional training, in-service training in Australia is directed chiefly towards keeping teachers abreast of developments and adding to their basic training.

Such training usually takes the form of short courses held sometimes during vacations, sometimes during school-time or in the evenings. Courses consist of discussions and lectures given by senior staff members of Education Departments and university and teachers' college lecturers, on such subjects as classroom techniques and supervision, librarianship, music, arts and crafts, and physical education. In some States, there are also in-service courses for special groups of teachers, such as headmasters or teachers of one-teacher schools. In addition, district inspectors are responsible for organizing short conferences of teachers where professional topics are discussed.

Education Departments encourage practising teachers to pursue university courses, and in some States pay the cost of courses undertaken by selected teachers.

The official publications of the Education Departments contain articles dealing with educational theory and practice. In most States, the magazines of the teachers' organizations, which reach the majority of government teachers, also contain articles of this type.

(viii) *State Details.* The details of teacher training in the States were given on pp. 442-3 of Official Year Book No. 40.

(ix) *Sex and Status of Teachers.* Although about one half of the teachers in State schools in Australia are men, the ratio varies from State to State. In the infants' schools and generally in girls' departments, women teachers only are employed. Men, however, predominate in the senior positions, both because of their greater preponderance amongst those with long service and because the higher promotion positions are generally reserved for men, except for some in infants' schools and girls' schools which are reserved for women.

13. *School Buildings and Grounds.*—In 1930, school building programmes were seriously cut because of the financial difficulties of the depression. The 1939-45 War intervened before school building could be resumed on a large scale. After the war, the building of schools was given a high priority and most schools are therefore either quite new or more than 25 years old.

The post-war buildings fall into two groups, portable and permanent. In primary schools, in particular, some Education Departments favour a mixture of both kinds of classrooms, thus enabling them to cope with the changing age-composition of different areas. Prefabricated classrooms have been imported or locally produced in very large numbers—the Bristol aluminium dual units being especially popular. Generally, these have been used to extend existing schools, although in a few cases entire schools have been composed of them. To meet the very acute shortage, all kinds of emergency measures have been taken, including the hiring of halls, and the use of cloak-rooms, weather sheds and verandahs for class instruction. However, a considerable number of modern and imposing new secondary schools have been built and equipped with special facilities for the varied activities of the pupils.

14. *Equipment.*—(i) *Text Books and Materials.* All equipment regarded as essential by the Education Department in each State, including equipment for manual training and home arts, but excluding text books for pupils, is provided free of charge.

The more widespread application in recent years of activity and play-way methods in the infants' schools has been stimulated by the provision of a greater volume of free materials such as blocks, counters, peg-boards and modelling clay.

Secondary schools are almost always provided with laboratories, but these are not found in primary schools, with the exception of the larger all-age schools in the country.

(ii) *Furniture.* There has been considerable development in this field. Originally most schools were equipped with long desks and benches, seating six to eight pupils, but these were later replaced by the standard dual desk with tip-up seat, and in infant classes

by individual chairs and small tables. After the war, considerable research was undertaken on posture and the physical measurement of children. The dual desk is now being replaced in some States by the individual table and chair, provided in a range of sizes suitable to each class. In some States, tubular steel is used. The new type of furniture is more suitable for flexible arrangements of the class in line with modern educational practice.

(iii) *Visual Aids.* In the past 20 years, there has been a remarkable growth in the use of visual aids in education. After some resourceful pioneering work had been done by individuals, the Department of Education, between 1936 and 1939, appointed special committees and teacher demonstrators to guide the development of the new educational medium. Production units to produce film strips suitable for use in schools were set up in five States and an Australian-produced film-strip projector was manufactured. After the war, the emphasis moved from the strip projector to the 16 mm. sound machine and the National Film Board, set up by the Commonwealth Government to promote the use of educational films, became the main producer of these films. Film companies are also designing films primarily for class-room use and several manufacturers have produced 16 mm. sound projectors. Education Departments have their own film libraries to distribute films to schools and, in addition, borrow from the National Library which is the main distributing centre for non-technical films in Australia.

15. *Parent and Citizen Organizations.*—In Australia, where all government schools are administered by central departments, there is little opportunity for local administration of education. Public interest is expressed through parent and citizen organizations. Although the names of these bodies differ in the various States, they have similar aims which are :—to promote the interest of the school by bringing parents, pupils and teaching staff together ; to help provide teaching aids not supplied by the department ; to provide recreation materials ; to assist in the regular attendance of children at school ; to help find accommodation for teachers.

In all States, the parent and citizen organizations have affiliated to become State-wide bodies. These, in turn, are the members of the Australia-wide body, the Australian Council of School Organizations.

16. *Statistics of Government Schools.*—(i) *General.* The government schools shown in the following tables include primary, secondary, junior technical, correspondence and subsidized schools, but exclude senior technical colleges, evening schools and continuation classes.

Particulars relating to senior technical colleges are given in § 5 page 448.

(ii) *Year 1954.* (a) *General.* The following table shows for 1954 the number of government schools, together with the teachers employed, teachers in training and the number of individual children enrolled.

GOVERNMENT SCHOOLS(a), 1954.

State or Territory.	Schools Open at End of Year.	Teachers Employed (excluding Teachers in Training).	Teachers in Training.	Net Enrolment.
New South Wales(b)	2,557	15,521	2,875	501,923
Victoria	2,003	10,924	2,413	313,963
Queensland	1,555	6,407	1,608	191,648
South Australia	679	4,373	480	122,994
Western Australia	483	3,051	752	(c) 88,748
Tasmania	321	2,048	312	54,333
Northern Territory(d)	9	68	..	(c) 1,676
Australia	7,607	42,392	8,440	1,275,285

(a) Excludes Senior Technical Colleges. (b) Includes Australian Capital Territory. (c) Average weekly enrolment. (d) Year ended 30th June, 1955.

(b) *Average Enrolment and Attendance.* The methods of calculating enrolment are not identical throughout the States. The unit in South Australia is the daily enrolment.

while New South Wales, Victoria, Western Australia and Tasmania employ the weekly enrolment. In Queensland, no average enrolment is compiled, and the August census enrolment figure has been taken.

As with enrolments, there is no uniform method of calculating the average attendance. Most of the States aggregate the attendances for the year and divide by the number of school sessions. New South Wales and Western Australia, however, employ averages of term averages. The average enrolment and attendance in each State and the Northern Territory during 1954 are shown below :—

GOVERNMENT SCHOOLS(a) : AVERAGE ENROLMENT AND ATTENDANCE, 1954.

State or Territory.	Average Weekly Enrolment.	Average Daily Attendance.	Percentage of Attendance to Enrolment.
New South Wales(b)	467,441	415,860	88.97
Victoria	299,670	272,548	90.94
Queensland	(c) 184,210	161,835	87.85
South Australia	115,579	107,875	93.33
Western Australia	88,748	82,677	93.16
Tasmania	51,825	47,169	91.02
Northern Territory(d)	1,676	1,520	90.69
Australia	1,209,149	1,089,484	90.10

(a) Excludes Senior Technical Colleges. (b) Includes Australian Capital Territory. (c) Census enrolment at 1st August, 1954. (d) Year ended 30th June, 1955.

Recurring epidemics of contagious diseases, minor illnesses and bad weather are all factors which affect the full attendance of pupils at school.

The average attendance at government schools in Australia is shown in the following table for the year 1891 and at varying intervals to 1954.

GOVERNMENT SCHOOLS(a) : AVERAGE ATTENDANCE, AUSTRALIA.

Year.	Total Population. (b)	Average Attendance.	Year.	Total Population. (b)	Average Attendance.
	'000.	No.		'000.	No.
1891	3,421	350,773	1948	7,792	770,554
1901	3,825	450,246	1949	8,046	810,800
1911	4,574	463,799	1950	8,307	844,123
1921	5,511	666,498	1951	8,528	899,514
1931	6,553	817,262	1952	8,740	974,934
1939	7,005	744,095	1953	8,903	1,037,621
1941	7,144	732,116	1954	9,090	1,089,484

(a) Excludes Senior Technical Colleges. (b) At 31st December.

(c) *Schools in the Australian Capital Territory.* During 1954, eleven government schools were in operation in the Australian Capital Territory; enrolment numbered 3,909; and average attendance was 3,427. By arrangement with the Commonwealth Government, these schools are conducted by the New South Wales Education Department with provision for primary and secondary education, the Department being recouped for expenditure. The cost of the teaching staff in 1954-55 was £199,734, while the cost of general maintenance amounted to £114,047. The figures quoted exclude enrolment, etc., at the Canberra Technical College and the Evening Continuation School. For further particulars of education facilities in the Australian Capital Territory see Chapter V.—The Territories of Australia, Australian Capital Territory, p. 115.

(iii) *Expenditure.* (a) *Maintenance—All Schools (except Senior Technical Colleges).* The net expenditure on maintenance in all grades of schools, except senior technical colleges and, in Victoria and (in 1939) Tasmania, junior technical schools, and the cost per head

of average attendance for 1939 and each of the years 1950 to 1954 are shown in the following table. The figures do not include expenditure on buildings, which is shown in a subsequent table. In all expenditure tables, the figures for Victoria, Queensland, Western Australia and the Northern Territory relate to the financial year ended six months later than the calendar year.

GOVERNMENT SCHOOLS(a) : NET EXPENDITURE ON MAINTENANCE.

Year.	N.S.W. (b)	Vic. (c)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Total.
TOTAL (INCLUDING SECONDARY SCHOOLS). (£.)								
1939	4,598,376	2,667,094	1,481,399	854,037	730,500	(c) 320,616	6,802	10,658,824
1950	10,830,086	7,763,962	3,963,736	2,435,007	2,283,666	1,082,758	40,578	28,399,793
1951	13,222,509	9,776,957	4,813,837	3,050,624	3,285,769	1,367,236	57,156	35,574,088
1952	17,844,140	11,930,560	5,630,480	3,767,881	3,897,881	1,916,383	88,176	45,075,501
1953	19,716,929	12,993,461	6,353,251	4,106,697	4,381,933	2,211,116	101,893	49,865,280
1954	21,486,088	14,453,861	6,978,485	4,443,816	5,143,030	2,318,304	125,062	54,948,646

PER HEAD OF AVERAGE ATTENDANCE.
(£ s. d.)

1939	15 12 2	14 1 4	13 0 9	12 18 4	14 5 7	11 7 6	11 3 9	14 6 7
1950	33 0 6	37 11 1	29 17 11	31 14 8	36 0 8	30 6 3	39 14 1	33 12 11
1951	37 16 1	44 12 4	33 14 8	36 18 9	49 2 10	36 11 10	52 6 10	39 11 0
1952	47 8 11	49 19 3	36 8 1	41 0 9	54 8 0	45 16 5	72 10 3	46 3 7
1953	49 1 9	50 8 1	40 14 8	40 15 5	37 12 8	50 7 2	66 2 5	48 1 2
1954	51 13 4	53 0 8	43 2 5	41 3 11	62 4 2	49 3 0	82 5 6	50 8 9

(a) Excludes Senior Technical Colleges. (b) Gross figures, receipts not being available.
(c) Excludes Junior Technical Schools.

(b) *Maintenance—Secondary Schools.* The figures shown in the preceding table refer to expenditure on the maintenance of all government primary and secondary schools, excluding senior technical colleges. It has been the practice of the State Education Departments to give separate information in regard to the cost of secondary education. The fact, however, that both elementary and higher education are in some instances given in the same school and by the same teacher makes difficult any satisfactory allocation of expenditure between primary and secondary education. Furthermore, the term "secondary" has not the same meaning in all States. Similar difficulties arise in connexion with the apportionment amongst the various branches of expenditure on administration, inspection and the training of teachers. The figures quoted hereunder in regard to cost have been extracted mainly from the reports of the State Education Departments, and are subject to the above qualifications.

GOVERNMENT SECONDARY SCHOOLS(a): EXPENDITURE ON MAINTENANCE.

State.	1953.		1954.	
	Cost.	Cost per Head of Population.	Cost.	Cost per Head of Population.
	£	£ s. d.	£	£ s. d.
New South Wales	5,747,866	1 13 11	6,450,426	1 17 8
Victoria	3,377,023	1 7 11	3,881,621	1 11 2
Queensland	735,821	0 11 4	842,976	0 12 9
South Australia	982,065	1 5 4	1,056,726	1 6 6
Western Australia	1,118,198	1 15 5	1,340,213	2 1 4
Tasmania(b)	396,503	1 5 11	424,705	1 7 4

(a) Excludes Senior Technical Colleges. (b) Includes High and Junior Technical Schools.

The figures in all cases exclude the cost of buildings. In Queensland, the figure quoted excludes the cost of the Agricultural High School and College, which amounted in 1953–54 to £214,080 and in 1954–55 to £221,181.

(c) *Buildings.* Expenditure on government school buildings, excluding senior technical colleges, for the years 1939 and 1950 to 1954 was as follows.

GOVERNMENT SCHOOLS(a) : EXPENDITURE ON BUILDINGS.
(Including Loan Fund Expenditure.)
(£.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Total.
1939	411,720	206,481	174,725	85,539	56,994	60,011	539	996,009
1950	2,163,917	2,364,674	633,149	544,859	676,742	402,080	13,723	6,799,144
1951	3,531,351	3,118,637	854,761	911,036	916,515	721,740	96,729	10,150,769
1952	4,845,271	3,099,502	644,998	1,667,480	2,006,693	599,338	116,735	12,980,017
1953	4,170,103	4,061,455	811,867	896,922	1,037,832	668,252	59,721	11,706,152
1954	5,493,800	4,660,276	1,286,620	1,146,487	1,458,278	1,312,325	15,608	15,373,394

(a) Excludes Senior Technical Colleges.

The totals for the various States in 1954 include the following amounts expended from funds other than the consolidated revenue fund :—New South Wales, £3,997,077 ; Victoria, £4,460,586 ; Queensland, £1,063,018 ; South Australia, £899,806 ; Western Australia, £1,189,452 ; and Tasmania, £1,233,757.

(d) *Net Total Cost.* The net total cost of education in government schools, including buildings, during the years 1939 and 1950 to 1954 was as follows :—

GOVERNMENT SCHOOLS(a) : NET TOTAL COST.
(£.)

Year.	N.S.W. (b)	Vic. (c)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Total.
1939	5,010,096	2,873,575	1,656,124	939,576	787,494	(c)380,627	7,341	11,654,833
1950	12,994,003	10,128,636	4,596,885	2,979,866	2,960,408	1,484,838	54,301	35,198,937
1951	16,753,860	12,895,594	5,668,598	3,961,660	4,202,284	2,088,976	153,885	45,724,857
1952	22,689,411	15,030,062	6,275,478	5,435,361	5,904,676	2,515,721	204,911	58,055,620
1953	23,887,032	17,054,916	7,165,118	5,003,619	5,419,765	2,879,368	161,614	61,571,432
1954	26,979,888	19,114,137	8,265,105	5,590,303	6,601,308	3,630,629	140,670	70,322,040

(a) Excludes Senior Technical Colleges.

(b) Gross figures, receipts not being available.

(c) Excludes Junior Technical Schools.

The figures in this and the preceding tables refer to all grades of government schools with the exception of senior technical colleges, and in Victoria and (in 1939) Tasmania, junior technical schools. Including buildings, the net cost per scholar in average attendance for the whole of the government schools in Australia amounted in 1954 to £64 10s. 11d.

(e) *School Banking.* Particulars of School Savings Banks are included in Chapter XX.—Private Finance.

§ 3. Non-Government Schools.

1. *Public Authority and the Non-Government Schools.*—In all States, education is compulsory for all children between certain ages. It must be received in a government school, unless the child is under "regular and efficient" instruction elsewhere. This may be at home, or in a non-government school. The provision for control over the regularity and efficiency of instruction in the non-government schools varies considerably from State to State. In Queensland and South Australia, it is possible under the present regulations for schools to exist without inspection. In New South Wales and Western Australia, provision is made for an initial inspection when a new school starts, and for inspections thereafter as the Minister requires, to ensure efficiency. In Victoria and Tasmania, registers are kept of teachers and schools, and both teachers and schools must satisfy the administering authority that they are efficient before registration is granted. Without such registration, neither a teacher nor a school can operate. Provision is made, too, for inspections at any time by the registering authority.

Public authority over schools or institutions having scholars above the compulsory ages is generally less direct. It is effected directly by the registration procedures in Victoria and Tasmania, and in all States there is a measure of indirect control through provisions governing the awards of State scholarships for secondary education, which can be taken only in government or in approved non-government schools.

The eight State-subsidized grammar schools in Queensland are the only non-government schools in Australia for which an annual inspection is prescribed by statute.

In all States, non-government schools are required, under the authority of either the Education Acts or Statistics Acts, to furnish certain returns. The form of these returns may be prescribed in the Acts or may be subject to alteration with the Minister's consent.

2. Numbers of Non-Government Schools, Teachers and Enrolments, 1954.—The numbers of non-government schools, teachers and enrolments for 1954 are shown in the following table :—

NON-GOVERNMENT SCHOOLS, 1954.

Denomination.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aust.
NUMBER OF SCHOOLS.								
Church of England ..	41	34	16	13	8	5	..	117
Presbyterian ..	12	15	3	2	2	2	..	36
Methodist ..	6	4	(b) 5	3	3	1	..	22
Roman Catholic ..	636	374	243	113	152	38	2	1,558
Other Denominational ..	21	21	7	19	5	4	..	77
Undenominational ..	52	46	10	7	82	7	..	204
Total	768	494	284	157	252	57	2	2,014
TEACHERS.								
Church of England ..	744	639	250	169	107	90	..	1,999
Presbyterian ..	271	299	51	64	51	11	..	747
Methodist ..	164	159	(b) 107	75	47	22	..	574
Roman Catholic ..	4,523	2,013	1,504	633	614	217	13	9,517
Other Denominational ..	69	134	30	88	17	52	..	390
Undenominational ..	445	340	110	108	165	33	..	1,201
Total	6,216	3,584	2,052	1,137	1,001	425	13	14,428
ENROLMENTS.								
Church of England ..	9,871	12,142	4,039	3,021	2,012	1,409	..	32,494
Presbyterian ..	4,202	6,049	568	1,066	1,086	171	..	13,142
Methodist ..	2,384	3,436	(b) 1,694	1,240	891	319	..	9,964
Roman Catholic ..	128,559	87,306	45,923	16,681	20,486	6,813	450	306,218
Other Denominational ..	1,098	2,566	482	1,376	310	840	..	6,672
Undenominational ..	5,768	6,603	2,086	1,565	3,236	564	..	19,822
Total	151,882	118,102	54,792	24,949	28,021	10,116	450	388,312

(a) Includes Australian Capital Territory. (b) Presbyterian and Methodist Schools' Association.

3. Growth of Non-Government Schools.—The enrolment and average attendance at non-government schools in 1891 and at varying intervals to 1954 were as follows :—

NON-GOVERNMENT SCHOOLS : ENROLMENT AND ATTENDANCE.

Year.	Enrolment.	Average Attendance.	Year.	Enrolment.	Average Attendance.
1891	124,485	99,588	1949	293,306	264,164
1901	148,659	120,742	1950	309,673	275,562
1911	160,794	132,588	1951	326,258	293,429
1921	198,688	164,075	1952	347,831	315,796
1931	221,387	189,665	1953	366,086	337,156
1939	247,482	219,171	1954	388,312	352,736

4. The Organization of Roman Catholic Education.—There is, in each State capital, an official who acts under the Archbishop as a Director of Catholic Education for the area. Each diocese within the area is, however, autonomous and manages its own educational affairs subject to the local episcopal authority. The State Director has, in addition to possible inspectorial functions within his own diocese, the duty of co-ordination of educational matters within his area, and of liaison with other educational authorities, particularly the State Education Department.

The system includes kindergartens, sub-primary, primary, academic secondary, home science, commercial, agricultural and technical schools, juniorates and minor seminaries, schools for the mentally and physically handicapped, orphanages and a variety of special schools of a charitable nature for under-privileged or socially handicapped children.

With the exception of a small number of permanent lay teachers and a number of visiting teachers, usually specialists in such matters as physical education, sport, speech, etc., teaching is done by members of religious orders.

5. **The Organization of Other Non-Government Education.**—(i) *General.* Within each State, although the other non-Government schools may be organized into loose forms of association for purposes such as sports, conferences, uniform conditions, etc., there is no system corresponding in size, detail or organization with the Roman Catholic schools.

(ii) *Church of England.* In certain schools under direct church control, the appointment of a majority of Council members rests with the Synod. More frequently perhaps the appointment of such Council members lies in the hands of the diocese or even the parish. The ecclesiastical head of the area, the archbishop or bishop, is typically *ex officio* chairman of the school Council. The church may appoint all members or on the other hand it may appoint a majority or only one or two. The other members are secured in many ways; some may be nominated by parents, some by "old boys", some by the "school association", some by co-option by the existing Council. Many combinations of these forms of membership occur.

(iii) *Other Denominations.* In general, the pattern is similar to that described above, with appointments usually controlled by the State authority of the church concerned, either alone or acting in conjunction with the local congregation. In Queensland, there are five schools operated under the joint auspices of the Presbyterian and Methodist Churches.

(iv) *Undenominational.* There are three main groups of such schools: firstly, those partly controlled by State action, such as those grammar schools for which some members of the controlling body are appointed under Act of Parliament; secondly, those operated under the auspices of corporate bodies, usually in the form of limited liability companies which may be affiliated with particular churches; and, thirdly, a number of privately-owned schools, many of which are small and restricted to kindergarten or primary schooling.

§ 4. Pre-School Education.

1. **Types of Pre-School Centres.**—Free kindergartens were originally established and financed mainly in congested industrial areas, by voluntary effort, but over the years the Commonwealth Government, the State Governments and some municipal councils have provided an increasing amount of financial assistance.

In 1938, the six Kindergarten Unions, the voluntary organizations which pioneered pre-school education in Australia, met to form a federal organization. Its title "Australian Association for Pre-school Child Development" was in 1954 changed to "Australian Pre-school Association". Its membership is now open to all organizations whose main objective is the care of the pre-school child, and includes bodies in the Australian Capital Territory, the Northern Territory, and the Territory of Papua and New Guinea.

The aim of the association is to promote the continuous advancement of pre-school movements throughout Australia. It sets out standards which act as a guide throughout Australia to those sponsoring pre-school centres, and is responsible for the administration of the six Lady Gowrie Child Centres. These centres are demonstration nursery schools which the Commonwealth Government established in each of the capital cities in 1940 and which are maintained by Commonwealth grants.

To-day pre-school centres are found not only in inner city areas but in suburban and country districts. Programmes are adapted to suit the areas in which the centres are situated. Types of pre-school centres include nursery kindergartens, crèches with full-day care for children of working mothers, play groups and play centres, occasional care centres and residential holiday homes. Crèches accept children from a few weeks of age up to 5 or 6 years while other centres cater for children from about 3 years up to 5 or 6 years. A mobile unit is in operation in the Australian Capital Territory.

2. **The Training of Teachers.**—It is an accepted principle in Australia that all types of pre-school work should be under the guidance of trained pre-school teachers, although, owing to the shortage of teachers, this cannot always be put into practice.

The Kindergarten Unions in all States except Tasmania have established teacher training colleges providing three year courses. The minimum entrance age is seventeen and the Leaving Certificate is usually required before admission. In addition, in New South Wales, the Sydney Day Nursery and Nursery Schools' Association maintains a training college, and a two-year course for nursery teachers is available at Sydney Teachers' College. In Tasmania, plans are being made for a three year course, similar to those given by the Kindergarten Training Colleges, to be conducted by the university. A temporary one-year course has been provided at Kingston Pre-school Centre, but prospective teachers who wish to gain a Kindergarten Training College Diploma must at present study on the mainland.

Many students-in-training receive government scholarships, and others are sponsored by government departments or voluntary organizations.

3. **Kindergarten of the Air.**—The Kindergarten of the Air came into being in 1942 in Western Australia, where, under the stress of the war, kindergartens could not remain open. It was conducted by the Australian Broadcasting Commission and proved so successful that within a few years it was being broadcast throughout Australia and has inspired similar projects overseas. It consists of a daily programme of 25 minutes based on the interests of children from 3 to 5 years of age, and reaches children in the outback and in isolated country schools, children in hospital and other children who are not able to attend a pre-school centre.

4. **Kindergarten Unions.**—The following information regarding kindergarten unions has been compiled from particulars supplied by the principals of the chief institutions or the organizing secretary in each State, except in the case of Western Australia where the details were furnished by the Education Department. It refers to kindergarten unions or associations, and excludes the kindergarten branches in the government schools of the various States.

KINDERGARTEN UNIONS, 1955.

State.	No. of Schools.	Average Attendance.	Permanent Instructors.	Student Teachers.	Voluntary Assistants.
New South Wales	37	1,539	104	40	..
Victoria	49	1,525	87	(a)	(a)
Queensland	4	313	11	..	..
South Australia(b)	88	3,164	249	..	10
Western Australia	35	1,061	68	..	..
Tasmania	5	231	10	..	8
Total	218	7,833	529	40	18

(a) Not available.

(b) Includes affiliated suburban and country centres.

In 1955, only 51 of these 218 kindergartens were located outside metropolitan areas, mainly in the larger provincial cities. In each capital city, except Hobart, there is a training college and the number of students in training during 1955 was 110 in Sydney, 181 in Melbourne, 29 in Brisbane, 44 in Adelaide, and 21 in Perth.

§ 5. Technical Education.

1. **General.**—In this section, technical education refers to that branch of education which is concerned with the preparation for entry to skilled occupations, including trades and professions. In the main, this education is vocational and is chiefly part-time, being carried out by the student while he is engaged in his occupation. The work of technical high schools, junior technical schools and other schools of this nature, which provide courses with a bias towards technical handwork, has been excluded, as these schools provide a form of education which is more properly regarded as secondary education.

The chief institutions for vocational training other than the universities are the technical colleges. These offer training not only in all the major industrial skills, but also in a variety of commercial, artistic and domestic occupations. Training in certain technical aspects of agriculture such as farm mechanics, wool classing and food processing is also provided by the technical colleges, while the seven agricultural colleges provide thorough training in agriculture, dairying and horticulture. Two agricultural colleges offer, in addition, a course in food technology and Roseworthy Agricultural College, in South Australia, a course in oenology.

Although, as in other branches of education, the main lines of technical education were determined many years ago, expansion and development in the past 20 years has perhaps been greater in this field than in any other. The following table gives some indication of the growth of technical education in the years 1939 and 1950 to 1954.

TECHNICAL EDUCATION : AUSTRALIA.

Year.	No. of Colleges.	No. of Students.	No. of Teachers.(a)	Total Expenditure.
1939	94	89,215	3,276	£ 1,359,800
1950	141	161,564	6,409	5,096,563
1951	146	158,179	6,179	5,930,370
1952	141	170,325	6,428	7,145,402
1953	141	178,301	6,688	7,826,645
1954	146	178,527	7,149	9,245,560

(a) Includes both full-time and part-time teachers.

Technical education is the field most sensitive to changing material needs and has expanded to meet the requirements of new industries and techniques. The desire for the comparative economic security of skilled jobs during the period of economic depression and the increasing demand for skilled workers due to the development of more advanced techniques in industry stimulated public interest in all States.

A characteristic feature of technical education has been the close co-operation between the Commonwealth and the States. The technical colleges were able to play an important part in meeting two crises with Australia-wide implications. During the economic depression in the 1930s, States sought means to provide technical training for the young unemployed and this led, in 1936, to the Youth Employment Scheme, in which the States and the Commonwealth participated. During the 1939-45 War, the Commonwealth and the States worked together in the Commonwealth Technical Training Scheme to meet the war-time need for technicians; after the war, this type of training was continued in the technical colleges in the States as a part of the Commonwealth Reconstruction Training Scheme.

The expansion of technical education in the last two decades has paralleled the growth of secondary production from predominantly scattered small-scale and light industry to more concentrated large-scale heavy industry utilizing advanced techniques. Technical colleges have always been linked with the industries from which they draw staff and students, but whereas formerly they produced skilled craftsmen, they now also accept the responsibility of turning out persons capable of adapting themselves to swift technological changes and able to assume responsibilities of management and leadership. Furthermore, rapid changes in industrial methods call for a close connexion between college curricula and workshop practice in order that they may keep in step and so that applied research can make available to industry the results of pure research. The introduction of day training classes for apprentices is an indication of the development of this relationship between technical education and industry.

The history of the development of technical education is one of increasing government support and control, increasing financial commitments by both State and Commonwealth Governments as well as considerable financial support and greater participation by industrial undertakings in the work of the colleges, increasing enrolments and facilities, the development of curricula and courses to meet new needs, and the growing realization of the need to recruit and train teaching staff in a systematic way.

2. Correspondence Training.—Technical correspondence courses were first offered in Australia about 1910. During the period 1940 to 1944, technical correspondence schools were founded in each state in conjunction with the Commonwealth and these have become an important part of the system of technical education in the Australian states.

These schools offer not only a wide variety of correspondence courses, including trade and apprenticeship, rural, commercial and art courses, but, in addition, provide secondary courses up to matriculation or diploma entrance standard. Students who because of distance or working hours cannot attend technical college classes may enrol for these courses.

In 1955, the Royal Melbourne Technical College established a shortwave broadcasting station to provide further tuition for its correspondence students.

An interesting recent development in technical correspondence education, in which the Australian technical colleges are co-operating with the Commonwealth Government, is the Correspondence Scholarship Scheme operating under the Colombo Plan. Through this scheme, South and South-East Asian students may take correspondence courses conducted by the technical colleges and by the University of Queensland, which has a highly organised system of external tuition. Courses include commercial, rural and teacher-training, engineering and other technical courses. Where practical training is required as part of the course, it is taken by the student in his own country.

3. Teacher Training.—Prior to the 1939-45 War, technical colleges were staffed chiefly by men drawn from two sources. They were either trained teachers in the employment of the Education Department or technicians drawn from industry. Although some of the latter were highly qualified, the great majority had not been trained as teachers. In order to remedy this, there has been a move to develop schemes of training technical college teachers without breaking the important link provided by recruiting specialist tradesmen to teach in the colleges. For example, since the 1939-45 War, New South Wales has extended a system whereby tradesmen-instructors receive a course of teacher training in both general educational theory and teaching method. After appointment, a teacher in a large centre attends classes for six hours each week during his first year of service and two hours weekly thereafter until he has completed the training course. Correspondence courses and itinerant teachers care for the newly appointed teacher-instructor in country colleges. Modifications of this aspect are in operation in other States. Many technical teachers, principally of academic, commercial and domestic science subjects, hold trained teachers' certificates from teachers' colleges.

4. Colleges, Teachers and Students.—The number of colleges, teachers and enrolments of individual students during the years 1939 and 1951 to 1954 are given in the following table:—

TECHNICAL EDUCATION: COLLEGES, TEACHERS AND ENROLMENTS.

State.	Colleges.	Teachers.			Individual Students Enrolled.		
		Full-time.	Part-time.	Total.	Males.	Females.	Persons.
New South Wales—							
1939.. ..	24	301	894	1,195	27,403	9,861	37,264
1951.. ..	44	935	947	1,882	(a)42,513	(a)20,652	63,165
1952.. ..	40	984	1,032	2,016	(a)44,161	(a)22,820	66,981
1953.. ..	40	994	1,036	2,030	(a)45,226	(a)23,252	68,478
1954.. ..	40	1,064	1,037	2,101	45,394	20,424	65,818
Victoria—							
1939.. ..	30	817	456	1,273	21,158	7,686	28,844
1951.. ..	36	1,280	1,071	2,351	29,229	12,217	41,446
1952.. ..	36	1,338	1,090	2,428	32,517	13,993	46,510
1953.. ..	37	1,497	1,147	2,644	35,511	14,304	49,815
1954.. ..	43	1,712	1,199	2,911	34,900	14,778	49,678
Queensland—							
1939.. ..	13	94	108	202	5,125	1,272	6,397
1951.. ..	12	135	346	481	12,654	5,425	18,079
1952.. ..	12	137	354	491	13,849	5,953	19,802
1953.. ..	12	143	361	504	14,574	6,732	21,306
1954.. ..	12	147	403	550	15,065	6,855	21,920
South Australia—							
1939.. ..	17	104	212	316	6,390	3,331	9,721
1951.. ..	28	195	482	677	10,512	6,893	17,405
1952.. ..	27	203	498	701	11,033	7,195	18,228
1953.. ..	27	209	494	703	11,439	6,863	18,302
1954.. ..	26	212	549	761	11,922	6,799	18,721
Western Australia—							
1939.. ..	5	36	119	155	3,843	1,830	5,673
1951.. ..	17	145	325	470	8,101	4,703	12,804
1952.. ..	17	159	321	480	7,995	5,284	13,279
1953.. ..	16	173	286	459	8,987	5,736	14,723
1954.. ..	16	203	278	481	9,670	5,948	15,618
Tasmania—							
1939.. ..	5	41	94	135	936	380	1,316
1951.. ..	9	34	284	318	3,356	1,924	5,280
1952.. ..	9	37	275	312	3,085	2,440	5,525
1953.. ..	9	56	292	348	3,382	2,295	5,677
1954.. ..	9	71	274	345	3,890	2,882	6,772
Total—							
1939.. ..	94	1,393	1,883	3,276	64,855	24,360	89,215
1951.. ..	146	2,724	3,455	6,179	106,365	51,814	158,179
1952.. ..	141	2,858	3,570	6,428	112,640	57,685	170,325
1953.. ..	141	3,072	3,616	6,688	119,119	59,182	178,301
1954.. ..	146	3,409	3,740	7,149	120,841	57,686	178,527

(a) Partly estimated.

5. Expenditure.—The expenditure on technical education in each State for 1954 is shown below:—

TECHNICAL EDUCATION: EXPENDITURE, 1954.

(Including Loan Fund Expenditure.)

(£.)

State.	Salaries and Maintenance.	Equipment.	Buildings.	Total Expenditure. (a)	Receipts— Fees, etc.	Net Expenditure.
New South Wales	2,121,543	278,489	660,954	3,061,465	455,780	2,605,685
Victoria(b)(c)	2,607,155	65,000	1,051,176	4,271,059	269,078	4,001,981
Queensland	395,004	154,477	63,105	612,586	40,558	572,028
South Australia	458,323	(d)	61,802	520,523	69,429	451,094
Western Australia(c)	488,447	(d)	99,137	587,584	22,992	564,592
Tasmania	133,770	35,909	17,164	192,343	1,481	190,862
Total	6,204,242	533,875	1,953,338	9,245,560	859,318	8,386,242

(a) The differences between amounts shown in this column and the sums of the three preceding columns represent expenditure on other items. (b) Includes expenditure on Junior Technical Schools. (c) Year 1954-55. (d) Included with salaries and maintenance.

Fees and other receipts are paid into Consolidated Revenue in all States except Victoria, where they are retained and spent by the Technical School Councils. The expenditure on buildings is financed largely from loan moneys, the sums provided from this source in 1954 being:—New South Wales, £780,676; Victoria, £1,051,176; Queensland, £48,747; South Australia, £38,194; Western Australia, £50,097; and Tasmania, nil.

The net expenditure on maintenance (including salaries) for technical education in Australia in 1954 amounted to 13s. 10d. per head of the mean population, as compared with £6 2s. 2d. per head expended on the net maintenance (including salaries) for primary and secondary education.

§ 6. Commonwealth Activities.

Although the primary responsibility for education rests with the Australian States, the Commonwealth Government is committed to a number of educational activities related to its other functions. For example, it maintains officer training colleges and education services for each of its Defence Services, a School of Pacific Administration for training administrators for the Territory of Papua and New Guinea and a School of Forestry. In each of the Australian territories, there is an education programme which provides for both the native and white children who live there. References to education in the territories appear in Chapter V.—The Territories of Australia.

The Australian Broadcasting Commission features school broadcasts and other educational broadcasts as part of its daily programmes. The Commonwealth Scientific and Industrial Research Organization undertakes research, the results of which are made available to educational institutions. In 1951, the Commonwealth Government introduced a free-milk scheme for school children. This extended a service which some State authorities were already providing for a proportion of the school population. Under the Commonwealth Reconstruction Training Scheme, many ex-servicemen and women have received the training which has enabled them to enter many different trades and professions.

The Commonwealth Office of Education, established under the Education Act 1945, acts as the Commonwealth's educational adviser, undertakes research work as Commonwealth activities require and is the channel for liaison between Commonwealth and State educational authorities. This office has responsibilities with regard to the education of migrants, international relations including the association of Australia with the aims and activities of the United Nations Educational, Scientific and Cultural Organization and the provision of scholarships and fellowships for selected students under the Commonwealth Technical Co-operation Scheme, the UNESCO Fellowship Scheme and the South-East Asian Scholarship Scheme.

The Universities Commission was also established under the Education Act 1945. This commission is mainly concerned with arranging training in universities and similar institutions for ex-members of the forces and providing assistance to students at universities and other approved institutions.

The Commonwealth also assists a number of other bodies concerned with education. Beside grants to organizations such as the Australian Council for Educational Research, grants are made to the States for payment to universities.

Further details of Commonwealth assistance to students and of grants for universities are given in § 8, para. 6, (iii) and (iv), of this chapter.

§ 7. Australia and International Relations in Education.

Despite its isolation, Australia has always been responsive to educational developments in overseas countries, particularly those in the United Kingdom, but it is only recently that it has begun to make any considerable impact on educational thought overseas.

In this connexion, there have been important developments since the 1939–45 War. For instance, there has been a remarkable increase in the volume of information on educational matters exchanged between Australia and South-east Asia, and Australia has participated in the Commonwealth Technical Co-operation Scheme and the United Nations Technical Assistance programme.

Perhaps the most important single factor behind the quickening of Australian interest in international cultural affairs has been membership of the United Nations Educational, Scientific and Cultural Organization. Australia has been a member since 1946. Some eleven expert committees in Australia are responsible for a wide and varied programme of activities on behalf of UNESCO. Their advice has helped to make Australia's contribution to UNESCO international conferences and seminars highly effective. Other work undertaken by these committees has included the provision of technical material and advice to the countries of South and South-east Asia, the conducting of seminars in Australia,

arranging for exhibitions and displays in Australia and overseas, and the publication of handbooks and brochures to assist teachers and other persons in meeting the problems involved in educating for international understanding.

The Australian National Advisory Committee for UNESCO, on which all the other committees are represented, advises the Commonwealth Government and co-ordinates the work of the specialist committees.

§ 8. Universities.

1. General.—There are at present nine universities and two university colleges in Australia, as follows:—

<i>New South Wales.</i>			
University of Sydney	..	..	.. Sydney
New South Wales University of Technology	..	..	.. Sydney
University of New England	..	..	.. Armidale
Newcastle University College	..	..	.. Newcastle
<i>Victoria.</i>			
University of Melbourne	..	..	.. Melbourne
<i>Queensland.</i>			
University of Queensland	..	..	.. Brisbane
<i>South Australia.</i>			
University of Adelaide	..	..	.. Adelaide
<i>Western Australia.</i>			
University of Western Australia	..	..	.. Perth
<i>Tasmania.</i>			
University of Tasmania	..	..	.. Hobart
<i>Australian Capital Territory.</i>			
Australian National University	..	..	.. Canberra
Canberra University College	..	..	.. Canberra

Three of these universities (the New South Wales University of Technology, the University of New England and the Australian National University) and one university college (the Newcastle University College) have been established since the 1939–45 War.

Officially incorporated by the Technical Education and New South Wales University of Technology Act 1949 of the New South Wales Parliament, the New South Wales University of Technology was established to provide facilities for training and research in the fields of applied science and technology. The council of the university is empowered to establish colleges of the university in country districts of New South Wales. Under this authority, a college of the university was established at Newcastle in December, 1951. Further particulars concerning the New South Wales University of Technology were given in Official Year Book No. 42 (pp. 473–4).

The New England University College, established as a branch of the University of Sydney in 1938, was incorporated as the University of New England under the University of New England Act 1953 of the New South Wales Parliament. There are at present four faculties in the university—Arts, established in 1938; Science, established in 1939; and Rural Science and Agricultural Economics, established in 1955. The university co-operates with the New South Wales University of Technology in the provision of arts courses at the Newcastle University College. Under this scheme, the courses of study are prescribed by the University of New England which is also the examining body. Instruction is provided by the members of the teaching staff of the Newcastle University College. Further particulars concerning the University of New England were given in Official Year Book No. 42 (p. 475).

The Australian National University was established under the Australian National University Act 1946 of the Commonwealth Parliament. It provides facilities for post-graduate research in medicine, physical sciences, social sciences and pacific studies. In 1955, 78 students were enrolled. Further particulars concerning the Australian National University were given in Official Year Book No. 42 (pp. 472–3).

2. Expansion within the Universities.—An important administrative development in all universities has been the appointment of full-time salaried Vice-Chancellors or Principals. This has given much greater effectiveness to university administration.

Within the past 20 years, the appearance of some of the universities has altered to a striking extent. New permanent buildings and some temporary ones have been erected and new wings have been added.

There was a continuing increase in university enrolments from 1929 (approximately 9,000) to 1940 followed by a slight recession. In the closing year of the 1939-45 War, however, the number of students had risen beyond any previous figure, and rapid post-war expansion was responsible for a peak enrolment of 32,453 students in 1948. After 1948, the numbers decreased each year as ex-service personnel completed their training under the Commonwealth Reconstruction Training Scheme, but it is anticipated that by 1960 some 40,000 students will be enrolled in Australian universities. Enrolment in 1955 was 30,792.

3. Courses.—A brief survey of developments in university courses since the war up to 1954 was given in Official Year Book No. 42 (p. 476). The following is an outline of some developments during 1955 and 1956.

In 1955, the Commonwealth Government invited the Universities of Sydney and Melbourne, together with the Canberra University College, to establish courses in Indonesian and Malayan Studies, and offered to meet the costs involved. Following this, courses in the Indonesian language began at the Canberra University College in 1956 and plans were made to start similar courses in language and culture at the other two institutions in 1957. Courses in Chinese and Japanese were already being offered at Canberra, and following an appointment to the Chair of Oriental Studies at the University of Sydney, which had been vacant for some years, courses in Chinese were re-established in 1956 and plans were made to re-establish courses in Japanese.

There have also been developments in agricultural education. Degree courses in *Rural Science and Agricultural Economics* were instituted at the University of New England in 1956. Late in 1955, the University of Sydney announced the institution of a new pass degree course of Bachelor of Agriculture, designed to meet the requirements of students who wish to teach agricultural subjects or undertake agricultural extension work. This three year course will be conducted side by side with the existing four year course leading to the Bachelor of Science in Agriculture.

The University of Sydney also established in 1956 the degree of Bachelor of Science in General Science, again designed particularly to meet the need of teachers and those who desire a broader scientific training than can be gained through the existing Bachelor of Science course. The new course may be completed in a minimum of three years or spread over a longer period.

In 1955, the Department of Social Studies at the University of Sydney was re-organized and a post graduate Diploma of Social Work introduced. This will replace the undergraduate Diploma of Social Studies as from the beginning of the 1958 academic year; in the meantime the two courses will run concurrently. An advanced one year course in Social Work was provided by the university in 1955 and 1956 for social workers from South-east Asian countries studying in Australia under the Colombo Plan.

In May, 1956, an appeal was launched in Sydney by the university for funds to establish a chair of Australian Literature.

Chairs of Traffic and Highway Engineering were established at the N.S.W. University of Technology during 1955. This university also received a grant from the American Kellogg Foundation to found a Chair of Hospital Administration. During 1956, a Professor was appointed and preparations were made for a post-graduate course to commence in 1957.

The Degree of Bachelor of Applied Science in Physiotherapy of the University of Queensland was extended in 1955 to include Occupational Therapy, and a new Diploma in Occupational Therapy was introduced. New Diplomas were also instituted at this university in Public Administration and Social Studies.

Following on the successful appeal for funds to establish a medical school in Western Australia, appointments were made to new Chairs in 1956 and plans made for clinical teaching at the final year level to commence in 1957, and the complete school to be in operation by 1959.

4. Research.—The research activities of the universities have been greatly stimulated over recent years by the interest and assistance of the Commonwealth and State Governments, of government departments and instrumentalities such as the Commonwealth Bank and C.S.I.R.O., of private foundations such as the Nuffield Foundation and the Carnegie Corporation, and of industrial undertakings such as General Motors Holden and Broken Hill Proprietary Ltd.

Grants have been made by the Commonwealth Government, through the Australian Atomic Energy Commission, to a number of Australian universities for nuclear research. In 1955, the Commission invited the universities to supply research programmes related to atomic energy which would require the use of the Commission's research establishment at Lucas Heights, New South Wales, and following on this, prepared plans for the establishment

of a co-operative organization designed to enable the universities to make the best use of its research facilities. The Commission also made available undergraduate and post-graduate scholarships for the training of Australian scientists and engineers at Australian universities in fields related to atomic energy.

In 1955, the University of Melbourne allocated funds for the purchase of television equipment for its Department of Visual Aids and for research into the impact of television on children and adults.

A five-year research project on the effect of Australia's immigration achievement since 1947 was inaugurated in 1955 at the Australian National University. A grant was made by the Nuffield Foundation to enable this research to be carried out.

Another grant from the Nuffield Foundation enabled an Australian team, made up of personnel from the Departments of Anatomy and Anthropology at the University of Sydney, to make an expedition to the New Guinea Highlands in order to undertake anthropological investigations. Through a Carnegie Corporation grant made in 1955, the University of Western Australia was able to establish a department of anthropology. This development will help to further the research already being carried out in Australia on problems relating to the education, welfare and development of aboriginal and part-aboriginal people.

The further expansion of teaching and research in various agricultural and veterinary fields was assisted by the annual and special grants of the Commonwealth Bank's Rural Credits Development Fund to several Australian universities. The C.S.I.R.O. also contributed to research in these and other fields.

5. *Services.*—The various types of community services provided by the universities were outlined in Official Year Book No. 42 (pp. 476–7). Similar services have continued to be made available in 1955 and 1956. Some of these are mentioned in para. 4 above, dealing with research.

6. *The Commonwealth and the Universities.*—(i) *General.* Before 1939, Commonwealth interest in research projects carried out by or in collaboration with the universities led to the granting of increasing sums for this purpose. During and after the 1939–45 War, the Commonwealth extended assistance to university students, at first with the object of increasing the number of highly qualified people available for the war effort, then with the object of rehabilitating ex-servicemen and finally as a social service of benefit to the community. Since 1951, the Commonwealth has made special grants to the States for payment to universities, and in addition has, through the Commonwealth Scholarship Scheme, given direct assistance to university students on a wide scale.

(ii) *Grants for Research.* The Commonwealth had given some support to research prior to 1926, chiefly through the Institute of Science and Industry, but the amount spent did not exceed £25,000 per annum. In 1926, the Institute was replaced by the Council for Scientific and Industrial Research (known since 1949 as the Commonwealth Scientific and Industrial Research Organization) with an annual appropriation of £250,000. It has since worked in close association with the universities. Both kinds of research, fundamental and applied, have at times occupied the attention of both the universities and the Commonwealth Scientific and Industrial Research Organization, but in general, the preliminary training of graduates in research work has been left to the universities.

In 1936, the Commonwealth Government made a grant of £30,000 per annum for five years to Australian universities for research in physical and biological sciences. This figure rose over the years to £100,000 in 1950 and was subsequently absorbed in the larger general grant which was then made available by the Commonwealth to the States for universities.

(iii) *Assistance to Students.* Up to 1945, the Universities Commission functioned under National Security Regulations but in that year it was established on a permanent basis under the Education Act. After the 1939–45 War, the Commission continued to provide financial assistance to students under an interim scheme until 1951. In that year, the interim scheme was superseded by the Commonwealth Scholarship Scheme.

Under this scheme, 3,000 scholarships are allocated annually to the States on a population basis. These scholarships are tenable at universities and other approved institutions. Awards are made on merit and all successful applicants have their fees paid. In addition, scholarship holders may be paid a living allowance subject to a means test. At 30th June, 1956, there were 8,641 scholars in training at universities and 1,166 at other institutions.

The Universities Commission also provides for the training at universities and similar institutions of ex-service personnel and war widows under the Reconstruction Training Scheme, the Korea and Malaya Training Scheme and the Disabled Members' and Widows' Training Scheme. A detailed description of the Reconstruction Training Scheme is to be

found on page 240 of Official Year Book No. 39. For the purpose of reconstruction training, the Commonwealth Government made available to the universities approximately £1 million for buildings and £500,000 for equipment, and in addition to paying the full tuition fees for reconstruction trainees, paid the universities an amount to cover the full cost of their training.

At 30th June, 1956, 25,250 full-time and 19,530 part-time students had been selected for university or university-type training under the Reconstruction Training Scheme and 21,381 had successfully completed their courses. At the same date, 14 full-time and 22 part-time students were taking university or university-type training under the Korea and Malaya Training Scheme and 22 had completed their courses. Seven students were taking university or university-type courses under the Disabled Members' and Widows' Training Scheme and 4 had completed their courses.

(iv) *Commonwealth Grants to the States for University Purposes.* Following a report submitted by a committee of inquiry appointed to report on university finances and requirements, the Commonwealth passed the States Grants (Universities) Acts in 1951, 1953, 1955 and 1956 to enable grants to be made to the States for their universities.

The States Grants (Universities) Act No. 37 of 1956 (assented to 27th June, 1956) operated with effect from 1st January, 1956. The main provisions of the act are summarized below:—

Section 4 (1).—If the sum of the fees and State grants received by a university during the year 1956 exceeds the amount specified in column 2 of the table below, the grant to the State for 1956 for that university is:—

- (a) an amount equal to one-third of the excess, and
- (b) the amount shown in column 3 of the table.

Section 4 (2).—The maximum amount payable under Section 4 (1.) is shown in column 4.

Section 5 (1).—The State will:—

- (a) in the year in which payment is received pay to the university concerned an amount equal to the grant received for that university; and
- (b) ensure that the amount shown in column 5 is applied towards the teaching and administrative costs of the residential colleges of the university and that the remainder of the grant is used for expenditure, not being capital expenditure, on university purposes.

COMMONWEALTH GRANTS TO THE STATES FOR UNIVERSITY PURPOSES.

(£.)

University.	Amount of Fees and State Grants.	Amount of Financial Assistance under Section 4 (1.) (b).	Maximum Amount Payable under Section 4 (1.)	Amount for Teaching and Administrative costs of Residential Colleges.
(1)	(2)	(3)	(4)	(5)
New South Wales—				
University of Sydney	783,369	272,323	520,000	11,200
New South Wales University of Technology	605,805	83,229	239,000	3,700
University of New England	64,164	15,179	50,000	2,300
Victoria—				
University of Melbourne	655,159	224,149	453,000	11,000
Queensland—				
University of Queensland	309,269	97,153	258,000	7,000
South Australia—				
University of Adelaide	272,394	95,398	239,000	4,600
Western Australia—				
University of Western Australia	183,531	64,477	165,000	3,300
Tasmania—				
University of Tasmania	106,319	33,522	76,000	900
Total	2,980,010	885,430	2,000,000	44,000

7. Teaching and Research Staff.—The following table shows particulars of the teaching and research staff of Australian universities during 1955:—

UNIVERSITIES: TEACHING AND RESEARCH STAFF, 1955.

University or College.	Professors.	Readers, Associate Professors, Assistant Professors, Lecturers in Charge.	Lecturers.(a)		Demonstrators and Tutors.(b)		Honorary Lecturers and Demonstrators.	Total.
			Full-time.	Part-time.	Full-time.	Part-time.(b)		
Sydney	52	37	297	244	72	103	50	855
Melbourne	48	35	219	103	92	83	1	581
Queensland (Brisbane)	31	25	142	164	39	29	(c) 27	457
Adelaide	31	30	114	71	18	79	..	343
Western Australia (Perth)	16	16	71	41	13	18	..	175
Tasmania (Hobart)	15	5	50	12	8	1	..	91
N.S.W. University of Technology (Sydney)	16	7	273	405	30	..	..	731
New England (Armidale, N.S.W.)	11	7	43	5	7	..	(d) 17	90
Canberra University College	8	2	18	17	4	5	..	54
Total	228	164	1,227	1,062	283	318	95	3,377

(a) Includes senior lecturers and assistant lecturers. (b) Excludes part-time demonstrators.
(c) Department of External Studies. (d) Includes 2 Department of External Studies.

The Conservatorium of Music in Sydney is attached to the Education Department but in Melbourne and Adelaide the Conservatorium of Music is under the control of the university.

8. Students.—(i) *Total*. The number of students (of whom 221 males and 3 females were Commonwealth Reconstruction Training Scheme students) enrolled for courses at the universities for the year 1955 is shown in the following table:—

UNIVERSITIES: TOTAL STUDENTS ENROLLED, 1955.

University or College.	Degree Courses.	Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Adjusted Total.(a)
		Post-Graduate.	Sub-Graduate.			
Sydney	6,334	98	826	..	146	7,328
Melbourne	6,232	20	232	160	436	7,080
Queensland (Brisbane)	3,301	29	448	481	300	4,527
Adelaide	2,470	100	824	2	780	4,165
Western Australia (Perth)	1,844	..	..	..	114	1,942
Tasmania (Hobart)	578	29	37	65	91	783
N.S.W. University of Technology (Sydney)	1,058	..	2,775	93	182	4,092
New England (Armidale, N.S.W.)	528	45	..	..	4	575
Canberra University College	220	..	11	..	69	300
Total	22,565	321	5,153	801	2,122	30,792

(a) Adjustment made for students enrolled for more than one course.

Of the total students in 1955, 24,042 were males and 6,750 females. Included in those enrolled for degrees were 96 enrolled for higher degree courses in Sydney, 233 in Melbourne, 102 in Queensland, 218 in Adelaide, 127 in Western Australia, 12 in Tasmania, 200 at the New South Wales University of Technology, 14 at the University of New England and 24 at the Canberra University College.

(ii) *New Students Enrolled.* The number of new students (of whom 5 males were Commonwealth Reconstruction Training Scheme students) enrolled for courses at the universities during the year 1955 is shown in the following table:—

UNIVERSITIES: NEW STUDENTS ENROLLED, 1955.

University or College.	Degree Courses.	Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Adjusted Total.(a)
		Post-Graduate.	Sub-Graduate.			
Sydney	1,702	13	322	..	47	2,084
Melbourne	1,424	1	93	32	187	1,737
Queensland (Brisbane)	836	2	173	143	158	1,307
Adelaide	516	17	230	..	291	1,053
Western Australia (Perth)	485	..	..	..	34	519
Tasmania (Hobart)	165	1	15	31	36	248
N.S.W. University of Technology (Sydney)	304	..	575	48	132	1,051
New England (Armidale, N.S.W.)	393	21	..	..	3	417
Canberra University College	72	..	4	..	33	109
Total	5,897	55	1,412	254	921	8,525

(a) Adjustment made for students enrolled for more than one course.

Of the total new students enrolled in 1955, 6,220 were males and 2,305 females. Included in those enrolled for degrees were 106 enrolled for higher degree courses—Sydney 1, Melbourne 24, Queensland 9, Adelaide 15, Western Australia 4, New South Wales University of Technology 38, New England 6 and Canberra University College 9. No new students were enrolled for higher degree courses at the University of Tasmania.

9. *University Income for General Activities.*—The income of the universities is derived principally from State and Commonwealth Government grants (including capital grants), students' fees, and income from private foundations. From all sources other than new bequests the income during 1955 for general university functions was as shown in the table below. In South Australia, Government grants and income from private foundations include amounts in respect of the Waite Agricultural Research Institute.

UNIVERSITIES: INCOME FOR GENERAL ACTIVITIES, 1955.
(£.)

University or College.	Government Grants.	Students' Fees.	Interest, Rent, Dividends and Donations.	Other.	Total.
Australian National University (Canberra)	1,686,500	849	29,922	54,413	1,771,684
Sydney	1,261,625	554,044	63,793	40,321	1,919,783
Melbourne	1,177,703	430,403	44,677	21,733	1,674,516
Queensland (Brisbane)	737,366	146,384	25,011	18,295	927,056
Adelaide	730,625	63,965	40,274	12,160	847,024
Western Australia (Perth)	536,928	22,848	10,592	22,685	593,053
Tasmania (Hobart)	259,776	29,750	1,121	4,299	294,946
N.S.W. University of Technology (Sydney)	1,906,154	105,692	..	46,349	2,058,195
New England (Armidale, N.S.W.)	262,654	16,547	716	37,956	317,873
Canberra University College	86,925	8,096	..	575	95,596
Total	8,646,256	1,378,578	216,106	258,786	10,499,726

10. **Principal University Benefactions.**—In earlier issues of the Official Year Book, information was given in some detail in regard to the extent to which the universities have benefited from private munificence. (See Year Book No. 40, pp. 467-8).

11. **University Expenditure for General Activities.**—The principal item of disbursements on general university activities is the maintenance of the teaching and research staff, representing 62.4 per cent. of the total in 1955 compared with 61.1 per cent. in 1954.

The following table shows the expenditure including capital expenditure during the year 1955:—

UNIVERSITIES: EXPENDITURE FOR GENERAL ACTIVITIES, 1955.

(£.)

University or College.	Adminis- tration.	Maintenance of—			Other including Buildings.	Total.
		Teaching and Research Depart- ments.	Premises and Grounds.	Libraries.		
Australian National University (Canberra)	108,226	660,350	81,634	40,496	877,828	1,768,534
Sydney	216,856	1,354,727	199,339	62,280	121,500	1,954,702
Melbourne	145,821	1,190,261	160,297	75,031	133,907	1,705,317
Queensland (Brisbane)	75,064	749,287	70,906	41,541	30,558	967,356
Adelaide	77,487	620,378	80,083	43,025	83,675	904,648
Western Australia (Perth)	46,730	408,608	62,101	26,070	79,199	622,708
Tasmania (Hobart)	35,338	218,774	18,683	19,920	14,081	306,796
N.S.W. University of Technology (Sydney)	136,581	1,265,718	137,649	43,369	474,948	2,058,265
New England (Armidale, N.S.W.)	48,251	166,446	28,034	14,455	86,764	343,950
Canberra University College	14,407	54,163	5,297	8,109	4,781	86,757
Total	904,761	6,688,712	844,023	374,296	1,907,241	10,719,033

12. **Funds for Special Purposes.**—(i) *General.* The tables shown in paras. 9 and 11 relate to general university activities while the following two show the financial position of the Special Purpose Funds which in the main are for special research purposes.

(ii) *Income for Special Purposes.* The following table shows the main items of income for the year 1955:—

UNIVERSITIES: INCOME FOR SPECIAL PURPOSES, 1955.

(£.)

University or College.	Government Grants.	Interest, Rent, Dividends and Dona- tions.	Public Examina- tion Fees.	Special Research Grants.	Other.	Total.
Australian National University (Canberra) .. .. .	..	2,903	..	3,902	1,134	7,939
Sydney	318,675	55,633	..	357,194	18,312	749,814
Melbourne	253,309	686,709	75,843	..	54,400	1,070,261
Queensland (Brisbane)	13,182	42,191	43,211	40,710	15,276	154,570
Adelaide	26,952	142,088	18,648	58,029	10,183	255,900
Western Australia (Perth) .. .. .	..	335,273	27,092	47,487	3,679	413,531
Tasmania (Hobart)	4,459	6,356	4,659	10,279	499	26,252
N.S.W. University of Technology (Sydney)	17,404	5,322	..	40,525	11,177	74,428
New England (Armidale, N.S.W.)	100,000	8,239	..	5,717	561	114,517
Canberra University College	15,600	228	..	2,750	..	18,578
Total	749,581	1,284,942	169,453	566,593	115,221	2,885,790

(iii) *Expenditure for Special Purposes.* The following table shows the main items of expenditure for the year 1955:—

UNIVERSITIES: EXPENDITURE FOR SPECIAL PURPOSES, 1955.
(£.)

University or College.	Special Purpose Funds (Research)	Other Special Purposes.	Public Examination Expenses.	Scholarships, Bursaries, etc.	Other, including Buildings.	Total.
Australian National University (Canberra) .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	1,974	1,974
Sydney	212,816	100,704	.. .. .	17,252	19,099	349,871
Melbourne	131,901	159,017	68,511	6,752	315,951	682,132
Queensland (Brisbane)	25,902	31,173	51,455	4,722	5,141	118,393
Adelaide	86,128	13,259	20,616	2,282	.. .. .	122,285
Western Australia (Perth)	39,845	1,253	26,061	20,469	4,875	92,503
Tasmania (Hobart)	12,747	.. .. .	3,361	2,266	.. .. .	18,374
N.S.W. University of Technology (Sydney)	19,540	23,281	.. .. .	5,568	.. .. .	48,389
New England (Armidale, N.S.W.)	2,639	3,560	.. .. .	240	65,024	71,463
Canberra University College	2,064	9,869	.. .. .	6,124	.. .. .	18,057
Total	533,582	342,116	170,004	65,675	412,064	1,523,441

13. *Degrees Conferred, etc.*—The following table shows the number of degrees conferred and diplomas and certificates granted for males and females separately, at each university during the year 1955:—

UNIVERSITIES: DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES GRANTED, 1955.

Course.	Aust. National Univ.		Sydney.		Melbourne.		Queensland.		Adelaide.		Western Australia.		Tasmania.		N.S.W. Univ. Tech.		New England.		Australia.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Degrees—																					
Arts	1	150	140	202	135	43	42	40	21	57	38	11	14	..	..	..	5	2	508	393
Law	60	5	60	6	8	1	5	1	12	1	3	3	..	..	..	..	..	148	17
Commerce or Economics	47	5	118	13	21	3	18	..	..	..	8	..	..	..	..	..	..	212	21
Education	3	..	29	3	10	2	..	..	7	4	..	..	..	..	..	..	..	49	9
Science	1	..	125	33	116	30	65	27	64	21	53	11	17	5	63	1	11	2	515	130	
Medicine(a)	1	349	50	131	23	61	6	61	11	..	..	..	..	..	..	..	..	..	602	91
Engineering	79	..	81	..	53	1	62	..	25	..	10	..	56	..	..	..	..	366	1
Agriculture
Veterinary
Science	37	4	..	..	8	1	..	..	..	..	..	..	..	..	..	..	..	45	5
Dentistry	69	2	45	2	24	4	10	1	5	1	..	..	..	..	..	..	..	153	10
Music	5	13	..	..	..	..	..	..	..	..	..	..	..	..	..	5	13
Architecture	17	5	17	5	2	1	..	..	..	..	..	..	4	1	..	..	..	40	12
Divinity	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3	..
Total	1	2	965	245	824	231	307	88	265	55	178	55	49	22	123	2	16	4	2,728	704	
Diplomas (Post-Graduate)—																					
Education	40	42	47	17	9	14	21	4	..	..	11	6	..	..	9	6	137	89	
Medicine	21	1	14	2	..	..	..	..	..	..	..	..	..	..	..	..	35	3	
Other	6	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	
Total	61	43	67	19	9	14	21	4	..	..	11	6	..	..	9	6	178	92	
Diplomas (Sub-Graduate)	8	22	23	27	30	26	68	32	..	..	1	..	..	..	..	..	130	107	
Certificates	63	5	..	..	12	9	7	8	..	..	..	..	82	22	

(a) Separate degrees for M.B. and B.S. are conferred by the University of Sydney; this fact has to be taken into account to arrive at the number who qualify to practice as medical practitioners.

§ 9. Further Education.

1. **General.**—Beyond the schools, colleges and universities, there are agencies engaged in less direct educational work which cannot be readily assessed and described. Among them are the media of mass communication (press, film and radio) which are powerful educational forces—whether they are used specifically to disseminate information such as new agricultural techniques or preventive health measures, or on the other hand in a much more general way to exert a powerful influence on the cultural level of the population. There are also bodies and institutions such as the adult education authorities, libraries, art galleries and museums which aim at catering for the educational and cultural needs of the general public.

2. **Adult Education.**—(i) *General.* The term “adult education” is used in Australia to refer in the main to non-vocational educational and cultural activities in which adults participate on a voluntary basis, such as those provided by some of the universities and by the various adult education authorities, which vary in form from State to State.

The Workers' Educational Association movement, which has for its object the bringing of the universities into closer relationship with the community in general, and providing for the higher education of the workers in civic and cultural subjects, has also been active in Australia. In 1913, associations were formed in all the Australian States. In four States the associations have been superseded by Adult Education Boards or Councils—set up by the State Governments in Victoria, Queensland and Tasmania and by the university in Western Australia. In the other two States, New South Wales and South Australia, the associations continue to co-operate with the university authorities in their extension work and are given direct grants by the Governments.

While the choice of courses offered by these bodies is naturally more limited in the smaller States, a variety of topics including social studies and current affairs, language and literature, drama, music, arts and crafts are available in all States.

(ii) *New South Wales: (a) University of Sydney.*—The Extension Board of the University of Sydney provides lectures and short courses in city and country.

In 1914, the Department of Tutorial Classes was established to provide classes and study groups along the lines of similar work in England. Its activities include the provision of tutorial classes in a wide variety of subjects, begun in 1938, and discussion groups and “kits” begun in 1946, to serve the needs of country districts and people who cannot be catered for by tutorial classes, and the fortnightly “Current Affairs Bulletin”. This publication, begun in 1942 and produced for four years by the Australian Army Education Service was recommenced in 1947 as a civilian and service publication by the Commonwealth Office of Education. At the beginning of 1952, the Department of Tutorial Classes took over the full responsibility for the bulletin. It receives an annual grant from the Commonwealth Government for this purpose.

In 1955, there were 136 tutorial classes (84 in the metropolitan area and 52 in the country) with a total enrolment of 3,282; 216 discussion groups (89 in the metropolitan area, 127 in the country) with a total enrolment of 2,210; and 49 kit groups (30 in the metropolitan area and 19 in the country) with an estimated membership of 648.

The Department works in conjunction with the Workers' Educational Association through the Joint Committee of Tutorial Classes, appointed by the university senate.

(b) *Workers' Educational Association.*—In addition to co-operating with the Department of Tutorial Classes in organizing certain classes and groups, the Association itself provides classes in a wide variety of fields. It publishes “Highway”, a two-monthly journal of adult education and maintains a property near Sydney where short residential schools are held throughout the year.

In 1955, the Association ran 26 classes in metropolitan areas and Newcastle, for which there were 1,321 enrolments.

(c) *University of New England.*—When the New England University College became an autonomous university in 1954, its Department of Adult Education took over full responsibility for the activities formerly undertaken by it on behalf of the Department of Tutorial Classes of the University of Sydney. It is actively engaged in bringing university extension activities to the people of northern New South Wales and conducts classes in arts and social sciences in towns throughout this region. Short residential courses have been held in animal husbandry.

(d) *Adult Education Library Service.*—The Public Library of New South Wales provides an adult education library service for all classes and groups conducted by the Department of Tutorial Classes of the University of Sydney, the Workers' Educational Association, and the Department of Adult Education of the University of New England.

(e) *Arts Council.*—The New South Wales Division of the Arts Council of Australia provides a mobile theatre unit and organizes touring companies in ballet, opera and plays to country towns. Musicians provide some short lecture courses in the city.

(f) *Adult Education Advisory Board.*—State Government grants are allocated to the University of Sydney (Department of Tutorial Classes), the Workers' Educational Association, the Arts Council of Australia (New South Wales Division) and the Adult Education Library Service by the Adult Education Advisory Board.

(g) *Education Department.*—The New South Wales Education Department provides evening colleges, housed in its schools and staffed by trained teachers. These provide for courses of a non-vocational nature in a wide variety of crafts, dramatic and musical activities. In addition it is possible for adults to prepare for the Intermediate and Matriculation examinations at certain of these colleges.

(iii) *Victoria.*—The Council of Adult Education is a government instrumentality established by the Adult Education Act 1946. Its aim is to stimulate adult education activities in Victoria and to encourage voluntary organizations and associations by giving them advice and assistance. Its activities include a variety of classes (approximately 60 were available in 1956) on topics ranging from social studies, psychology, language and literature, to crafts, music, drama, travel and deportment, and usually lasting from 10 to 20 weeks. An annual 10-day summer school is another important activity. The Council publishes a bulletin the "C.A.E. Newsletter". Its group service assists and provides programme material for the discussion groups formed by organizations and individuals throughout the State. In 1955-56, there were 4,749 enrolments for classes and 2,200 individual enrolments for 193 discussion groups.

A recent development of importance is the extension of the council's activities, including classes and discussion groups, to the prisons, as part of a general plan for penal reform in Victoria.

Through its Community Arts Service, the Council undertakes the organization of tours by musicians and by theatrical and other companies in country towns which otherwise would have no opportunity of seeing such performances. It provides an advisory service to dramatic and musical societies and co-operates with the National Gallery of Victoria in the organization of travelling art exhibitions.

The Council's income is derived from a government grant, and to a smaller degree, from student fees and Community Arts Service performances.

(iv) *Queensland.*—The Queensland Board of Adult Education was constituted in 1944 and is responsible under the Minister for Public Instruction for the provision of adult education facilities throughout the State. Under the executive officer of the Board, the Supervisor, are five district officers, based in large country towns, who are responsible for organizing activities in Queensland country areas.

The cost of the adult education programme is borne by the State Government and admission to all courses is free. Activities include lectures, group meetings on a variety of topics, generally short term but some of which extend over a full year, and film screenings. Library and film services are provided for adult education groups.

In all, the number of lectures, group meetings, etc., in 1955, was 5,940, with a total attendance of 145,027.

(v) *South Australia.*—Since 1917, the University of Adelaide, through the Joint Committee for Tutorial Classes, has provided each year in the metropolitan area a series of tutorial classes, lecture classes and study circles on a wide range of subjects of cultural and current interest. Fees are paid direct to the Workers' Educational Association, which organizes these classes. The Joint Committee extends its activities into the larger country centres by sending art exhibitions and plays on tour, lending boxes of books and arranging lectures and film screenings.

The Education Department also caters for adults in country towns by providing evening classes, particularly in arts and crafts.

Adult education in South Australia is expanding. In 1956, the university established its Department of Adult Education and appointed a director to take up duty in 1957. Annual governmental grants for adult education activities are to be increased.

(vi) *Western Australia*.—Adult education in Western Australia is organized by the Adult Education Board, established in 1928 under the terms of the statutes of the University of Western Australia. The Board has a considerable degree of autonomy and its executive officer is the Director of Adult Education.

The Board conducts lecture classes in the city and in a few suburban centres. Twenty-one classes were held in 1955, with a total enrolment of 800. It sponsors musical and dramatic performances by outstanding artists both in the city and country, and arranges for screenings of foreign films. Its library provides a box scheme for discussion groups, of which there were 40 scattered throughout the State in 1955.

The Board holds an annual summer school in January, coinciding with the Festival of Perth, for the inauguration of which it was largely responsible.

The Board's finance is derived from university grants, while many of its activities are self-supporting. The State Government makes grants for the Board's work in country areas.

(vii) *Tasmania*. Some form of adult education has existed since the formation in 1913 of a Workers' Education Association, which worked in conjunction with the University of Tasmania for a number of years, receiving a grant through the university, which had a Director of Tutorial Classes. Later the grant was paid direct to the Association by the Government and the university's tutorial department ceased to exist. In 1948, the Adult Education Act was passed providing for the formation of an Adult Education Board whose functions are to plan and develop adult education in Tasmania and to assist other bodies actively engaged in adult education. The definition of adult education under the act covers "cultural or educational pursuits and the encouragement of the arts and sciences".

The executive officer of the Board is the Director of Adult Education, at Hobart, under whose direction three regional officers organize adult education in areas each covering approximately one-third of the State, while a fourth is organizer for Hobart.

The Board organizes classes of ten weeks' duration on a wide range of subjects. In 1954-55, 519 classes with an enrolment of 6,000 were held in 55 centres throughout the State. It sponsors special lectures, film screenings and art exhibitions, recitals of music and dramatic performances, in both city and country areas. Its income is derived from a State Government grant and from student fees.

3. *The New Education Fellowship*.—The New Education Fellowship is a world organization of parents, educators, and other citizens interested in the development of new educational practices. It was founded in London in 1915 and spread to Australia at the time of a regional conference held here in 1937. There are now sections in each State. Its Australia-wide journal "New Horizons in Education" is published quarterly.

4. *Migrant Education*.—The Commonwealth Government's post-war immigration policy has brought to Australia some thousands of immigrants with little or no knowledge of English. To assist their assimilation into the Australian community, a system of migrant education has been developed to teach them English and to give them information about Australia.

Before arriving in Australia, non-English-speaking migrants are taught English by shipboard education officers.

In Australia, free evening classes are arranged by State Education Departments wherever a group of six or more migrants in country areas, or twelve or more migrants in city areas wish to learn English. Should migrants find it impossible to attend classes, they may apply, through State Education Departments, for a free correspondence course in English. In addition, they may listen to regular broadcasts of English lessons by the Australian Broadcasting Commission. The Commonwealth Office of Education provides technical advice on all aspects of migrant education and is responsible for the preparation of teaching materials.

In June, 1956, 17,600 new Australians were enrolled in evening classes and 12,500 were taking correspondence lessons. At the same time, 18,000 new Australians were receiving the monthly booklet accompanying the radio lessons.

§ 10. Libraries.

1. *General*.—The Munn-Pitt Report of 1935 greatly stimulated interest in libraries and librarianship throughout Australia. This is seen in the rapid development of libraries in all States, all of which have now passed legislation to increase library services, and in the establishment in 1937 of the Australian Institute of Librarians to improve the standard of librarianship. This body was reconstituted in 1949 as the Library Association of Australia, its functions now including the promotion and improvement of libraries and library services. The Association conducts annual examinations for which students are prepared by courses of instruction in all States. Formal library schools exist in the National Library, Canberra, and the Public Libraries at Sydney and Melbourne.

2. *Commonwealth.*—(i) *Commonwealth National Library.* This library grew directly from the Library of the Commonwealth Parliament established in 1901. Whilst providing, as a primary responsibility, for the general reading and reference needs of the Members of the Parliament, it has developed into a central source of information for the Government and its departments and other agencies. The close association of the National Library with the central government follows the pattern of the Library of Congress at Washington, U.S.A. Like the latter, it has also inherited the basic elements of the national library concept of the older countries of Europe: that a national library is the proper place to collect the national literature systematically and to make it known and available for use, and that it is a place to which the most profound scholars may turn with confidence for what is most significant in the literature of other countries.

Through its Legislative Reference Branch the National Library aims to provide for the Parliament and the Government an up-to-date reservoir of fact and opinion on public issues both domestic and foreign. In addition to assembling material, the staff compiles bibliographies and reference guides to the literature on special subjects and in 1955 handled 1,100 inquiries involving special search. A further service to the Government flows from the activities of the Archives Division, a central element in the Government machinery for the management and preservation of its records. Archival repositories for Commonwealth records are maintained in Canberra, Sydney, Melbourne, Brisbane, Adelaide and Perth.

As well as the governmental record of national life and development, the National Library systematically collects and preserves Australian books, periodicals, newspapers, government publications, pictures, prints, manuscripts, maps, moving-picture films and sound recordings. It is assisted by the Copyright Act 1912–1950, which requires one copy of all material printed in Australia to be deposited in the Library and has been enriched by the acquisition of such notable collections as the Petherick collection of 16,500 items in 1911, the Cook manuscripts in 1923, the Cumpston collection on Public Health in Australia in 1936, the Mathews ornithological collection in 1940, and the Ferguson sociological collection now being transferred to the Library. A special feature of the Library's Australian work is the copying on microfilm in association with the Public Library of New South Wales of all important unique material overseas relating to Australia, including more than a million pages in the Public Record Office in London.

The Library fulfils its obligations to make Australian publications widely known, both at home and abroad, through a series of select lists which include *Australian Public Affairs Information Service* (monthly with an annual cumulation) and *Australian Books* (annual) and full bibliographies in the monthly *Australian Government Publications* and *Books Published in Australia*, cumulated as the *Annual Catalogue of Australian Publications*. Collections of Australian books are maintained by the library at all posts at which Australia is officially represented abroad. In London and New York, the National Library maintains and staffs Australian Reference Libraries.

The Library is the central library of documentary and educational films and the non-theatrical film-distributing agency in Australia for the Australian National Film Board, and its film collection contains nearly 5,000 titles, together with Australian historical films and a great number of film strips. Special efforts are being made to discover and preserve samples of early Australian film-making.

Local library services are provided by the Library for the residents of the Australian Capital Territory, the Northern Territory, the Territory of Papua and New Guinea, Norfolk Island and Nauru.

The National Library's collections contain more than 400,000 volumes, together with very extensive holdings of pamphlets, pictures, prints, maps, manuscripts and microfilm, and about 3½ million feet of moving-picture films. Its permanent and temporary holdings of archives were, in 1955, approximately 100,000 cubic feet. Special features of the Library's book collections are its strong holdings of Australiana, materials relating to the Pacific area and to East and South-east Asia, the publications of foreign governments and of international organizations, works in the social sciences and in particular in political and economic science.

(ii) *Patent Office Library.* The Library of the Commonwealth Patent Office, Canberra, contains over 60,000 volumes. Patent specifications of inventions are received from the principal countries of the world, and a wide range of technical literature and periodicals is available.

(iii) *The Australian War Memorial Library.* In the War Memorial library are housed the documentary and pictorial records of Australia's fighting services, collected during and after both world wars. To this material are constantly being added books, periodicals and other records covering contemporary trends and events in the fields of military history and military science, as well as records of earlier wars in which Australian troops participated.

The printed records section contains approximately 50,000 volumes, a large collection of military maps, newscuttings and newspapers, sound recordings of war leaders and personalities, war posters and postage stamps. Many personal collections by distinguished soldiers and historical documents relating to the wars have also been placed in the Memorial's custody.

Written records comprise correspondence files of headquarters and units of both world wars, and the original war diaries compiled from day to day by each unit during its existence.

The collection of official war photographs covering the 1914–18 and 1939–45 Wars numbers over 250,000, and a similar collection of official motion picture film depicting Australia at war totals about 4 million feet.

Facilities for public research are not yet fully developed, but all requests for information are met where practicable.

(iv) *Other Departmental Libraries.* The following Commonwealth authorities in Canberra have specialized collections in their own fields, and in addition draw largely on the National Library:—Attorney-General's Department, Commonwealth Bureau of Census and Statistics, Commonwealth Forestry and Timber Bureau, Department of Trade, Department of Primary Production, Department of External Affairs, Department of Territories, Department of Health, Department of National Development, Commonwealth Public Service Board, Department of Customs and Excise, Department of Works, and News and Information Bureau of the Department of the Interior.

The Department of Labour and National Service has its main library in Melbourne, and branch libraries in Sydney and Adelaide. Other departmental libraries in Melbourne are those of the Department of Air, Department of Defence, Department of Social Services, Repatriation Commission and Postmaster-General's Department. The library of the Commonwealth Office of Education is in Sydney.

(v) *Commonwealth Scientific and Industrial Research Organization.* The head office in East Melbourne maintains a library covering all branches of science except the medical sciences. In addition, each division and section of the organization has its own library; together, these form a series of specialist libraries covering such subjects as food preservation, forest products, industrial chemistry and physics, fisheries, agriculture, animal husbandry, building research, etc. There are 34 such branches, each with its own staff, and also smaller collections under the care of research officers aided by visiting librarians. The head office library maintains a union catalogue of the holdings of all C.S.I.R.O. libraries, and small union catalogues are being developed among groups of branch libraries with similar interests. The collections are particularly strong in the publications of oversea scientific and technical research institutions, with many of which exchange relations exist. The general public may have access to these materials for reference purposes. The head office library, and most of the larger branches, have photocopying facilities. This service is normally for the use of officers of the organization itself, but where the organization holds a publication not available elsewhere in Australia photocopies will be made on request.

3. States.—(i) *Metropolitan Public Libraries.* In each of the capital cities, there is a well equipped public library, the libraries in Melbourne and Sydney especially comparing very favourably with similar institutions elsewhere in the world. The following statement gives the number of volumes in the public library of each capital city at 30th June, 1955:—

METROPOLITAN PUBLIC LIBRARIES, 30th JUNE, 1955.

City.	Number of Volumes in—			Total.
	Reference Branch.	Ordinary Lending Branch.	Country Lending Branch.	
Canberra(a)	400,000	..	(b)	400,000
Sydney	(c) 497,134	(d) 96,479	168,780	(e) 665,914
Melbourne	627,765	40,880	..	765,124
Brisbane	154,753	..	..	154,753
Adelaide	177,027	35,391	(f) 60,970	273,388
Perth	201,198	..	..	201,198
Hobart	52,056	30,357	(g) 170,654	253,067
Darwin	250	..	(h) 16,400	16,650

(a) Commonwealth National Library, including Parliamentary Section. (b) Books are lent to libraries or students throughout Australia whenever necessary for research work. (c) Includes 158,410 volumes in the Mitchell Library. (d) The maintenance and control of the ordinary lending branch of the Public Library at Sydney were transferred in 1908 to the Municipal Council. In 1955, books in this library numbered 142,999. (e) Includes 10,000 volumes in the Dixon Library and 2,069 in the Modern School Library. (f) Includes 10,126 volumes in the Children's Branch. (g) Includes 92,876 volumes in the Children's Branch. (h) Ordinary and Country Lending Branch and 400 volumes in the Children's Branch.

(ii) *New South Wales.* The Free Library Movement in New South Wales, founded for the establishment of a system of public libraries on the basis suggested in the Munn-Pitt Report of 1935, helped to pave the way for the Library Act 1939, which was fully proclaimed as from 1st January, 1944. During 1954-55, the 145 councils which have adopted the Library Act spent on their libraries approximately £403,000 from rates and £145,903 received in subsidy. There are 143 libraries of which 5 are in Sydney, 29 in suburbs of Sydney, 5 in Newcastle and 104 in country municipalities and shires. These libraries contain 1,166,000 volumes.

New South Wales departmental libraries are staffed by officers seconded from the State Library, which also provides a central book-buying and master cataloguing service for certain municipal and shire libraries constituted under the 1939 Act. The State Library also manages the libraries of the University Tutorial Classes and the Workers' Educational Association.

The Country Circulation Department forwards books on loan to State schools, to Schools of Arts and to individual students. During 1954-55, 109,457 books were lent to small State schools, 33,356 to Schools of Arts and small country libraries, 306 to the Far Western Division, and 13,215 on special loan for extended periods to shire and municipal libraries and to Lord Howe Island, while 30,580 reference works were lent to individual country students.

The Mitchell Library in Sydney, of more than 60,000 volumes and pamphlets and 300 paintings, principally relating to Australasia and the Southern Pacific was bequeathed to the trustees of the Public Library in 1907 by Mr. D. S. Mitchell, together with an endowment of £70,000. The testator stipulated that the regulations of the British Museum were to be adopted as far as possible, hence the library is the resort of specialists. There are now 158,410 volumes in the library, in addition to valuable manuscripts, collections of Australian postage and fiscal stamps, and various pictures, coins, etc.

In Newcastle, the collection given by Dr. Roland Pope is housed at the School of Arts.

Other important libraries in New South Wales are the Australian Museum, 31,496 volumes; Teachers' Colleges, 148,130; Technical Education Branch, 59,504; Public Schools, 1,554,119; Railways Institute, 136,498; Government Transport Institute, 50,900; Cooper Library of the New South Wales Public School Teachers' Federation, 21,800; and the Library at the National Herbarium, 8,100 volumes. At 30th June, 1956, the Parliamentary Library contained 120,085 volumes.

(iii) *Victoria.* Until the establishment of the Free Library Service Board in 1947, the only public library facilities available in Victoria (apart from those of the State Public Library and one or two Metropolitan Municipal Libraries) were those offered by about 200 outmoded Mechanics' Institute Libraries situated in country areas all over the State. The Board's policy has been to replace these services with modern public libraries controlled by local Municipal Councils and subsidized by the Board. Since the Board's inception, 74 municipalities, comprising 1,303,472 of the State's population, have established libraries. Of these, 18 are in the city, serving 860,568 people, and 56 in the country serving 442,904 people. The amount of £150,865 was paid to the Councils in library subsidy for the year 1955-56 and a total of £283,171 was expended in Municipal Library Service for the same year. There are 666,000 books available to the communities in which libraries are established and combined circulation figures were 4,131,369 as at 30th September, 1955.

A feature of the services provided in the country is the number of co-operative or regional library groups now being developed. These services, of which there are eight, comprising a total of 28 Councils, consist of groups of Councils which pool their financial resources, book-stocks and trained staff, in order to provide more comprehensive, efficient library facilities.

Approximately 140 Mechanics' Institute Libraries are still in existence in country areas. In 1956, 64 of them shared a grant of £2,000.

(iv) *Queensland.* Prior to 1945, Queensland's library needs were met by the State Public Library, and by Schools of Arts or similar libraries in metropolitan and country districts. The Libraries Act 1943 constituted a Library Board charged with the control and management of the Public Library. The library contained 154,753 volumes in 1954-55. The Libraries Act Amendment Act of 1949 provides for the deposit in the Public Library of a copy of all books, pamphlets, maps and other printed material published in Queensland. A country extension service for people residing outside the metropolitan area is now operating on a limited scale. Its book collection numbered 35,012 in 1954-55.

To encourage the establishment of new library services and the extension of existing facilities the Board, in 1954-55, subsidised 94 local bodies operating 104 libraries.

The Act empowers local authorities to establish library facilities. In 1956, 36 local authorities were conducting library servicing, and several others have indicated that they will do so in the near future. The Brisbane City Council has established nine libraries, of which five have separate children's collections, and hopes to increase the number to 28.

The Oxley Memorial Library was established in 1926 to promote the study of Australian literature, literature relating to Australia and Queensland historical material. Since 1946, it has been administered as a department of the Public Library, and the collection kept segregated. During the year 1954–55, its holdings in volumes increased from 17,168 to 17,824. A valuable addition in 1950 was the L'Estrange collection of Queensland stamps.

The library of the Parliament of Queensland was established in 1860. At 30th June, 1956, the library held 82,396 books and pamphlets, consisting of official publications and books devoted largely to history, the social sciences, biography and literature. The library is entitled to a copy of every book published in Queensland.

(v) *South Australia.* The Public Library of South Australia is a government department, administered by a Principal Librarian and a Libraries Board.

In the reference department there are about 179,000 volumes, most of which may be borrowed. Over 3,000 periodicals are filed, and the collection of newspapers includes every newspaper printed in South Australia. There are 36,400 volumes in the lending department available to persons living in the metropolitan area, and the Country Lending Service has 55,200 volumes, of which more than half are suitable for children.

The Research Service specializes in scientific and technical inquiries, and supplements the resources of the Public Library by borrowing from other libraries and by obtaining microfilm copies of material not available locally. It has an extensive collection of trade catalogues.

The library of the Parliament of South Australia held approximately 65,000 volumes at 31st December, 1955.

The Institutes Association in 1955 comprised 228 suburban and country libraries with 749,358 volumes.

(vi) *Western Australia.* In 1955, the Library Board of Western Australia was made responsible for all forms of public library services throughout the State to which the State Government contributes funds.

The Board has the following major functions :—

- (a) To encourage local authorities throughout the State to establish public libraries and to provide as a State subsidy all books and bibliographical services necessary for such libraries when established ;
- (b) To administer for a limited period a former scheme of monetary grants of up to £50 per annum to local authorities which maintain public libraries ;
- (c) To administer the State Library ;
- (d) To advise the Government on all matters relating to libraries ;
- (e) To provide for the training of librarians.

Local public libraries are subsidized on a £1 for £1 basis, the local authority providing accommodation and staffing and the Board all books and related services.

Books are provided on a minimum basis of one volume per head of the population of the district concerned, and if the cost of so doing exceeds the local costs of the local authority a balancing payment is made to the Board to equalize the expenditure. All books throughout the State are available at any library on request to the Board. All cataloguing is done by the Board. The first library under this scheme was opened in August, 1954 and at 31st December, 1956, 18 libraries had been established.

Prior to the establishment of the Library Board, in 1944 the Government appointed a Country Free Lending Libraries Committee to make small grants to local authorities for library purposes. That committee has now been merged with the Board and its activities will cease in about 1962, and will be replaced by the full service of the Board.

The State Library was established in 1887 in commemoration of Queen Victoria's Jubilee. It is now the reference division of the Library Service of Western Australia and in addition to providing the normal facilities of a reference library for the metropolitan area, extends its service throughout the State through local public libraries.

The State Library is divided into four subject departments as follows :

- J. S. Battye Library of West Australian History.
- Library of Business, Science and Technology.
- Library of Social Sciences, Philosophy and Religion.
- Library of Literature and the Arts.

The State Bibliographical Centre is housed at the State Library and there is also a Commercial Information Centre. The State archives are maintained by the State Library and managed by the staff of the Battye Library. The library is fully equipped with microfilms and photocopy apparatus.

The bookstock of the Board at 31st December, 1956, was approximately:

Lending library services (including books in public libraries) : 80,000 volumes.
State Library : 200,000 bound volumes.

The University of Western Australia, through its Adult Education Board, manages the Adult Education Library of some 12,000 volumes of general reading and fiction. Books are sent to country readers by post.

There are some 80 special libraries in government departments and industrial firms. A Union Catalogue of periodicals currently received in the libraries of all types in the metropolitan area has recently been published by the Library Board of Western Australia.

(vii) *Tasmania.* The Tasmanian Library Board, constituted in 1944, is responsible for administering the State library headquarters in Hobart, for the extension of library services throughout the State and for the control of State aid for libraries. In 1955-56, the Launceston City Council contributed £5,077 and an equal amount was received in State aid.

The Tasmanian Library Board provides lending and reference services for the people of Hobart and operates a reference service for people throughout the State. In addition, it conducts screenings of documentary films, recitals of recorded music, lectures, library weeks in country centres, puppetry demonstrations, etc.

The Parliamentary Library works in close collaboration with the State Library, which provides a reference officer to serve members during session, and undertakes to catalogue all new books added to the library as well as supplying recreational reading.

4. *University Libraries.*—The libraries of the Australian universities provide material not only for the education of graduates and undergraduates, but also for scholars, research workers and practical investigators all over the continent. Much of the material they contain is not available elsewhere, for although in most cases smaller, they are in many directions more highly specialized than the public libraries. They lend to one another and to State and private institutions as well as to individual investigators. Each of them is governed by a librarian, who is responsible as a rule to an executive sub-committee and a committee which is practically co-extensive with the professional staff. In size, the library of the University of Sydney is the fourth library in Australia, and the libraries of the Universities of Melbourne and Adelaide are respectively seventh and eighth. The following table shows the sizes and rates of growth and expenditure of the Australian university libraries ; it is impossible to give borrowing statistics, as they differ too widely to be comparable without considerable explanation.

UNIVERSITY LIBRARIES, 1955.

University or College.	Volumes.	Accessions during year.	Expenditure.
			£
Australian National University	111,710	11,122	40,496
Sydney	368,218	10,393	62,280
Melbourne	214,589	9,582	75,031
Queensland	134,668	10,664	41,541
Adelaide	205,064	14,408	43 025
Western Australia	129,025	7,465	26,070
Tasmania	86,500	3,833	19,920
New South Wales University of Technology	60,144	6,465	43,369
New England	30,892	3,301	14,455
Canberra University College	22,250	2,711	8,879

The first books were bought for the library of the University of Sydney as early as 1851 ; only since 1910, however, has it possessed a building of its own. It is named after the principal benefactor, Thomas Fisher, who bequeathed to it in 1885 the sum of £30,000. It contains an up-to-date bookstock of glass and steel and a fine reading room in which, since the beginning of 1941, about 18,000 volumes of the collection have been made available on open access shelves. In addition, members of the teaching staff and certain classes of undergraduates are admitted to the bookstacks ; all readers are encouraged to borrow freely. The library possesses a large number of periodicals, especially scientific, valuable collections of seventeenth-century pamphlets and Elizabethan translations from the classics, and an extensive collection of Australian literature. In 1956, some 15,000 volumes of books in Chinese were added to the collection. Besides medical and law branches, there are a number of departmental libraries.

Early in 1854, the University of Melbourne made its first allocation for books, but the library was housed in temporary quarters for a number of years. In recent years, the university authorities have treated the library generously, and there have been some welcome benefactions, but accommodation is insufficient and a new library building is a pressing need. The W. L. Baillieu Trust has made available the first instalments of a £100,000 gift for building purposes. Most of the books are accessible on open shelves, and though the library is intended primarily for reference purposes, borrowing, except of text-books and certain valuable volumes, is made as easy as possible. The resources of the library are also extensively used on inter-library loan by industries and other organizations throughout Australia. The library is administered from the centrally situated general library; there is a large medical branch library specially rich in periodicals, and smaller branch libraries in various other departments.

The library of the University of Queensland was founded in 1911. The main library is now in its own building in the new University at St. Lucia, and there are a considerable number of departmental libraries. All books are in open access and most are available for borrowing. At the end of 1956, the library contained more than 145,000 volumes. The main library includes a special collection of material relating to the history, development and culture of the countries surrounding the Pacific Ocean.

The Adelaide University library bears the title of its original benefactor, Robert Barr Smith, who, with members of his family in and after 1892, gave the university about £50,000 for library purposes. Some 20,000 volumes are shelved in the reading room and are available to the ordinary student. Up-to-date steel bookstacks provide accommodation for about 100,000 volumes. Borrowing facilities are available to all matriculated students, to country students and to graduates. There are medical and law departmental libraries. The medical library has on permanent loan the collection of the Institute of Medical and Veterinary Science, and also incorporates the library of the British Medical Association (South Australian Branch).

In the University of Western Australia, the first permanent library staff was not appointed until 1927. Provision of permanent library accommodation was not possible when the university moved to its present site, and space and facilities have consequently been inadequate. The whole collection, consisting of about 135,000 volumes, is accessible on open shelves, and there are several departmental libraries. The library possesses a good range of periodicals, especially legal and scientific and is building up a useful collection of Australian literature. The medical library was opened in 1956.

Although the library of the University of Tasmania was founded in 1893, a full-time librarian was appointed for the first time at the end of 1945. From 1945 to 1956, the book stock almost doubled and now approaches 100,000 volumes. The library received about 2,000 periodicals in 1956. Since 1954, a Hobart Union List of Serials has been housed in, and kept up to date by the university library, thus providing a major reference tool for all bibliographic inquiries in the State.

The New England University library was founded in 1938, and bears the name of its benefactor, Sir William Dixson. At the end of 1955, it contained 30,892 volumes, mainly on open shelves. In 1957, the library moved to its new temporary quarters which provide accommodation for approximately 65,000 volumes on open access as well as seating for 100 readers. Two basement areas are being developed to accommodate a bindery and a stack room for local records and additional books and periodicals.

The New South Wales University of Technology made its first allocation for books and periodicals in 1950, the publications being incorporated in the Library of the Sydney Technical College. As a result of arrangements completed in 1951 for the university to administer professional diploma courses of the Department of Technical Education, publications relating to these courses were transferred from the Department to the university, but remained in the libraries of the Technical College where these courses were being conducted. Of the 60,000 volumes in the university's library at December, 1955, 9,000 were in the university's library at Kensington, 14,000 in the library of the Newcastle University College, the rest being in the Technical College libraries. The university library is administered through a central unit at the Sydney Technical College Library which maintains a central catalogue of the holdings of all libraries other than that of the Newcastle University College. The university library is strong in current scientific and technical periodicals. Borrowing facilities are available to all students.

The Canberra University College library was established in 1938. At the end of 1956, it contained 27,000 volumes, which are on open shelves.

The library of the Australian National University was founded in 1948. At the end of 1955, stock comprised about 112,000 volumes, including a collection in oriental languages. In some measure, the library is unique in that it is designed to serve a staff and students

of a wholly post-graduate institution but its resources are freely available to all serious readers. It specializes in the fields of the physical and medical sciences, excluding clinical works. In the social sciences, it aims to provide a good working collection while giving consideration to the holdings of the Commonwealth National Library. It possesses significant collections in Anthropology, Mathematics and Mathematical Statistics.

5. **Children's Libraries and School Libraries.**—(i) *New South Wales.* Children's libraries are being developed as departments of municipal and shire libraries. School library work is fostered by the State Library in co-operation with the Education Department. A "Modern School Library" has been established, and vacation classes for teacher-librarians are held.

(ii) *Victoria.* Under the auspices of the Free Library Service Board, 74 municipal children's libraries have been, or are in the process of being, established as part of the library services provided by the councils concerned. All these libraries provide comprehensive modern children's book collections which are constantly being refreshed. An annual grant of £5,000, which is additional to the ordinary annual municipal library grant, is provided to assist these libraries. In addition, 14 independently controlled children's libraries shared in this grant in 1956.

The Education Department is making provision for the building of a library room in new schools. Where accommodation is available in existing schools, library furniture is provided free of cost to the schools. In December, 1956, 260 schools had central libraries. The Government subsidizes the purchase of books on the basis of £1 for £1, or £2 for £1, according to the size of the school. The maximum amount of subsidy to any school is normally £60 per annum, but new schools may receive a subsidy of £100 in each of the first two years of their existence.

Financed by a bequest from the late William Gillies, a scheme of circulating libraries for small schools, particularly in remote areas, has been operating for some years. Four hundred and thirty-five schools benefited from this scheme in 1956.

The Department has a Library Service Officer with a small staff to advise and assist schools in the establishment and organization of libraries. A one-year course for the training of teacher-librarians was established at Melbourne Teachers' College in 1955. Approximately 20 teachers are trained each year.

(iii) *Queensland.* The purchase of books in State school libraries in Queensland is financed by school committees and parents' associations, with a subsidy from the Department of Public Instruction on a £1 for £1 basis.

In 1937, a system of Circulating Supplementary Readers was commenced. Books are graded for age levels and are moved from school to school, sufficient copies of each book for a whole class being sent, and reading being done in school. There are 96,000 such books now in use, the distribution at present being confined to primary schools.

(iv) *South Australia.* A Children's Library of 12,200 volumes is used by school classes and individual children living in the metropolitan area. Books of fiction are lent to children of fourteen years and over, while other books may be borrowed by children of any age.

(v) *Western Australia.* The State Education Department makes library subsidies and grants to government schools as follows:—

A subsidy of £1 for each £1 raised by the Parents' and Citizens' Association of each school is payable up to a maximum of £40 for Class III schools, £50 for Class II schools, and £60 for Class I primary schools, high schools and junior high schools.

Direct grants, free of subsidy conditions, are made to high schools on the basis of £10 to junior and three-year high schools, and £20 to five-year high schools. Five-year high schools also receive a founding grant of £100 per year for the first three years of their existence. These grants must be used for the purchase of non-fiction books.

All high schools are provided with a library room, and furniture and trained teacher-librarians are appointed to them. Building plans do not provide for primary school libraries, but a number of the schools have set up central libraries when rooms have become available.

Class IV and V schools, that is one-teacher and two-teacher schools, are served by the Charles Hadley Travelling Library and the Small Schools Fixed Library services. Under the Fixed Library Scheme permanent libraries of reference books and encyclopaedias were placed in each such school. Books to the value of £15 were added to each of these libraries annually from 1948 to 1954. From 1955, the grant for these books is to be made at three year intervals. The Hadley Library provides recreational reading and operates 330 boxes which are exchanged every three months. The government grants £500 per annum for this service, and the participating schools contribute the commission received from the Commonwealth Savings Bank for the teachers' services—about £170.

Children in isolated country areas are catered for by books sent out by the State Correspondence School's Library. The children are kept in touch with the library by means of radio talks and leaflets issued periodically.

(vi) *Tasmania*. The Lady Clark Memorial Children's Libraries, at the State Library, Hobart, aim to serve all children in Tasmania with books. At 30th June, 1956, 72 children's libraries had been established, of which 40 were in schools.

Practically all State secondary schools in Tasmania have libraries, with full-time librarians in four of them. A Schools' Library Service gives a book service to schools and assists schools wishing to set up their own libraries. In 1955, the number of schools receiving service was 122 and the number of books issued was 8,629.

6. **Special Libraries.**—Before the 1939–45 War, the number of special libraries, apart from those maintained by government departments, was small, but during recent years many manufacturing, commercial, research and other firms, as well as statutory bodies, have found it necessary to establish special libraries to serve their specialist or other staff. These libraries, which are most numerous in Sydney and Melbourne, are being increasingly staffed by trained librarians.

7. **Microfilms.**—The following libraries supply microfilm or photostat copies of material, usually at a small charge (the letter "P" signifies photostat supplied and "M" microfilm supplied):—*Australian Capital Territory*—Australian War Memorial (P), Commonwealth National Library (PM), C.S.I.R.O. (M); *New South Wales*—Metropolitan Water, Sewerage and Drainage Board (P), Public Library of New South Wales (M), Standards Association of Australia (P), School of Public Health and Tropical Medicine (M), Fisher Library, University of Sydney (PM); *Victoria*—Commonwealth Serum Laboratories (P), Technical Information Section, Munitions Supply Laboratories (PM), Public Library of Victoria (M), Standards Association of Australia (Melbourne Branch) (P), University of Melbourne (PM), C.S.I.R.O. (M); *Queensland*—Public Library (P); *South Australia*—Public Library of South Australia (PM), University of Adelaide (PM), Waite Agricultural Research Institute (P); *Western Australia*—State Library (PM); *Tasmania*—University of Tasmania (PM).

§ 11. Public Museums.

The Australian Museum in Sydney, founded in 1836, is the oldest institution of its kind in Australia. In addition to possessing fine collections of the usual objects found in kindred institutions, the museum contains a very valuable and complete set of specimens of Australian fauna. The number of visitors to the institution during 1954–55 was 261,194 and the average attendance on week-days 592, and on Sundays 1,461. The expenditure for 1954–55 amounted to £62,628. A valuable library containing 31,496 volumes is attached to the museum. Courses of evening popular lectures are delivered and lecturers also visit distant suburbs and country districts, and afternoon lectures for school children are provided. Nature talks are also broadcast by radio. Representative collections illustrative of the natural wealth of the country are to be found in the Agricultural and Forestry Museum and the Mining and Geological Museum. The latter institution prepares collections of specimens to be used as teaching aids to country schools. The "Nicholson" Museum of Antiquities, the "Macleay" Museum of Natural History and the Museum of Normal and Morbid Anatomy attached to the University of Sydney, and the National Herbarium and Botanical Museum at the Sydney Botanic Gardens, are all accessible to the public. There is a Museum of Applied Arts and Sciences in Sydney with branches in three country centres. Expenditure during the year 1954–55 was £50,458. Valuable research work is being performed by the scientific staff in connexion with oil and other products of the eucalyptus and the gums, kinos, tanning materials, and other economic products of native vegetation generally.

The National Museum at Melbourne, devoted to natural history, geology and ethnology, is located in the eastern section of the Public Library Building. The National Art Gallery is situated in the same building. The Museum of Applied Science, also housed under the same roof, contained at 30th June, 1955, 23,922 exhibits which covered applied and economic aspects of all branches of science. There is a fine Museum of Botany and Plant Products in the Melbourne Botanic Gardens. In addition to the large collection in the geological museum attached to the Mines Department in Melbourne, well-equipped museums of mining and geological specimens are established in connexion with the School of Mines in the chief mining districts.

The Queensland Museum, founded in 1855, comprises exhibited and reference collections of zoology, geology and ethnology. It is maintained entirely by the State Government. Expenditure for the year 1954–55 was £21,964. The collections are principally, but not exclusively, Australian; there is, for example, the excellent series of ethnological material formed by Sir William McGregor in New Guinea. The publication is *Memoirs of the Queensland Museum* which was preceded by the *Annals of the Queensland Museum*. The library is extensive and valuable, and of great assistance to research workers in the State.

The Queensland Geological Survey Museum has branches in Townsville, opened in 1886, and in Brisbane, opened in 1892.

The South Australian Museum has considerable collections of most branches of natural history. In 1955-56, there were approximately 180,000 visitors and expenditure was £41,843.

The Western Australian Museum and Art Gallery are controlled by a Board of Trustees appointed by the State Government and are housed in one building. The Museum is mainly devoted to natural history, ethnology and geology, the collections being mostly of Australian origin.

There are two museums in Tasmania—the Tasmanian Museum at Hobart, and the Victoria Museum and Art Gallery at Launceston—both of which contain valuable collections of botanical, mineral and miscellaneous products. The museums received aid from the Government during 1954-55 to the extent of £21,446.

§ 12. Public Art Galleries.

The National Art Gallery of New South Wales originated in the Academy of Art founded in 1871. The expenditure for 1954-55 was £35,546. At the end of 1955, its contents comprised 1,380 oil paintings, 834 water colours, 2,060 prints and drawings, 276 sculptures and casts, and 1,314 ceramics, works in metal and miscellaneous. Since 1895, loan collections of pictures have been forwarded regularly for exhibition in important country towns.

The National Gallery at Melbourne at 30th June, 1955 contained 1,002 oil paintings, 7,515 objects of statuary, bronzes, ceramics, etc., and 7,896 water colour drawings, engravings and photographs. The Gallery is situated in the same building as the Museum and Public Library. Expenditure allocated to the National Gallery in 1954-55 was £61,588, including £2,487 for purchases of works of art. Several munificent bequests have been made to the institution by private citizens. There are provincial art galleries at Ararat, Ballarat, Bendigo, Castlemaine, Geelong, Mildura, Shepparton, St. Arnaud and Warrnambool, to which, periodically, pictures are sent on loan from the National Gallery.

The Queensland National Art Gallery, Brisbane, maintained by the State Government, was founded in 1895. A Director was appointed in 1950, in which year the interior of the gallery was remodelled. More recently an art museum and a print room have been opened. At 30th June, 1955, there were on view 374 oil paintings, 200 water colours, 310 black and white, and 51 pieces of statuary, together with 134 various prints, mosaics, and miniatures. Exclusive of exhibits on loan, the contents are valued at about £30,915. Visitors during the year 1954-55 averaged 1,250 on Sundays and 383 on week-days.

The Art Gallery at Adelaide originated in an exhibition of pictures in the Public Library Building in 1882. Many bequests made by private citizens have materially assisted its growth. At 30th June, 1956, there were in the Gallery 1,647 paintings in oil and water colours, 597 drawings and black and white, and 122 items of statuary, the contents being valued at £115,600. The expenditure during 1955-56 was £25,760.

The foundation stone of the present Art Gallery at Perth in Western Australia was laid in 1901, and the Museum and Art Gallery are all situated in the one structure. The collection comprises 298 oil paintings, 177 water colours, 553 black and white, 280 statuary, and 1,601 ceramic and other art objects.

In Tasmania, the Art Gallery at Hobart was opened in 1887. In June, 1955, the contents consisted of 160 oil paintings, 120 water colours, 120 black and white, 3 statuary and 144 etchings, engravings, etc. Expenditure in 1954-55 was £17,682.

The Art Gallery at Launceston was opened on 2nd April, 1891. Only a small proportion of the contents belongs to the gallery, the bulk of the pictures being obtained on loan. In June, 1955, there were on view 53 oil paintings, 25 water colours, 4 black and white, and 3 miscellaneous exhibits. Expenditure in 1954-55 was £9,745.

§ 13. Scientific Societies.

1. Royal Societies.—In earlier issues of the Official Year Book, an outline was given of the origin and progress of the Royal Society in each State. The accompanying table contains the latest available statistical information regarding these institutions, the headquarters of which are in the capital cities.

ROYAL SOCIETIES, 1955.

Particulars.	Sydney.	Mel- bourne.	Bris- bane.	Adel- aide.	Perth.	Hobart.	Can- berra.
Year of foundation	1866	1854	1884	1880	1914	1843	1930
Number of members	341	236	221	175	208	491	142
Volumes of transactions issued	89	100	66	79	39	89	..
Number of books in library	32,000	22,000	46,146	19,600	5,000	30,510	..
Societies on exchange list	408	360	270	230	209	303	..
Income	£ 4,102	2,185	385	4,207	188	1,556	76
Expenditure	£ 3,358	2,090	346	2,035	341	1,550	42

2. The Australian and New Zealand Association for the Advancement of Science.—This Association was founded in 1887. Its headquarters are at Science House, Gloucester Street, Sydney, and meetings are held at intervals of approximately eighteen months within the various States and in the Dominion of New Zealand. The next meeting is scheduled to take place in Adelaide in August, 1958.

3. Other Scientific Societies.—The Linnean Society of New South Wales, with headquarters in Sydney, was founded in 1874. Sir William Macleay, who died in 1891, during his lifetime and by his will endowed the Society to the amount of £67,000, which has been increased by investment to approximately £100,000. The Society offers annually to graduates of the University of Sydney who are members of the Society and resident in New South Wales, research fellowships (Linnean Macleay Fellowships) in various branches of natural history. Two fellowships were awarded in 1956. The library comprises some 18,000 volumes. Eighty-one volumes of Proceedings have been issued, and the Society exchanges with about 300 kindred institutions and universities throughout the world. The membership at the end of 1956 was 243.

The British Astronomical Society has a branch in Sydney, and in each of the States the British Medical Association has a branch.

In addition to the societies enumerated above, there are various others in each State devoted to branches of scientific investigation.

§ 14. State Expenditure on Education, Science and Art.

The expenditure in each State on education, science and art during the year 1954–55 is shown in the following table. Owing to the details not being available in all States, the figures exclude officers' pensions and superannuation, pay-roll tax, and interest and sinking fund on capital expended on buildings. The cost of the medical and dental inspection of school children is also excluded, as this service is more appropriately classified under Public Health.

STATE EXPENDITURE ON EDUCATION, SCIENCE AND ART, 1954-55.

(£'000.)

State.	Expenditure from—				Receipts.	Net Expendi- ture.
	Revenue.	Loan.	Other Funds.	Total.		
New South Wales	32,161	6,401	..	38,562	925	37,637
Victoria	19,528	5,843	..	25,371	267	25,104
Queensland	8,933	1,472	475	10,880	251	10,629
South Australia	6,644	1,118	..	7,762	341	7,421
Western Australia	6,631	1,240	..	7,871	127	7,744
Tasmania	3,098	1,289	..	4,387	10	4,377
Total	76,995	17,363	475	94,833	1,921	92,912

CHAPTER XIII.

PUBLIC JUSTICE.

§ 1. Introduction.

Each State has its own separate judicial system, Commonwealth jurisdiction being confined to the High Court of Australia (largely a Court of Appeal intermediate to the Privy Council although it has also original jurisdiction), the Commonwealth Court of Conciliation and Arbitration and the Federal Court of Bankruptcy. A statement of the powers and functions of the High Court of the Commonwealth will be found in Chapter III. of the Commonwealth Constitution which appears on page 16 of this volume.

In considering the crime statistics of the various States, due allowance must be made for certain factors, such as the relative powers of the higher and lower courts. In the case of lower courts, the actual number of laws in each State breach of which renders a person liable to fine or imprisonment must be taken into account. Again, the attitude of the magistracy and police towards certain classes of offences is a factor, for in the case of liquor laws or laws connected with vagrancy or gaming, the views of the magistrates, and instructions issued to the police, may be responsible for considerable variations in the numbers of arrests and prosecutions. The strength and distribution of the police forces, and the age-constitution and distribution of the population of the States, also influence the figures. Due weight should be given also to such information as is available concerning the prevalence of unsolved crime.

§ 2. Lower (Magistrates') Courts.

1. Powers of the Magistrates.—(i) *New South Wales*. There is no general limit to the powers of the magistrates with regard to offences punished summarily, their authority depending in each case on the statute which creates the offence and gives them jurisdiction. Except in the case of a very few statutes, and excluding cumulative sentences, the power of sentence is limited to twelve months. Imprisonment in default of fine is regulated by a scale limiting the maximum period according to the sum ordered to be paid, but in no case exceeding twelve months. Actions for debt and damage within certain limits also come within magisterial jurisdiction. In cases of liquidated debts, and damages, whether liquidated or unliquidated, the amount is limited to £50 before a court constituted by a stipendiary magistrate. The amount in actions of debt before two or more Justices of the Peace is limited to £30 and in actions of damage it is limited to £10, but may extend to £30 with the consent of the defendant. Outside the Metropolitan Area of Sydney and certain other prescribed districts one justice of the peace may hear cases of debt, liquidated or unliquidated, or damage up to £5 and to £30 by consent of parties.

(ii) *Victoria*. The civil jurisdiction of magistrates is restricted to what may be designated ordinary debts, damages for assault, restitution of goods, etc., where the amount in dispute does not exceed £100, and to actions arising out of torts or contracts to the extent of £250. No definite limit is fixed to the powers of the magistrates on the criminal side, and for some offences, sentences of up to two years imprisonment may be imposed. The proportion of long sentences is, however, comparatively small.

(iii) *Queensland*. Generally speaking, the maximum term of imprisonment which justices can inflict is six months, but in certain exceptional cases, such as offences against sections 233, 344 and 445 of the Criminal Code (betting houses, aggravated assaults, and unlawfully using animals), sentences of twelve months may be imposed.

There is provision for applying cumulative sentences, but in practice not more than one sentence is generally made cumulative on a previous sentence.

Magistrates have no power to deal with habitual offenders, but such powers are vested in the Supreme Court.

(iv) *South Australia.* In South Australia, the power of special magistrates to impose fine and imprisonment is defined by the special act creating the offence and conferring jurisdiction. In the case of minor indictable offences, triable summarily, a maximum penalty of £100 fine or 2 years' imprisonment is fixed by the Justices Act 1921-1943. Magistrates also have power to hear certain civil actions in which the amount claimed is less than £750.

(v) *Western Australia.* The powers of magistrates and justices in regard to offences triable summarily are governed by the act creating the offence and giving them jurisdiction. Imprisonment in default of payment of a fine is regulated by a scale limiting the period according to the amount of the fine but not to exceed six months.

The civil jurisdiction of magistrates and courts is restricted in general to £500. By consent of the parties, any action that might be brought in the Supreme Court may be dealt with in a Local Court. Justices may act in the case of illness or absence of the magistrate.

Magistrates are coroners and justices may be appointed as acting coroners.

Magistrates have appellate jurisdiction under some statutes and in country districts act as Chairmen of the Courts of Session. They may be appointed as Commissioners of the Supreme Court. On the goldfields, the magistrate is also the warden.

(vi) *Tasmania.* Magistrates may hear and determine in Courts of Petty Sessions all offences other than those punishable on indictment. Stealing and analogous crimes where the property involved does not exceed £100 in value may be dealt with by magistrates unless the defendant objects.

No general limit is fixed in respect of sentences, the statute creating the offence almost invariably laying down the penalty. Where this is not the case, the Contravention of Statutes Act 1889 provides that a fine of £50 may be imposed. Generally speaking, sentences which justices can impose are limited to six months, although in several cases sentences of up to two years may be imposed. The aggregate term of cumulative sentences cannot exceed two years.

The civil jurisdiction of magistrates is divided into two categories. A Commissioner of the Court of Requests, who must be a legal practitioner, and is invariably a police magistrate, may hear actions for the recovery of debts and damages not exceeding £100. The jurisdiction of these courts may be increased by proclamation to £250, and this has been done in five instances. Courts of General Sessions, constituted by at least two justices, exercise similar powers, but the jurisdiction cannot exceed £50. Only one court has the maximum jurisdiction, the others being limited to £30.

2. *Cases Tried at Magistrates' Courts.*—The total number of arrest and summons cases tried at Magistrates' Courts in each State is given below for 1939 and for the years 1950 to 1954 :—

CASES TRIED AT MAGISTRATES' COURTS.

State or Territory.	1939.	1950.	1951.	1952.	1953.	1954.
New South Wales ..	144,848	214,894	242,165	269,197	276,566	a 271,105
Victoria ..	82,858	97,201	109,066	129,091	134,912	135,409
Queensland(b) ..	32,501	43,932	49,849	44,868	46,482	49,372
South Australia ..	22,776	(b)31,964	(b)30,953	(b)33,688	(b)28,757	(b)32,593
Western Australia ..	24,111	29,521	31,985	40,674	43,495	50,640
Tasmania ..	9,498	12,403	14,649	16,964	20,381	19,814
Northern Territory(b) ..	1,494	1,269	1,178	1,657	2,077	2,105
Aust. Cap Territory ..	284	1,237	1,500	1,610	1,294	1,406
Total	318,370	432,421	481,345	537,749	553,964	562,444

(a) In addition 23,177 parking offences were settled by payment of fines to the Police Department without court appearances. (b) Year ended 30th June following.

Investigation of the returns shows that considerable variations in the figures for single States are occasioned by breaches of new acts, or the more stringent enforcement of the provisions of existing acts. Any deductions drawn from the total returns as to the increase or decrease of criminality should, therefore, be based upon a careful analysis of the detailed list of offences.

3. Convictions at Magistrates' Courts.—The figures given in the previous table include a number of people who were charged without sufficient reason, and, statistically, are not of general importance. A classification of convictions of persons who appeared before the lower courts in each State during 1954 is given in the following table :—

CONVICTIONS AT MAGISTRATES' COURTS, 1954.

Class of Offence.	N.S.W.	Vic.	Qld.(a)	S.A.(a)	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Against the Person ..	2,860	1,210	495	336	386	198	57	65	5,607
Against Property ..	14,225	6,242	3,051	1,527	3,853	699	80	159	29,836
Forgery and Offences against the Currency..	19	19	4	2	1	1	40	7	73
Against Good Order ..	95,530	26,943	26,340	5,996	7,597	1,712	746	672	165,536
Other Miscellaneous ..	137,404	87,505	16,356	21,401	36,167	14,689	941	225	314,688
Total	250,019	121,919	46,242	29,264	48,005	17,299	1,864	1,128	515,740

(a) Year ended 30th June, 1955.

The following table shows the number of convictions in 1939 and in each year from 1950 to 1954 :—

CONVICTIONS AT MAGISTRATES' COURTS.

State or Territory.	1939.	1950.	1951.	1952.	1953.	1954.
New South Wales ..	126,353	199,619	224,514	249,845	257,522	^a 250,019
Victoria	72,186	87,873	98,369	115,534	121,497	121,919
Queensland(b) ..	28,920	41,492	46,436	41,266	42,590	46,242
South Australia ..	20,429	(b)28,675	(b)27,432	(b)30,229	(b)25,482	(b)29,264
Western Australia ..	22,539	27,315	29,763	38,109	40,643	48,005
Tasmania	8,722	10,961	12,765	15,032	17,705	17,299
Northern Territory(b)	1,394	1,145	980	1,411	1,915	1,864
Aust. Capital Territory ..	260	1,151	1,442	1,441	1,141	1,128
Total	280,803	398,231	441,701	492,867	508,495	515,740

(a) Does not include 23,177 parking offences settled by payment of fines to the Police Department without court appearances. (b) Year ended 30th June following.

4. Convictions for Serious Crime at Magistrates' Courts.—(i) *General.* While the figures given in the preceding table refer to the entire body of convictions, the fact must not be overlooked that they include a large proportion of offences of a technical nature, many of them unwittingly committed, against various acts of Parliament. Cases of drunkenness and minor breaches of good order, which, if they can be said to come under the heading of crime at all, at least do so in a very different sense from some other offences, also help to swell the list. The following table has therefore been prepared for the purpose of showing the convictions at magistrates' courts, for what may be regarded as the more serious offences, i.e., against the person and property, either separately or conjointly, and forgery and offences against the currency.

(ii) *Number and Rates, Years 1939 and 1950 to 1954.*—The following table shows the number and rates of convictions for serious crime at magistrates' courts for the years 1939 and 1950 to 1954 :—

CONVICTIONS FOR SERIOUS CRIME AT MAGISTRATES' COURTS.

State or Territory.	1939.	1950.	1951.	1952.	1953.	1954.
NUMBER.						
New South Wales ..	12,724	14,141	15,632	17,858	17,612	17,085
Victoria ..	5,727	5,204	6,495	7,602	6,905	7,471
Queensland(a) ..	2,402	2,699	3,041	2,916	3,226	3,546
South Australia ..	1,224	(a) 1,654	(a) 1,926	(a) 1,945	(a) 1,744	(a) 1,867
Western Australia ..	2,614	2,901	3,115	3,446	3,632	4,241
Tasmania ..	959	810	829	1,126	1,185	898
Northern Territory(a) ..	44	43	144	149	195	177
Aust. Capital Territory ..	59	183	171	173	53	231
Total ..	25,753	27,635	31,353	35,215	34,552	35,516
Rate per 10,000 of population ..	36.91	33.67	37.12	40.64	39.08	39.41

(a) Year ended 30th June following.

(iii) *Rate of Convictions, 1881 to 1951.* The rate of convictions at ten-yearly intervals over a period of seventy years is shown below ; only the more serious offences particularized in para. (i) above have been taken into consideration.

RATE OF CONVICTIONS FOR SERIOUS CRIME AT MAGISTRATES' COURTS : AUSTRALIA.

Year	1881.	1891.	1901.	1911.	1921.	1931.	1941.	1951.
Convictions per 10,000 persons ..	69.3	44.8	29.1	24.6	29.2	37.1	33.6	37.1

5. *Committals to Higher Courts.*—(i) *General.* In a previous paragraph, it has been pointed out that comparisons of criminality based on a consideration of the total returns from magistrates' courts are somewhat inadequate, inasmuch as the figures include numbers of cases which are merely technical breaches of laws having in some instances a purely local significance. The committals to higher courts give a better basis of comparison, although even in this connexion allowances must be made for the want of uniformity in jurisdiction. A classification of the offences for which persons appearing in the lower courts were committed to higher courts in each State and Territory for the year 1954 is shown in the following table :—

COMMITTALS TO HIGHER COURTS, 1954.

Class of Offence.	N.S.W.	Vic.	Qld.(a)	S.A.(a)	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Against the Person ..	1,128	461	221	203	131	54	21	7	2,226
Against Property ..	2,946	1,426	254	177	233	283	14	10	5,343
Forgery and Offences against the Currency ..	..	120	..	22	8	8	9	5	172
Against Good Order ..	91	7	2	5	5	7	..	1	118
Other Miscellaneous ..	40	68	5	19	4	5	1	..	142
Total ..	4,205	2,082	482	426	381	357	45	23	8,001

(a) Year ended 30th June, 1955.

The following table shows the number of committals in 1939 and in each year from 1950 to 1954, with the rate of such committals per 10,000 of population :—

COMMITTALS TO HIGHER COURTS.

State or Territory.	1939.	1950.	1951.	1952.	1953.	1954.
NUMBER.						
New South Wales	2,288	3,513	3,706	4,504	4,263	4,205
Victoria	1,777	1,638	1,650	1,671	2,071	2,082
Queensland(a)	359	521	434	605	609	482
South Australia	259	(a) 362	(a) 480	(a) 554	(a) 422	(a) 426
Western Australia	129	211	209	373	384	381
Tasmania	82	195	197	224	337	357
Northern Territory(a)	12	9	28	35	46	45
Australian Capital Territory	18	38	30	23	19	23
Total	4,924	6,487	6,734	7,989	8,151	8,001
Rate per 10,000 of population	7.1	7.9	8.0	9.2	9.2	8.9

(a) Year ended 30th June following.

(ii) *Rate of Committals, 1881 to 1951.* The rate of committals for serious crime at ten-yearly intervals since 1881 is shown below :—

RATE OF COMMITTALS TO HIGHER COURTS : AUSTRALIA.

Year	1881.	1891.	1901.	1911.	1921.	1931.	1941.	1951.
Committals per 10,000 persons	12	11	8	6	7	8	5	8

6. *Drunkenness.—(i) Cases and Convictions.* The number of arrest and summons cases of drunkenness and the convictions recorded during the year 1939 and the years 1951 to 1954 are given in the following table :—

DRUNKENNESS : CASES AND CONVICTIONS.

State or Territory.	1939.		1951.		1952.		1953.		1954.	
	Cases.	Convictions.	Cases.	Convictions.	Cases.	Convictions.	Cases.	Convictions.	Cases.	Convictions.
New South Wales	32,472	32,405	83,178	82,837	79,217	79,088	72,765	72,647	72,591	72,541
Victoria	11,609	11,421	23,151	22,884	21,751	21,526	19,424	19,226	20,167	19,955
Queensland(a)	11,202	11,118	28,176	28,144	22,994	22,932	21,257	21,199	23,986	23,947
South Australia	2,607	2,597	(a)5,902	(a)5,890	(a)6,317	(a)6,307	(a)5,530	(a)5,509	(a)4,772	(a)4,765
Western Australia	2,681	2,658	6,035	5,974	6,107	6,042	6,274	6,210	5,350	5,809
Tasmania	411	407	718	693	834	816	800	763	836	798
Northern Terr.(a)	686	677	564	524	434	424	707	699	487	474
Aust. Cap. Terr.	114	114	477	476	545	541	381	378	240	240
Total	61,782	61,397	148,201	147,422	138,199	137,676	127,138	126,631	128,929	128,529
Rate of convictions per 10,000 of population	88.0		174.5		158.9		143.2		142.6	

(a) Year ended 30th June following.

Under the heading "drunkenness" are included cases of ordinary drunkenness, drunkenness and disorderliness, and habitual drunkenness.

The number of convictions, as might be expected, is almost identical with the number of cases.

(ii) *Convictions per 10,000 of Population.* In the twenties, the convictions for drunkenness averaged approximately 100 per 10,000 of population, but the rate fell away considerably during 1930 and 1931, being only 57.1 in the latter year. The average then rose steadily, the annual average for the period 1936 to 1939 being 82.7 and that for the years 1940 to 1945, 90.8. In 1946, the convictions per 10,000 rose very steeply to 132.1, increasing further to 174.5 by 1951, since when they have declined again to 142.6 in 1954.

(iii) *Consumption of Intoxicants.* The following table shows the consumption of spirits, wine and beer per head of population in Australia during the years 1938-39 and 1950-51 to 1955-56 :—

CONSUMPTION OF INTOXICANTS IN AUSTRALIA PER HEAD OF POPULATION.

Year.				Spirits.	Wine.	Beer.
				Proof Gals.	Gals.	Gals.
1938-39	..	..	..	0.22	0.65	12.47
1950-51	..	..	..	0.38	1.61	20.41
1951-52	..	..	..	0.32	1.80	21.19
1952-53	..	..	..	0.20	1.36	21.80
1953-54	..	..	..	0.25	1.39	23.05
1954-55	..	..	..	0.29	1.11	24.26
1955-56	..	..	..	0.31	1.17	24.74

(iv) *Remedial Treatment of Drunkenness.* Legislation has been passed in each State providing for the committal of inebriates to special Government institutions. The laws in the various States are as follows :—New South Wales, Inebriates Act 1912 amended in 1949 ; Victoria, Inebriates Act 1928 ; Queensland, Inebriate Institutions Act 1896 ; South Australia, Inebriates Act 1908-1934, Convicted Inebriates Act 1913-1934 ; Western Australia, Inebriates Act 1912-1919 ; Tasmania, Inebriates Act 1885, Inebriate Hospitals Act 1892 and 1941. Curative work was first undertaken by the Government of New South Wales in 1907. In most cases, the institutions are connected with the gaols, and, naturally, custodial measures are still a strong feature in their management ; nevertheless, the results of remedial measures have been encouraging.

7. *First Offenders.*—In all the States, statutes dealing with first offenders have been in force for many years. Existing legislation is as follows :—New South Wales, Crimes Act 1900 amended in 1924 and 1929, First Offenders (Women) Act 1919 as amended in 1929 ; Victoria, Crimes Act 1928 ; Queensland, Criminal Code Acts 1899 to 1945 ; South Australia, Offenders Probation Act of 1913-1953 ; Western Australia, Criminal Code Act 1913-1942 ; Tasmania, Probation of Offenders Act 1934. The method of procedure is practically the same in all cases, i.e., with regard to most first offenders convicted of a minor offence the magistrate or judge is empowered to allow the offender to go free on recognizances being entered into for his good behaviour for a certain period.

8. Children's Courts.—Special courts for the trial of juvenile offenders have been established in New South Wales, Victoria, Queensland, Western Australia and Tasmania, while Children's Courts, although not under that title, are provided for by the Maintenance Act 1926–1952 in South Australia. The object of these courts is to avoid, as far as possible, the unpleasant associations of the ordinary police court.

§ 3. Higher (Judges') Courts.

1. Convictions at Higher Courts.—The following table shows for each State and Territory and for Australia as a whole the number of convictions at higher courts for each of the principal offences during 1954.

CONVICTIONS AT HIGHER COURTS, 1954.

Offences.	N.S.W. (a)	Vic.	Qld. (a)	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aus- tralia.
I. OFFENCES AGAINST THE PERSON.									
Murder	6	2	11	..	..	..	8	..	27
Attempted Murder	4	1	5	..	1	..	..	..	11
Manslaughter	16	7	4	1	7	2	..	1	38
Causing Death by Dangerous Driving .. .. .	..	..	..	..	3	..	..	..	3
Rape	5	7	5	2	3	3	(b) 1	..	26
Other Offences against Females	118	88	49	58	35	26	9	4	387
Unnatural Offences	127	75	22	15	7	11	3	2	262
Abortion and Attempts to Procure	4	..	..	6	1	1	..	1	13
Bigamy	58	24	4	8	6	1	..	..	101
Suicide, Attempted .. .. .	..	3	..	..	..	7	..	..	10
Assault, Aggravated	114	40	45	7	5	9	3	2	225
Assault, Common	32	11	1	..	1	..	..	..	45
Other Offences against the Person	6	8	3	11	2	4	..	1	35
<i>Total</i>	490	266	149	108	71	64	24	11	1,183
II. OFFENCES AGAINST PROPERTY.									
Burglary and House-breaking	625	349	133	103	57	54	6	6	1,333
Robbery and Stealing from the Person	43	41	16	8	13	72	..	4	197
Embezzlement	44	2	7	3	9	..	..	4	69
Larceny, Other	164	125	33	34	27	..	6	..	389
Receiving	39	36	7	7	5	9	..	..	103
Fraud and False Pretences	105	14	13	13	14	23	1	..	183
Other Offences against Property	75	27	18	6	10	8	3	..	147
<i>Total</i>	1,095	594	227	174	135	166	16	14	2,421
III. FORGERY AND OFFENCES AGAINST THE CURRENCY									
.. .. .	15	29	..	11	4	10	10	..	79
IV. OFFENCES AGAINST GOOD ORDER									
.. .. .	7	2	2	..	4	1	2	..	18
V. OTHER MISCELLANEOUS									
.. .. .	24	21	4	19	2	3	3	1	77
Grand Total	1,631	912	382	312	216	244	55	26	3,778

(a) Year ended 30th June 1955.

(b) Attempted rape.

2. Convictions at Higher Courts, Years 1939 and 1950 to 1954.—The number of convictions at higher courts and the rate per 10,000 of population for these years are given in the following table.

CONVICTIONS AT HIGHER COURTS.

State or Territory.	1939.	1950.	1951.	1952.	1953.	1954.
NUMBER.						
New South Wales(a)	982	1,299	1,388	1,629	1,449	1,631
Victoria	690	722	761	883	918	912
Queensland(a)	214	346	336	419	502	382
South Australia	179	207	307	328	330	312
Western Australia	71	149	141	213	241	216
Tasmania	39	148	163	171	203	244
Northern Territory(a)	11	44	44	26	51	55
Australian Capital Territory	14	49	33	16	10	26
Total	2,200	2,964	3,173	3,685	3,704	3,778
Rate per 10,000 of population ..	3.2	3.6	3.8	4.3	4.2	4.2

(a) Year ended 30th June following.

3. **Habitual Offenders.**—In most States, judges have power to declare as habitual criminals persons who have a certain scheduled number of previous convictions. A summary of the methods adopted in each State was given on pp. 497–8 of Official Year Book No. 40.

4. **Capital Punishment.**—There were fifteen executions in Australia during the period 1939 to 1954. One took place in New South Wales (in 1939), six in Victoria (two in 1939, one in 1942 and three in 1951), four in South Australia (one in 1944, one in 1946, one in 1950 and one in 1953), one in Western Australia (in 1952), one in Tasmania (in 1946), and two in the Northern Territory (in 1952).

Under the Criminal Code Amendment Act 1922, capital punishment was abolished in Queensland.

In the early days of the history of Australia, the penalty of death was attached to a large number of offences, many of which would be dealt with at the present time in the lower or magistrates' court. With the growth of settlement, and the general improvement in social and moral conditions, the list was, however, considerably curtailed, and the existing tendency is practically to restrict death sentences to cases of murder. In cases of rape, which is a capital offence in some of the Australian States, the penalty has been but sparingly inflicted in recent years.

The average annual number of executions in Australia from 1861 to 1880 was 9; from 1881 to 1900, 6; from 1901 to 1910, 4; from 1911 to 1920, 2; from 1921 to 1930, 2; from 1931 to 1940, 1; and from 1941 to 1950, 0.5.

§ 4. Civil Courts.

1. **Lower Courts.**—The total number of plaints entered and the amounts awarded to plaintiffs during the year 1954 are shown in the following table. The figures are compiled from returns from the Small Debts Courts in New South Wales, Courts of Petty Sessions in Victoria, Magistrates' Courts in Queensland, Local Courts of South Australia and Western Australia, Courts of Requests in Tasmania, Courts of Summary Jurisdiction in Northern Territory and Court of Petty Sessions in the Australian Capital Territory.

CIVIL CASES AT LOWER COURTS, 1954.

Particulars.	N.S.W.	Vic.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T.	Total.
Cases .. No.	53,497	66,740	7,220	31,332	24,773	20,098	843	871	205,374
Amount .. £	345,102	650,619	286,560	443,576	244,451	149,784	(b)	20,116	(b)

(a) Year 1954-55.

(b) Not available.

2. **Higher Courts.**—The following table shows the transactions on the civil side in the Higher Courts during the year 1954. The particulars given below include the number and amount of judgments entered by default or confession, or agreement, and differ from those in issues of the Official Year Book prior to No. 29, which related in most States only to cases actually tried during the year.

CIVIL CASES AT HIGHER COURTS, 1954.

Particulars.	N.S.W.	Vic.	Q'land. (a)	S. Aust.	W. Aust. (b)	Tas.	N.T. (a)	A.C.T.	Total.
Cases .. No	17,810	11,664	1,146	131	453	630	15	113	31,962
Amount .. £	(c)	1,672,809	286,585	80,662	275,929	149,293	(c)	31,001	(c)

(a) Year 1954-55.

(b) Judgments signed and entered.

(c) Not available.

3. **Divorce.**—(i) *Number of Petitions filed and Divorces granted.* The following table shows the number of petitions for dissolution of marriage, nullity of marriage and judicial separation filed in each State during 1955, and the number of dissolution and nullity of marriage decrees made absolute and judicial separations granted during the year:—

PETITIONS FOR DIVORCE AND DIVORCES GRANTED, 1955.

State or Territory.	Petitions for Dissolution of Marriage, Nullity of Marriage and Judicial Separation.			Decrees made Absolute for—		Judicial Separations Granted.
	By Husband.	By Wife.	Total.	Dissolution of Marriage.	Nullity of Marriage.	
New South Wales ..	1,747	2,408	4,155	2,874	17	9
Victoria ..	741	880	1,621	(a) 1,674	16	1
Queensland ..	(b) 385	(b) 418	(b) 803	801	2	..
South Australia ..	359	475	834	624	4	..
Western Australia ..	301	274	575	479	6	3
Tasmania ..	127	158	285	233	..	..
Northern Territory ..	22	18	40	18	..	..
Aust. Cap. Territory ..	15	12	27	21	..	..
Total ..	3,697	4,643	8,340	6,724	45	13

(a) Decrees nisi granted.

(b) Petitions heard.

(ii) *Number of Divorces granted, Years 1939 and 1951 to 1955.* The numbers of dissolutions of marriage, nullities of marriage and judicial separations in each State and Territory for these years are shown in the following tables.

DIVORCES GRANTED, AUSTRALIA.

DISSOLUTION OF MARRIAGE.

State or Territory.	1939.	1950.	1951.	1952.	1953.	1954.	1955.
New South Wales ..	1,540	3,419	3,303	3,335	3,725	2,816	2,874
Victoria	794	1,591	1,714	1,596	2,096	1,519	1,674
Queensland	(a) 222	783	701	705	725	710	801
South Australia ..	241	661	637	581	628	594	624
Western Australia ..	242	720	682	585	535	530	479
Tasmania	80	152	194	217	210	235	233
Northern Territory ..	(a) 2	6	13	6	12	20	18
Australian Capital Territory	6	25	25	17	31	33	21
Australia ..	3,127	7,357	7,269	7,042	7,962	6,457	6,724

NULLITY OF MARRIAGE.

State or Territory.	1939.	1950.	1951.	1952.	1953.	1954.	1955.
New South Wales ..	5	31	25	27	21	28	17
Victoria	7	11	15	17	31	20	16
Queensland	(a) 2	7	6	6	5	4	2
South Australia ..	2	3	4	3	8	4	4
Western Australia ..	2	4	1	..	4	2	6
Tasmania .. ..	..	..	..	..	..	2	..
Northern Territory ..	..	..	..	..	..	..	..
Australian Capital Territory .. ..	..	..	..	..	..	..	..
Australia ..	18	56	51	53	69	60	45

JUDICIAL SEPARATION.

State or Territory.	1939.	1950.	1951.	1952.	1953.	1954.	1955.
New South Wales ..	8	6	4	7	6	7	9
Victoria	4	2	1	3	1	..	1
Queensland .. ..	..	1	1	..	..	..	..
South Australia ..	..	2	1	1	2	2	..
Western Australia ..	..	..	..	..	..	1	3
Tasmania .. ..	..	..	..	..	..	1	..
Northern Territory ..	..	..	..	..	..	..	..
Australian Capital Territory	1	..	..	..	1	..	..
Australia ..	13	11	7	11	10	11	13

(a) Year ended 30th June 1940.

(iii) *Average Annual Number of Divorces granted, Years 1871 to 1950.* The average annual number of divorces in Australia for each decennial period from 1871 to 1950 was as follows:—

DIVORCES : AUSTRALIA.

Year 1871-80.	1881-90.	1891-1900.	1901-10.	1911-20.	1921-30.	1931-40.	1941-50.
Average 29	70	358	399	744	1,699	2,521	6,192

(iv) *Grounds of Decree on which Divorce was granted, Year 1955.* The grounds on which dissolutions of marriage, nullities of marriage and judicial separations were granted during 1955 in each State and Territory are shown in the following tables:—

GROUND OF DISSOLUTION OF MARRIAGE, NULLITY OF MARRIAGE AND JUDICIAL SEPARATION, 1955.

Ground on which Granted.	N.S.W.	Vic. (a)	Q'ld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
(i) <i>Dissolution of Marriage.</i>									
<i>Desertion</i> .. No.	b 1,903	c 1,139	(d) 548	(e) 251	(f) 242	156	5	14	4,258
Proportion of total %	66	68	68	40	51	67	28	67	63
<i>Adultery</i> .. No.	674	476	242	238	212	68	7	5	1,922
Proportion of total %	24	28	30	38	44	29	39	23	29
<i>Other—</i>									
Bigamy .. ..	..	3	1	1	..	..	..	..	5
Cruelty	114	11	1	113	1	3	5	..	248
Cruelty and Drunkenness	127	20	..	..	5	5	..	1	158
Drunkenness	40	3	..	9	1	1	1	1	56
Gaol for Crime	15	9	..	..	1	..	..	..	25
Insanity .. ..	..	12	6	4	3	..	..	..	25
Maintenance .. ..	..	..	..	6	10	..	..	..	16
Non-consummation .. ..	..	..	..	..	4	..	..	..	4
Other	1	1	3	2	..	..	..	..	7
<i>Total Other</i> .. No.	297	59	11	135	25	9	6	2	544
Proportion of total %	10	4	2	22	5	4	33	10	8
Grand Total ..	2,874	1,674	801	624	479	233	18	21	6,724
(ii) <i>Nullity of Marriage.</i>									
Bigamy	10	4	..	2	6	..	..	..	22
Impotency	6	12	..	1	..	..	..	..	19
Other	1	..	2	1	..	..	..	..	4
Total	17	16	2	4	6	..	..	..	45
(iii) <i>Judicial Separation.</i>									
Adultery	5	..	..	..	1	..	..	..	6
Cruelty	1	..	..	..	..	..	..	..	1
Desertion	3	1	..	..	2	..	..	..	6
Total	9	1	..	..	3	..	..	..	13

(a) Decrees nisi granted. (b) Includes "non-compliance with order for restitution of conjugal rights"—364; "separation for over five years"—1. (c) Includes "adultery and desertion"—61. (d) Includes "adultery and desertion"—3. (e) Includes "separation for over five years"—7. (f) Includes "separation for over five years"—127.

(v) *Ages of Husband and Wife at Time of Dissolution of Marriage.* The following table shows, in each age group at the time when the decree of dissolution of marriage was made absolute, the number of husbands and wives whose marriage was dissolved during 1955.

AGES OF PARTIES AT TIME OF DISSOLUTION OF MARRIAGE, AUSTRALIA, 1955.

Ages of Husbands (Years).	Ages of Wives Years).											Total Husbands.
	Under 21.	21 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 and over.	Not stated.	
Under 21 ..	3	1	1	..	..	..	..	..	..	..	..	5
21 to 24 ..	30	99	18	5	..	..	..	..	..	..	..	153
25 to 29 ..	16	322	558	83	15	1	..	..	..	..	..	995
30 to 34 ..	9	58	630	609	96	23	7	..	..	..	..	1,435
35 to 39 ..	1	21	156	468	427	94	15	4	..	..	..	1,059
40 to 44 ..	..	6	47	167	421	338	65	8	3	4	..	793
45 to 49 ..	..	..	15	52	128	308	246	34	7	1	2	503
50 to 54 ..	..	2	3	16	31	121	179	122	18	8	3	272
55 to 59 ..	..	..	1	2	15	37	69	70	68	10	..	237
60 and over ..	..	..	1	3	5	21	25	34	62	86	..	83
Not stated ..	..	3	3	5	1	1	2	..	..	1	67	..
Total Wives	59	512	1,433	1,410	1,139	944	608	272	158	110	79	6,724

(vi) *Dissolutions of Marriage Granted—Duration of Marriage and Issue of Persons Involved.* The following table shows the number of dissolutions of marriage granted in 1955, classified according to the legal duration of the marriage (i.e., the period from the date of marriage to the date when the decree nisi was made absolute) and the issue involved. In respect of 42 per cent. of the dissolutions granted in that year, the marriages had been contracted within the previous 10 years. Of the parties to these marriages, 33 per cent. had no children, 29 per cent. had one child, 22 per cent. had two children, 9 per cent. had three children and 7 per cent. had four or more children.

DURATION AND ISSUE OF MARRIAGES DISSOLVED, AUSTRALIA, 1955.

Duration of Marriage (Years)	Number of Children													Total Dissolutions of Marriage Granted.	Total Children.	
	0	1	2	3	4	5	6	7	8	9	10	11	Not stated			
Under 1 year	1	1	..	..	..	..	..	..	..	..	..	..	..	..	2	1
1 and under 2 ..	22	3	..	..	..	..	..	..	..	..	..	..	..	..	26	5
2 " " 3 ..	56	18	2	1	..	..	..	..	..	..	..	..	..	..	77	25
3 " " 4 ..	97	43	6	..	..	..	..	..	..	..	..	..	..	..	146	55
4 " " 5 ..	182	98	23	1	..	..	..	..	..	..	..	..	..	..	305	152
5 " " 6 ..	230	124	44	5	2	1	..	..	..	..	..	..	..	..	406	240
6 " " 7 ..	241	167	56	15	2	1	..	..	..	..	..	..	..	..	482	337
7 " " 8 ..	197	139	89	17	1	1	1	..	..	..	..	..	..	..	445	383
8 " " 9 ..	175	166	109	35	10	1	..	..	..	..	..	..	..	..	496	534
9 " " 10 ..	151	157	103	29	10	2	..	1	..	..	..	..	..	..	453	507
10 " " 11 ..	121	126	79	18	11	2	..	..	..	..	..	..	..	..	357	392
11 " " 12 ..	92	81	74	31	9	2	2	..	..	..	..	..	..	..	291	380
12 " " 13 ..	86	99	67	29	11	4	1	..	..	..	..	..	..	..	297	390
13 " " 14 ..	84	110	94	28	12	1	2	..	..	..	..	..	..	..	331	447
14 " " 15 ..	65	95	91	26	14	3	..	2	..	..	..	..	..	..	296	440
15 " " 16 ..	60	72	80	43	10	2	2	..	..	..	..	..	..	..	269	423
16 " " 17 ..	47	50	36	26	8	2	2	..	1	..	1	..	..	..	173	270
17 " " 18 ..	33	45	54	23	12	6	1	..	1	..	..	..	..	..	175	314
18 " " 19 ..	41	51	46	25	15	4	3	..	3	..	..	..	..	..	189	347
19 " " 20 ..	16	47	44	28	11	10	4	2	..	..	..	..	..	..	162	351
20 " " 21 ..	30	36	40	32	11	5	1	..	..	..	..	..	..	..	155	287
21 to 24 years	82	105	114	73	32	17	14	..	4	5	1	..	..	..	447	926
25 to 29 " ..	69	69	129	66	45	23	11	6	1	3	1	..	1	..	424	984
30 to 34 " ..	35	38	41	32	17	10	9	7	3	2	1	..	..	..	195	489
35 to 39 " ..	14	12	16	11	2	8	5	4	1	1	..	..	..	..	74	200
40 to 44 " ..	6	3	9	4	5	1	1	..	..	..	..	..	..	..	29	64
45 years and over	4	..	3	1	..	2	1	..	1	..	..	..	..	..	13	40
Not stated ..	2	2	1	1	..	1	..	..	..	..	..	..	2	..	9	12
Total Dissolutions	2,239	1,957	1,451	600	250	110	60	29	15	8	2	1	2	6,724	..	
Total Children	..	1,957	2,902	1,800	1,000	550	360	203	120	72	20	11	..	..	8,995	

(vii) *Number of Divorced Persons at Censuses 1901 to 1954.* The following table shows the number and proportions of divorced males and females in Australia at each Census from 1901 to 1954. A classification of these persons by age appeared in earlier issues of the

Official Year Book (see No. 39, page 269). Prior to 1911, no record was made of divorced persons in South Australia, so comparisons cannot be made to extend beyond that date.
DIVORCED PERSONS AT CENSUS DATES : AGE DISTRIBUTION, AUSTRALIA.

Sex.	Number.						Proportion per 10,000, 15 years of age and over.					
	1901. (a)	1911.	1921.	1933.	1947.	1954.	1901. (a)	1911.	1921.	1933.	1947.	1954.
Males ..	1,234	2,368	4,233	10,298	25,052	32,389	10	15	23	42	89	100
Females ..	1,149	2,140	4,304	10,888	27,516	36,650	10	15	24	46	96	115

(a) Excludes South Australia.

4. **Bankruptcies.**—Particulars relating to bankruptcy in each State up to the end of 1927 were incorporated under this heading in issues of the Official Year Book prior to No. 23. Under the terms of the Bankruptcy Act 1924–1955, jurisdiction in bankruptcy and insolvency was taken over by the Commonwealth from 1st August, 1928. The act made provision for the declaration of districts, and each State (except Queensland) and the Northern Territory have been declared bankruptcy districts. The bankruptcy district of New South Wales includes the Australian Capital Territory. Queensland has been divided into three districts corresponding to the three Supreme Court districts in that State. Operations under the act for the year ended 31st July, 1955 are shown in the following table. For purposes of comparison, annual averages for the five-yearly period 1949–1950 to 1953–54 are appended to the table.

FEDERAL BANKRUPTCY ACT : OPERATIONS, 1954-55.

Particulars.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aus-tralia.	
Sequestration Orders and Orders for Administration of Deceased Debtors' Estates	Number	314	144	126	75	64	44	2	769
	Liabilities £	750,350	327,498	244,386	187,921	151,816	58,643	3,638	1,724,252
	Assets ..£	434,332	106,368	185,420	123,097	63,614	26,517	7,413	946,761
Compositions without Bankruptcy Part XI.	Number	1	8	1	22	34	..	..	66
	Liabilities £	5,217	47,588	1,651	78,643	150,928	..	..	284,027
	Assets ..£	1,100	39,591	1,281	71,060	155,697	..	..	268,729
Deeds under Part XI.	Number	..	2	..	13	1	3	..	19
	Liabilities £	..	8,589	..	70,202	11,190	55,022	..	145,003
	Assets ..£	..	6,205	..	46,175	17,607	44,008	..	113,995
Deeds of Arrangement, Part XII.	Number	45	46	28	1	1	2	..	123
	Liabilities £	406,434	380,408	215,837	1,715	1,223	7,533	..	1,013,150
	Assets ..£	353,794	212,987	151,586	1,265	274	8,326	..	728,232
Total, 1954-55	Number	360	200	155	111	100	49	2	977
	Liabilities £	1,162,001	764,083	461,874	338,481	315,157	121,198	3,638	3,166,432
	Assets ..£	789,226	365,151	338,287	241,597	237,192	78,851	7,413	2,057,717

FIVE YEARLY AVERAGE 1949-50 TO 1953-54.

Particulars.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aus-tralia.	
Sequestration Orders and Orders for Administration of Deceased Debtors' Estates	Number	189	91	81	48	33	27	..	469
	Liabilities £	417,548	188,819	227,984	103,744	91,065	34,838	1,200	1,065,198
	Assets ..£	269,952	69,278	151,743	67,360	61,579	16,910	2,288	639,110
Compositions without Bankruptcy Part XI.	Number	1	3	1	13	17	..	..	35
	Liabilities £	2,556	23,427	1,805	55,985	96,374	..	612	180,759
	Assets ..£	646	11,430	1,490	45,495	107,245	..	1,021	167,327
Deeds under Part XI.	Number	..	1	..	5	3	..	..	9
	Liabilities £	..	4,282	..	39,646	13,819	..	..	57,747
	Assets ..£	..	4,463	..	29,819	12,314	..	..	46,596
Deeds of Arrangement, Part XII.	Number	31	29	12	..	..	1	..	73
	Liabilities £	270,033	152,354	60,607	1,527	396	8,172	..	493,089
	Assets ..£	257,075	110,211	54,113	2,500	203	5,446	..	429,548
Total	Number	221	124	94	66	53	28	..	586
	Liabilities £	690,137	368,882	290,396	200,902	201,654	43,010	1,812	1,796,793
	Assets ..£	527,673	195,382	207,346	145,174	181,341	22,356	3,309	1,282,581

The procedure in certain States has been influenced largely by the procedure in force prior to the passing of the Commonwealth Act, and therefore, no particular significance attaches to the large number of compositions, etc., in South Australia and Western Australia.

The Bankruptcy Act 1930 created a Federal Court of Bankruptcy and provided for the appointment of a Judge or two Judges thereto. In 1930, a Commonwealth Judge in Bankruptcy was appointed, in addition to the State Judges, to deal with bankruptcy work in New South Wales and Victoria, as the Courts in these States were unable to cope with the business. All the bankruptcy cases in these States are now heard in the Federal Court which sits in Sydney and Melbourne alternately.

5. **High Court of Australia.**—Under the provisions of Section 71 of the Commonwealth Constitution, the judicial power of the Commonwealth is vested in a Supreme Court called the High Court of Australia, and in such other courts as the Parliament creates or invests with Federal jurisdiction. The High Court of Australia possesses both original and appellate jurisdiction. The powers of the Court are defined in the Commonwealth Constitution, and in the Judiciary Act 1903–1955. The Court consists of a Chief Justice and six other judges. Sittings of the Court are held in the capitals of the various States as occasion may require. The High Court functions as a Court of Appeal for Australia. The following statement shows the transactions of the High Court for 1954 and 1955.

TRANSACTIONS OF THE HIGH COURT OF AUSTRALIA.

Original Jurisdiction.	1954.	1955.	Appellate Jurisdiction.	1954.	1955.
	Number of writs issued	250		104	Number of appeals set down for hearing ..	131	101
Number of causes entered for trial ..	51	10	Number allowed ..	46	44
Judgments for plaintiffs	56	63	Number dismissed ..	60	48
Judgments for defendants	10	1	Otherwise disposed of	34	16
Otherwise disposed of ..	18	8			
Amount of judgments ..	£68,019	£139,664			

During 1954 and 1955, respectively, the High Court dealt also with the following : Appeals from Assessments under the Taxation Assessment Act, 49, 45 ; Special cases stated for the opinion of the Full Court, 8, 13 ; Applications for Prohibitions, etc., 28, 43. The fees collected amounted to £3,202 in 1954 and £3,312 in 1955.

6. **Commonwealth Industrial Court.**—Information regarding this Court, which was established under the Conciliation and Arbitration Act 1904–1956, will be found in Chapter VI.—Labour, Wages and Prices, of this volume.

§ 5. Police and Prisons.

1. **General.**—Early issues of the Official Year Book (*see* No. 4, p. 918) contain a *résumé* of the evolution of the police force in Australia up to the passing of the Police Act 1862 (25 Vic., No. 16) in New South Wales.

2. **Duties of the Police.**—In addition to the ordinary employment attaching to their office, the police are called upon to perform many duties which in other countries are carried out by other officials. Much of the time of the several forces is taken up in extraneous duties not connected with the protection of life and property, while the cash value of the services rendered to other Government departments is considerable.

3. **Strength of Police Force.**—The strength of the police force including probationers, cadets, special constables and women police, in each State and Territory at the end of 1939 and the years 1950 to 1954 is shown in the following table.

The police forces (with the exception of the small body of Commonwealth police maintained in the Northern Territory and in the Australian Capital Territory) are entirely under State control, but, by arrangement, the Commonwealth Government utilizes their services in various directions, such as acting as aliens registration officers, and policing the various regulations, etc.

STRENGTH OF POLICE FORCES.

State or Territory.	Area of State in Sq. Miles.	No. of Police.					
		1939.	1950.	1951.	1952.	1953.	1954.
New South Wales ..	309,433	3,907	4,449	4,527	4,688	4,661	4,610
Victoria ..	87,884	2,333	2,751	2,879	2,992	3,047	3,021
Queensland(a) ..	670,500	1,460	2,220	2,455	2,449	2,403	2,355
S. Australia(a) ..	380,070	905	972	1,055	1,091	1,107	1,086
W. Australia(a) ..	975,920	600	787	877	929	936	964
Tasmania(a) ..	26,215	296	392	420	418	438	471
Nor. Territory(a) ..	523,620	48	61	48	50	56	62
Aust. Cap. Ter. ..	939	17	45	57	58	57	60
Total ..	2,974,581	9,566	11,677	12,318	12,675	12,705	12,629
Population to each Police Officer ..	..	733	715	695	692	703	723

(a) 30th June of year 1955.

The figures for New South Wales for 1954 exclude 8 black trackers and cadet trackers (i.e., natives employed in the detection of offenders, chiefly in outlying districts) and 4 matrons, while the Victorian returns exclude one black tracker. For Queensland the figures exclude 23 black trackers, for South Australia, 5 wardresses, for Western Australia 18 black trackers and 6 female searchers, and for the Northern Territory 29 black trackers. Women police are employed in all the States, the respective numbers for 1954 included in the table above being:—New South Wales, 37, Victoria, 30, Queensland 8, South Australia 20, Western Australia 9, Tasmania 5 and Australian Capital Territory 3. Their work is mainly preventive, relating particularly to females and neglected children. They also carry out escort duties in respect of female prisoners.

4. **Prison Accommodation and Prisoners, 1954.**—The table below shows the number of prisons in each State, the accommodation therein, and the number of prisoners under sentence at the end of 1954:—

PRISON ACCOMMODATION AND PRISONERS, 1954.

Particulars.	N.S.W. (a)	Vic.	Qld. (a)	S. Aust.	W. Aust. (a)	Tas. (a)	N.T. (a)	Total.
No. of Prisons ..	16	11	7	16	19	2	2	73
Accommodation in—								
Separate cells ..	2,305	1,323	603	681	669	149	31	5,761
Wards ..		435	295	128	207	32	28	1,125
Prisoners at end of year ..	2,238	1,186	580	377	386	163	50	4,980

(a) Year ended 30th June 1955.

There are no gaols in the Australian Capital Territory, but there is a lock-up consisting of five cells attached to the police station at Canberra, and a similar lock-up at Jervis Bay, where offenders are held while awaiting trial or serving short sentences not exceeding one week imposed by the Magistrate's Court.

5. **Prisoners in Gaol, 1939 and 1950 to 1954.**—The number of prisoners in gaol at 31st December in each of the years 1939 and 1950 to 1954 and the proportion per 10,000 of the population are shown in the following table. The figures refer to prisoners under sentence and exclude aborigines and debtors.

PRISONERS IN GAOL.

State or Territory.	1939.	1950.	1951.	1952.	1953.	1954.
NUMBER.						
New South Wales(a) ..	1,355	1,885	2,070	2,135	2,155	2,238
Victoria ..	1,144	981	1,048	1,248	1,173	1,186
Queensland ..	261	(a) 454	(a) 472	(a) 538	(a) 606	(a) 580
South Australia ..	199	261	316	437	413	377
Western Australia(a) ..	244	342	362	374	360	386
Tasmania(a) ..	108	114	142	154	152	163
Northern Territory ..	23	(a) 52	(a) 34	(a) 44	(a) 47	(a) 50
Total ..	3,334	4,089	4,444	4,930	4,906	4,980
Per 10,000 of population ..	4.8	4.9	5.2	5.6	5.5	5.4

(a) 30th June of year following.

§ 6. Cost of Administration of Justice.

1. **Expenditure by the States.**—The table below shows the net expenditure from Consolidated Revenue during 1954–55 in connexion with the administration of justice in each of the States.

Net costs are shown instead of gross expenditure as it is difficult to obtain comparable figures of the total costs of the various services under this heading. It will be noted that in South Australia the receipts for legal fees and registrations exceed the actual expenditure under "Justice".

NET EXPENDITURE ON ADMINISTRATION OF JUSTICE, 1954-55.

State.	Net Expenditure.			Per Head of Population.		
	Justice.	Police.	Prisons.	Justice.	Police.	Prisons.
	£	£	£	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
New South Wales ..	960,270	5,236,132	1,220,919	5 7	30 3	7 1
Victoria ..	544,282	3,821,191	553,085	4 5	30 9	4 5
Queensland ..	212,381	2,734,811	209,080	3 3	41 3	3 2
South Australia ..	— 38,154	1,210,307	222,875	—0 11	30 0	5 6
Western Australia ..	21,225	1,221,178	168,477	0 8	37 8	5 2
Tasmania ..	140,490	579,758	101,222	9 0	37 1	6 6
Total ..	1,840,494	14,803,377	2,475,658	4 1	32 9	5 6
1953–54 ..	1,808,185	14,243,687	1,852,675	4 2	32 2	4 2
1952–53 ..	1,890,836	13,478,847	1,723,190	4 4	31 0	4 0
1951–52 ..	1,599,109	12,011,760	1,560,028	3 9	28 4	3 8
1938–39 ..	315,881	3,499,202	417,679	0 11	10 1	1 2

2. **Commonwealth Expenditure.**—The expenditure shown in the previous table is that incurred by the State Governments only, and does not include expenditure of the Commonwealth Attorney-General's Department which is shown hereunder for the years 1938–39 and 1950–51 to 1955–56.

EXPENDITURE OF THE COMMONWEALTH ATTORNEY-GENERAL'S DEPARTMENT.

(£.)

Year.	Gross Expenditure.	Receipts.	Net Expenditure.
1938–39	281,497	111,036	170,461
1950–51	1,096,274	204,362	891,912
1951–52	1,348,721	238,676	1,110,045
1952–53	1,438,139	286,746	1,151,393
1953–54	1,549,991	321,683	1,228,308
1954–55	1,715,945	370,759	1,345,186
1955–56	1,896,741	407,474	1,489,267

The expenditure for each year includes that in connexion with patents and copyright which amounted to £379,370 in 1954–55, and to £388,268 in 1955–56. The Commonwealth took over jurisdiction in bankruptcy in August, 1928, and the expenditure thereon amounted to £122,465 in 1954–55 and to £145,390 in 1955–56. Revenue of the Attorney-General's Department for the year 1954–55 amounted to £370,759, comprising £210,941 for patents, copyright, trade marks and designs, £54,223 for bankruptcy and £105,595 miscellaneous, including fees and fines. Revenue for 1955–56 was £407,474, comprising £266,646 for patents, copyrights, trade marks and designs, £60,032 for bankruptcy and £80,796 for miscellaneous, including fees and fines.

In addition to the foregoing, expenditure in the Northern Territory for the upkeep of the police force and prison services amounted to £135,738 during 1954–55 and to £145,387 during 1955–56.

Expenditure in connexion with the Australian Capital Territory police amounted to £87,126 in 1954–55 and to £98,720 in 1955–56.

CHAPTER XIV.

PUBLIC HEALTH AND RELATED INSTITUTIONS.

A. PUBLIC HEALTH—STATE GOVERNMENT ACTIVITIES.

(including activities of the Commonwealth Government in the Northern Territory and the Australian Capital Territory).

§ 1. Public Health Legislation and Administration.

1. **New South Wales.**—The Department of Public Health comes under the jurisdiction of the Minister for Health, with an Under-Secretary as Permanent Head of the Department for administrative purposes.

There is also a Director-General of Public Health and Chief Medical Adviser to the Government, who is *ex officio* President of the Board of Health and Chairman of the Nurses' Registration Board. He is assisted by a Deputy Director-General.

The Inspector-General of Mental Hospitals is responsible for the administration of that part of the Lunacy Act relating to the care and treatment of mental patients. There is also a Deputy Inspector-General.

The following statutory authorities are constituted under Acts administered by the Minister for Health :—Board of Health (Public Health Act), Hospitals Commission of N.S.W. (Public Hospitals Act), Dental Board (Dentists Act), Pharmacy Board (Pharmacy Act), Medical Board (Medical Practitioners Act), Board of Optometrical Registration (Opticians Act), N.S.W. State Cancer Council (N.S.W. State Cancer Council Act), Ambulance Transport Service Board (Ambulance Transport Service Act), Physiotherapists Registration Board (Physiotherapists Registration Act) and Nurses Registration Board (Nurses Registration Act).

The Department's activities extend over the whole of the State and embrace all matters relating to public health and the greater part of the general medical work of the Government. These include the following :—(a) Supervision of the work of local authorities (municipal and shire councils) in relation to public health matters connected with the following Acts—Public Health Act, Noxious Trades Act and Pure Food Act ; (b) Scientific Divisions (Government Analyst, Microbiological Laboratory, and Division of Industrial Hygiene) ; (c) Tuberculosis and Social Hygiene Divisions ; (d) Medical Officers of Health at Sydney, Broken Hill, Newcastle, Wollongong, Bathurst and Lismore ; (e) State Hospitals and Homes and State Sanatoria ; (f) Mental Hospitals ; (g) Public Hospitals (Hospitals Commission) ; (h) Maternal and Baby Welfare (Baby Health Centres) ; (i) School Medical and Dental Services ; and (j) Publicity, Nutrition and Library Services.

2. **Victoria.**—The Ministry of Health Act 1943 created the position of Minister of Health and made the Minister holding that position responsible for all Acts formerly administered by the Minister of Public Health as well as all other legislation, including the Mental Hygiene Acts and the Hospitals and Charities Acts, which related to the health and well-being of the people of the State.

The original Department of Public Health became the General Health Branch of the Department of Health controlled by a Chief Health Officer. Subsequently various functions were taken from that Branch to form the Maternal and Child Hygiene Branch and the Tuberculosis Branch. With the Mental Hygiene Branch, these three make up the four branches of the Department.

(a) *The General Health Branch.* This Branch, in collaboration with local government health authorities, is actively carrying on its fight against infectious diseases. The success of this campaign may be illustrated by the fact that there were 3,254 cases of diphtheria with 93 deaths in 1927 and only 170 cases with 2 deaths in 1955.

New legislation, the Infectious Diseases Hospitals Act 1954, was introduced late in 1954. This Act repealed all previous legislation relating to infectious diseases hospitals and made the State Government, through the Hospitals and Charities Commission, responsible, from 1st October, 1954, for the whole of the cost of treating cases of infectious disease.

Work in regard to the treatment and prevention of venereal disease and improvements in methods of treatment have resulted in a very marked advance. It is now no longer necessary to maintain a special hospital unit in this State for the treatment of cases of venereal disease. Special clinics for prophylaxis and treatment are attached to several public hospitals in the State and treatment may be obtained at all public hospitals.

The Poliomyelitis Division which has been operating since 1949 provides a consultant diagnostic service and maintains an after care treatment service for the whole of the State. Three medical officers and a number of visiting physiotherapists and nurses provide such treatment for a great number of patients mainly in their own homes.

The Industrial Hygiene Division staffed by medical and scientific officers with a number of specially trained inspectors supervises the working conditions of the 350,000 persons employed in industry in Victoria.

(b) *The Maternal and Child Hygiene Branch.* This Branch has been largely responsible for the reduction of Victoria's infant mortality rate to a point where it is now one of the lowest in the English-speaking world. This Branch is also concerned with pre-natal hygiene, the development of pre-school services generally and the school medical and dental services.

(c) *The Tuberculosis Branch.* The Tuberculosis Branch under the control of a Director of Tuberculosis carries on work aimed at preventing as far as possible the spread of tuberculosis. Using improved diagnostic facilities and better methods of treatment, it has been possible to reduce greatly the incidence of this disease. No longer is there a waiting list for entry into a sanatorium; in fact, the former State sanatorium at Greenvale is in future to be used as an institution for the aged.

(d) *The Mental Hygiene Branch.* At the end of 1951, an Authority was established under the Mental Hygiene Authority Act 1950 to take charge of the Mental Hygiene Branch. The Authority consists of three members of whom one, an expert in psychiatry, is Chairman. Although the Authority is Head of the Branch, detailed administration can be carried out by its officers leaving the Authority free to deal with major problems relating to the improvement of treatment and accommodation for the mentally ill. The efforts of the Authority at the present time are principally concerned with improving existing hospitals and providing additional accommodation made necessary by the increase in population in the State and with developing preventive out-patient psychiatric services designed to reduce the need for in-patient beds.

The Cancer Institute, set up in 1949 under the provisions of the Cancer Institute Act 1948, is now operating a very active out-patients treatment centre as well as a small in-patient unit. Facilities provided at the Institute for radiation therapy are being extended by installing a 4 m.e.v. linear accelerator. It will be the first of this type of machine to operate in Australia.

Legislation which is the concern of the Minister of Health includes the following:—Anti-Cancer Council Act, Births Notification Acts, Cancer Institute Act, Cemeteries Acts, Dietitians Registration Act, Part V. of the Goods Act, Hairdressers Registration Acts, Health Acts, Hospitals and Charities Acts, Infectious Diseases Hospitals Act, Masseurs Acts, Medical Acts, Mental Deficiency Act, Mental Hygiene Acts, Midwives Act, Nurses Acts, Opticians Registration Act, Poisons Acts and Venereal Diseases Act.

3. *Queensland.*—(i) *General.* The Health Acts 1937 to 1955 are administered by the Director-General of Health and Medical Services subject to the Minister for Health and Home Affairs. A central Staff controls the following Divisions:—

(a) *Division of Public Health Supervision.* This Division is controlled by the Deputy Director-General of Health and Medical Services and comprises separate sections of environmental sanitation, food and drug control, enthetic (venereal) diseases, hookworm control and Hansen's disease control. Qualified full-time officers are in charge of each section. Free treatment of venereal diseases is offered at the Department's male and female clinics in Brisbane, and at any public hospital. Two institutions (one at Peel Island in Moreton Bay for white patients and one at Fantome Island near Townsville for aboriginal patients) are maintained for the treatment of Hansen's disease. Modern therapy with sulphone drugs has caused a dramatic decline in numbers of patients at these institutions. Free immunization against diphtheria, whooping cough and tetanus is offered by most of the local authorities. A recent survey showed that 94 per cent. of school children in the Greater Brisbane area and 90 per cent. in the rest of the State had been immunized against diphtheria.

(b) *Division of Tuberculosis.* The Director, assisted by medical officers and nurses, exercises control of patients with tuberculosis. A central chest clinic in Brisbane offers Mantoux tests, X-ray examinations, and inoculations of Mantoux negative reactors free of charge and this service is extensively used. A mobile X-ray unit visits country districts. Children in the final grade of primary schools are now being Mantoux-tested and given B.C.G. vaccine.

(c) *Division of Industrial Medicine.* This Division exercises supervision over the health of workers in both primary and secondary industries, including control of leptospirosis (Weil's disease), scrub typhus and other fevers of occupational origin in the sugar-cane growing districts north of Ingham.

(d) *Division of Maternal and Child Welfare.* The Director, assisted by full-time and part-time health officers and a staff of qualified nurses, offers supervision and advice on the rearing and health of infants and pre-school children at 228 baby health centres throughout the State. Outlying centres are visited by air or by special rail car. Homes for in-patient treatment of infants with feeding problems have been established at Brisbane, Toowoomba, Ipswich and Rockhampton.

(e) *Division of School Health Service.* This Division comprises the Chief Medical Officer, School Health Services, and a staff of medical officers, dentists and visiting school nurses. Every child has a medical examination at least once in three years.

(f) *Division of Mental Hygiene.* The Director is responsible for the care and treatment of mentally sick patients in the State's four mental hospitals at Brisbane, Toowoomba, Ipswich and Charters Towers.

(g) *Division of Laboratory Services.* Two laboratories—the Laboratory of Microbiology and Pathology and the Government Chemical Laboratory—are maintained to ensure the purity of a wide range of foodstuffs and materials. The former also offers a service in clinical pathology to country hospitals and private medical practitioners.

(ii) *Hospitals.* All public hospitals operate under the district system, which provides for the constitution of Hospitals Districts and Hospitals Regions and a Hospitals Board for each district. The State is divided into 11 Hospitals Regions with a base hospital for each region which comprises a number of Hospitals Districts. The purpose of the regional scheme is to co-ordinate the public hospitals in the region with the base hospital. The administration of the hospitals services, including public dental services, in each Hospitals District is vested in the Hospitals Board which comprises not less than four members nor more than eight members appointed by the Governor-in-Council and one member elected by the component Local Authorities. There are 54 Hospitals Boards controlling 140 public hospitals.

Private hospitals in Queensland are controlled under the provisions of the "Health Acts 1937 to 1955" and the "Private Hospital Regulations 1937". There are 59 of these institutions licensed in the state, containing 1,459 beds, of which 20, containing 656 beds, are in Brisbane.

4. *South Australia.*—The Department of Public Health embraces the activities of the Central Board of Health, the Food Drugs Advisory Committee, the School Medical and Dental Services, Poliomyelitis Services, Deafness Guidance Clinic and the public health aspect of the control of tuberculosis, including the State X-ray Health Survey, under the control of the Director of Tuberculosis.

The Central Board of Health consists of five members, three of whom (including the chairman) are appointed by the Governor while one each is elected by metropolitan local boards and by all other local boards. The Central Board of Health administers the Health, Food and Drugs, Dangerous Drugs, Noxious Trades, Bakehouses Registrations and Early Notification of Birth Acts. The Board is also concerned to some degree with Acts relating to local government, abattoirs and cremation. Other legislation administered by the Department of Public Health relates to venereal diseases and vaccination.

The Health Act, 1935-1955 constitutes every municipal council and every district council a local board of health for its municipality or district. There are 142 of these local boards under the general control and supervision of the Central Board. Under the Food and Drugs Act, each local board is constituted the local authority for its respective district, except in the metropolitan area, for which the Metropolitan County Board is the local authority.

The medical staff of the Department includes the Director of Tuberculosis, a Senior Medical Officer, the Principal Medical Officer for Schools and the Poliomyelitis Medical Officer, four full-time medical officers, nine temporary medical officers and six part-time

medical officers. Five dentists, five dental assistants and seven nurses are engaged in connexion with the School Medical Services. There are nine full-time and fourteen part-time inspectors directly responsible to the Board. There is also a nurse inspector employed to advise and assist local boards in connexion with infectious diseases. A consulting radiologist, five radiographers and four nurses are engaged in the State X-ray Health Survey and one nurse in B.C.G. vaccination. A physiotherapist and a social worker are engaged in the poliomyelitis services. The inspectors appointed under the Health and Food and Drugs Acts periodically visit the local districts and see, generally, that the local boards are performing their duties.

5. **Western Australia.**—The legislation in this State is the Health Act 1911–1955. This was consolidated and reprinted in 1948 and amended in 1950, 1952, 1954 and 1955. The central authority is the Department of Public Health, controlled by a Commissioner, who must be a qualified medical practitioner. The State is covered by local authorities which are constituted as Municipalities or Road Boards.

A Local Board of Health may be set up in lieu of a Road Board, but this method of control is no longer used. In any emergency, the Commissioner may exercise all the powers of a Local Health Authority in any part of the State.

Interesting features of recent legislation are as follows :—(a) Act No. 70 of 1948 gave power to control sufferers from tuberculosis and established a Tuberculosis Control Branch; (b) Act No. 11 of 1952 gave wide powers to regulate the sale and use of pesticides; (c) Act No. 34 of 1954 provides for the licensing of manufacturers of therapeutic substances. The Act has not yet been proclaimed; and (d) Act No. 45 of 1954 requires every medical practitioner who attends a child which dies within 28 days of birth to notify the Commissioner.

6. **Tasmania.**—The Department of Health Services is under the jurisdiction of the Minister for Health, and the administration of the various divisions is controlled by the permanent head of the department, the Director-General of Medical Services, who is also directly responsible for the Division of Hospital and Medical Services. Associated with the Director-General are the Directors of Orthopaedics, Pathology and Anaesthetics, who give their services part-time.

The Division of Hospital and Medical Services is responsible for the establishment and administration of public hospitals, the provision of specialist services under the supervision of the Directors of Orthopaedics, Pathology and Anaesthetics, the licensing and inspection of private hospitals, the provision of Bush Nursing hospitals and services in country districts, the administration of the Bush and Tourist Nursing services, the conduct of Homes for the Aged and the Government Medical Service, which comprises 19 practices in country districts where there are no private medical practitioners.

The Division of Public Health is responsible for the administration of laws relating to environmental sanitation, food and drugs, places of public entertainment, cremation, and notifications of infectious diseases. The Division also controls the School Medical and Dental Services, Maternal and Child Health Centres, the Analytical Laboratory, and Mothercraft Homes.

The Tuberculosis section is responsible for conducting comprehensive state-wide X-ray surveys and for the maintenance of diagnostic clinics and chest hospitals.

The Division of Mental Hygiene is responsible for the building of mental hospitals, the consultative diagnosis and treatment of psychiatric cases, the treatment and care of the mentally ill, the treatment and care of inebriates, the treatment and custody of sexual offenders, the treatment of psychopathic cases, and the care and treatment of retarded children.

7. **Northern Territory.**—The Commonwealth Department of Health is responsible for the administration of hospital, health and medical services in the Northern Territory.

Four general hospitals have been established. The Darwin Hospital has accommodation for 190 in-patients, Alice Springs Hospital, 117, Katherine Hospital, 27, and Tennant Creek Hospital, 34. A modern institution, known as the East Arm Settlement, for the treatment of Hansen's disease was opened in August, 1955. A full range of ancillary services is available at the Darwin Hospital which serves as a base hospital for the Territory.

Dental clinics have been set up at Darwin and Alice Springs. Medical and dental services to outback areas are fully developed and are provided either by road or air.

Two Drovcr aircraft are stationed at Darwin and one is stationed at Alice Springs. These are staffed and serviced by Trans-Australia Airlines and are extensively used in ambulance and survey medical work. At Alice Springs, medical officers of the Northern Territory provide the medical services to the Flying Doctor Service (South Australian) Base.

A section of the Department undertakes continuous investigation of native health.

School Medical and Dental Officers move throughout the area providing diagnostic and treatment facilities. Public health services are provided and health inspectors periodically visit all settlements.

Darwin, as a first port of entry for overseas aircraft and shipping, is provided with a quarantine station.

8. Australian Capital Territory.—The Public Health Ordinance 1928-30 placed under the control of the Minister for Health all matters relating to public health and hygiene in the A.C.T. The Minister has appointed a Medical Officer of Health and a number of Health Inspectors to administer and police this ordinance. The Canberra Community Hospital is administered subject to the Minister for Health by a board consisting of five elected members and three members appointed by the Minister. The hospital has accommodation for 253 in-patients, an adequate out-patients department, and a modern 16 bed tuberculosis chalet. A District Nursing Service administered by the Commonwealth Department of Health was established in 1950 to provide a home nursing service for the sick and aged. The service is available to patients on the request of a registered medical practitioner.

§ 2. Supervision and Care of Infant Life.

1. General.—The number of infant deaths and the rate of infant mortality for the five years 1951 to 1955 are given in the following table, which shows that during this period 23,350 children died in Australia (excluding Territories) before reaching their first birthday. Further information regarding infant mortality will be found in Chapter XVII.—Vital Statistics.

INFANT DEATHS AND DEATH RATES.

State.	Metropolitan.					Remainder of State.				
	1951.	1952.	1953.	1954.	1955.	1951.	1952.	1953.	1954.	1955.

NUMBER OF INFANT DEATHS.

New South Wales	661	604	620	787	814	1,234	1,214	1,226	1,063	1,036
Victoria ..	549	610	544	576	549	594	588	589	479	486
Queensland ..	277	259	228	206	210	484	513	541	489	446
South Australia ..	218	210	196	199	207	210	203	179	189	224
Western Australia	185	179	180	153	187	240	205	198	206	186
Tasmania ..	56	50	51	58	55	140	122	126	128	134
Australia(a) ..	1,946	1,912	1,819	1,979	2,022	2,902	2,845	2,859	2,554	2,512

RATE OF INFANT MORTALITY.(b)

New South Wales	22.89	20.71	21.45	22.51	22.76	28.57	26.96	26.66	27.85	26.81
Victoria ..	20.66	21.69	19.56	18.26	16.68	24.78	22.96	22.88	20.72	20.75
Queensland ..	26.83	23.73	21.02	18.95	18.60	25.04	25.60	27.14	24.08	21.17
South Australia ..	22.45	21.29	19.71	19.82	20.13	27.09	25.31	21.79	23.08	27.27
Western Australia	26.38	23.52	23.28	19.59	22.50	30.84	26.27	24.36	25.37	22.37
Tasmania ..	26.37	21.62	22.16	25.45	23.10	26.75	21.77	23.18	23.31	23.48
Australia(a) ..	23.00	21.73	20.78	20.30	20.03	27.06	25.38	25.23	24.70	23.84

(a) Excludes Territories.
registered.

(b) Number of deaths under one year of age per 1,000 live births

During recent years greater attention has been paid to the fact that the health of mothers and infants depends largely on pre-natal attention as well as after-care. Government and private organizations, therefore, provide instruction and treatment for mothers before and after confinement, while the health and well-being of mother and child are looked after by the institution of baby health centres, baby clinics, crèches, visits by qualified midwives, and special attention to the milk supply.

2. **Government Activities.**—In all States, Acts have been passed with the object of supervising and ameliorating the conditions of infant life and reducing the rate of mortality. Departments control the boarding-out to suitable persons of the wards of the State, and wherever possible the child is boarded out to its mother or near female relative. Stringent conditions regulate the adoption, nursing and maintenance of children placed in foster-homes by private persons, while special attention is devoted to the welfare of ex-nuptial children. (*See also* in this connexion Chapter XV.—Welfare Services.)

Under the provisions of Part V. of the Social Services Act 1947–1956, a sum of £15 is payable to the mother in respect of each confinement at which a living or viable child is born if the mother has no other children under 16 years of age. Where there are one or two other children under 16 the amount payable is £16, and where there are three or more other children under 16 the amount payable is £17 10s. Where more than one child is born at a birth the amount of the allowance is increased by £5 in respect of each additional child born at that birth. Detailed particulars regarding maternity allowances are given in Chapter XV.—Welfare Services.

3. **Nursing Activities.**—(i) *General.* In several of the States, the Government maintains institutions which provide treatment for mothers and children, and, in addition, subsidies are granted to various associations engaged in welfare work.

(ii) *Details by States.* In earlier issues of the Official Year Book (*see* No. 22, pp. 515–6) information may be found concerning the activities of institutions in each State.

(iii) *Summary.* The following table gives particulars of the activities of Baby Health Centres and Bush Nursing Associations :—

BABY HEALTH CENTRES AND BUSH NURSING ASSOCIATIONS, 1955.

Heading.	N.S.W.	Vic.	Qld.(a)	S. Aust.	W.Aust.	Tas.	A.C.T. (a)	Total.
Baby Health Centres—								
Metropolitan .. No.	97	151	55	79	26	26	7	441
Urban-Provincial and Rural .. No.	226 (b)	376	169	146	27	67	..	1,011
Total .. No.	323	527	224	225	53	93	7	1,452
Attendances at Centres								
No.	1,032,852	1,128,292	370,680	221,633	191,677	128,889	25,210	3,099,233
Visits paid by Nurses								
No.	26,945	103,649	26,348	25,694	20,514	79,858	2,721	285,729
Bush Nursing Associations								
—Number of Centres ..	31	58	7	33	9	29	..	167

(a) Year ended 30th June, 1955.

(b) Includes eight mobile units which served 26 centres.

In the last twenty-five years, the number of attendances at the Baby Health Centres has more than trebled. The numbers of attendances, at five-yearly intervals, since 1930 were as follows :—1930, 919,893 ; 1935, 1,355,306 ; 1940, 2,035,299 ; 1945, 2,927,764 ; 1950, 3,049,375. During the year 1954, the number of attendances was 3,062,966.

§ 3. Medical Inspection of School Children.

1. **General.**—Medical inspection of school children is carried out in all the States and the Australian Capital Territory. Medical staffs have been organized, and in some States travelling clinics have been established to deal with dental and ocular defects.

2. **New South Wales.**—(i) *School Medical Service.* The primary object of the School Medical Service is the medical examination of children attending all schools administered by the Department of Education and also children attending the majority of other schools in the State to discover any departure from normal in the health of a child, either physical or mental, and to notify the parent or guardian, in order that the child may be further investigated to determine the need for treatment. Treatment is accepted as the responsibility of the practising medical profession.

Medical officers make an annual visit to schools in the metropolitan, Newcastle and Wollongong areas, and in five country towns (Armidale, Tamworth, Bathurst, Orange and Wagga), and examine children in kindergarten or 1st grade in primary schools and 1st and 4th years in secondary schools. Children in other classes are examined or reviewed, as necessary. The vision and hearing of pupils are re-tested in 4th grade.

In country areas, the object is for medical officers to visit schools every three years, and for all children attending to be examined. Owing to insufficient staff, the country portion of the programme cannot be completed each year.

When an abnormal condition, not under effective treatment, is found, the parent is informed in writing and, if possible, is called in for interview with the examining medical officer. In the metropolitan, Newcastle and Wollongong areas, school nurses follow up these cases with the object of persuading parents to seek medical advice.

As well as examining school children, the medical officer examines the sanitary arrangements at each school.

During 1955, medical officers of this service examined 161,581 children, compared with 152,138 examinations carried out in 1954. Of the total number, 95,338 children were fully examined, equalling 14.5 per cent. of the school population for the State. In addition, the cases of 66,243 children were reviewed during the year.

Defects of notifiable standard, including unhealthy mouths, were found in 22.5 per cent. of the children fully examined. It was found necessary to notify 71 per cent. of the total 21,373 defects recorded to parents or guardians, in order that further investigation and/or treatment could be effected.

The establishment of the service consists of 32 permanent and 2 part-time medical officers; 5 psychiatrists; 2 part-time ear, nose, and throat surgeons; 5 psychologists; 29 nurses; 9 social workers; 10 speech therapists; 8 trainees in speech therapy; 13 clerical officers; and a telephonist.

Surveys. Various surveys of school children are undertaken from time to time, e.g. hookworm survey, height-weight survey, nutrition surveys, and investigations to determine the incidence of enlargement of the thyroid gland, defective vision, postural defects, etc.

Hearing Surveys. In addition to the hearing tests carried out by the school nurses and medical officers in the course of the routine medical examination, audiometric surveys and follow-up tests are undertaken. Part-time ear, nose and throat specialists review the condition of children found to have any significant degree of deafness, give advice with regard to treatment, and advise whether the use of a hearing aid is desirable. Their suitability for admission to an opportunity deaf class or school for deaf children is also considered.

Teachers' Colleges. Medical officers of the service attached to teachers' colleges lecture in school health and other subjects to students in the colleges and are responsible for the health supervision of college students.

Child Guidance Clinics. Starting with the appointments of a psychiatrist and a psychologist in 1936, five child guidance clinics have now been established under the administration of the school medical service. They are all located in the metropolitan area. One clinic functions at the Yasmarr Boys' Shelter and deals exclusively with cases before the Children's Courts. Each clinic is now staffed by a psychiatrist, a psychologist and social workers.

Bush Nursing Association. An arrangement exists whereby bush nurses act as school nurses in schools at or near the Bush Nursing Centres and carry out a limited inspection for the detection of defects or unhygienic conditions.

In addition to having the abovementioned functions, the service carries out the medical administrative work of the Department of Education. It is also the advisory authority for the control of infectious diseases among school children.

(ii) *School Dental Service.* There are 21 travelling School Dental Clinics. The aim of the School Dental Service is not only to provide dental treatment for children on school premises, but also to train them in the care of their teeth, and teach them the principles of dental health.

Of 46,044 children examined in both city and country schools, 38,425 were included in a Dental Health Survey. Of these, 6.7 per cent. were found to have naturally sound mouths, whilst an additional 18 per cent. were found to have sound mouths as a result of treatment. 75.3 per cent. were in need of treatment.

In 1955, the clinics treated 22,684 children in 58,748 visits; 42,717 teeth were extracted; 40,530 permanent fillings and 52,958 other treatments, including prophylaxis, were provided. There was a general increase in the work compared with 1954.

The number of clinics has never been sufficient to provide more than a limited service. It has been found necessary to restrict treatment to the ages 6-8 years in the metropolitan area, and 6-9 years in large country centres. In small outlying rural schools, children of all ages are included.

In addition to the normal dental services in schools, treatment was carried out for the children at the Glenfield Special School.

3. **Victoria.**—The School Medical and Dental Services are gradually being extended throughout the State. The objective of the medical services is to ensure that each child is examined to ascertain any physical defects at least once in every three years of school life. Parents are informed concerning such defects and advised how treatment may best be obtained. In 1955, approximately 112,000 children were examined, 65 per cent. of them being in the metropolitan area.

Nurses employed for the purpose perform valuable follow-up work in interviewing parents to ensure that as far as possible treatment recommended is carried out. There are at present 25 medical officers and 36 nurses employed in this service.

The School Dental Service affords dental treatment to children attending primary schools and resident in institutions in certain parts of the State. The districts included are progressively extending as facilities and staff increase.

Children from metropolitan schools in industrial suburbs are transported to the School Dental Centres by contract bus service. Country schools are visited by mobile dental units.

Six dental vans and five semi-trailer (two-surgery) units are operating in the mobile service. Three additional vans will shortly be put into operation.

The Dental Service has a staff of 35 dentists, 38 dental attendants and 9 others. During 1955, 33,000 children attending 378 schools were examined and all necessary dental treatment carried out. This treatment included approximately 35,000 extractions and 59,000 fillings.

4. **Queensland.**—During 1954–55, the School Health Services Branch employed 3 full-time and 1 part-time medical officers, 23 nurses, 16 dentists and 1 part-time dentist.

The medical officers and nurses examined school children regularly, referring children with defects to their own medical advisers. During 1954–55, 86,818 medical examinations were conducted.

Advice is given on school sanitation, infectious diseases in schools and health education.

During 1954–55, school dentists gave treatment to 11,003 school children whose parents could not afford private treatment. The treatment was carried out at four rail dental clinics and at schools with portable equipment. In addition, school children are treated at hospital dental clinics in the larger towns.

In Western Queensland, local practitioners act as part-time ophthalmic officers.

In North Queensland, two school sisters assist in the control of hookworm.

During 1954–55, the cost of the service was £77,875.

5. **South Australia.**—Children in State schools are examined while in Grades 1, 4 and 7 in the primary schools, and in their second and fourth years in secondary schools. Efforts are made to visit country schools every three or four years and all the children are examined. Students who wish to become teachers are examined on appointment as preliminary probationary students while still attending secondary schools, again immediately prior to entering the Teachers' College and finally when they leave the college to take up teaching duties. Courses of lectures in hygiene and in first aid are given to all college students and, in addition, domestic arts students are lectured on home nursing.

The medical staff consists of a principal medical officer, 4 medical officers and 7 trained nurses. Three dentists and two assistants are attached to the branch.

During 1955, 35,359 children were examined by medical officers and of these 2,145 required notices for defective vision, 884 for defective hearing, and 896 for their tonsils and adenoids.

The Psychology Branch consists of a senior psychologist, 2 psychologists, a senior guidance officer, 2 guidance officers, 2 social workers, an advisory teacher of opportunity classes, an advisory teacher of hard-of-hearing children, a part-time speech therapist, a part-time consultant psychiatrist and a part-time consultant neurologist. The work of the Branch may be divided into three sections—clinical, educational and vocational.

Clinical. The clinical work involves examining difficult children of many types, including those with such problems as backwardness, truancy, delinquency, etc. In addition, the parents of all children examined are interviewed and their co-operation is sought.

Educational. In addition to supervising opportunity and special classes for children backward in school work, the Branch advises on questions of placement and types of education for ordinary children in schools.

Vocational. The guidance officers are responsible for the supervision of record cards where used in primary schools. They also test and advise all children about to leave school.

The Branch also lectures to students of the Teachers' College as well as to other interested organizations such as mothers' clubs.

Expenditure of the Medical and Psychology branches was £17,752 during 1955.

6. **Western Australia.**—Under the Health Act 1911–1955, the medical officers appointed by the local authorities became medical officers of schools and of school children.

In the Health Department, there are five full-time medical officers for schools. During 1955, 35,868 children were examined (metropolitan 18,651, country 17,217), of whom 19,303 were boys and 16,565 girls. There were 230 schools visited, comprising metropolitan, 57 State schools, 33 convents and 10 kindergartens, and country, 100 State schools, 26 convents and 4 kindergartens. The principle aimed at is to examine every school child once every two years.

During 1955, the 7 full-time dental officers employed visited 13 metropolitan schools, 120 country schools, and 5 metropolitan and 4 country orphanages. The number of children examined was 8,585 of whom 5,228 were treated with their parents' consent. The cost of this service for 1954–55 was £42,416.

7. **Tasmania.**—During the year 1955, 4 full-time and 2 part-time medical officers examined school children in State and private schools. Some Government medical officers assisted in the examination of school children in isolated areas. 13 full-time and 2 part-time sisters visited homes and schools regularly. Of the 22,140 children examined by medical officers 9,620 were found to have defects, 3,942 requiring dental treatment.

There are 17 school dental clinics in Tasmania. Surgeries are located at Hobart (2), Launceston (2), Burnie and Devonport, mobile clinics being operated in other districts. A full-time dental surgeon is in charge of each surgery or clinic. During the year there were 17,320 new visits to the school dentists and 29,167 repeat visits.

The cost of the school medical and school dental services for the year ended June, 1955 was £66,635.

8. **Australian Capital Territory.**—The Commonwealth Department of Health is responsible for the medical inspection of school children in the Australian Capital Territory.

During 1951, with the appointment of an Infant Welfare and Schools Medical Officer, a plan was introduced for triennial examinations of children in primary and secondary schools, attention also being paid to those children with defects, many of whom were marked for review. At pre-school centres and nursery schools, all children were to be examined on entrance and reviewed in their second year of attendance.

It was apparent at the commencement of 1955 that, owing to a great increase in the child population of the Australian Capital Territory, some modification of the School Medical Officer's programme would be necessary if all schools and play centres were to receive their share of attention. Accordingly, initial examinations were carried out on school children who were members of 1st class (mostly six year olds) instead of five year olds in Kindergarten. Examination of this age group was found to be less time-consuming and results were found to be more reliable than that of the earlier age groups. Children in 3rd class (mostly eight year olds) received full examination whilst those in 6th class (mostly eleven year olds) received tests for sight and hearing only. Third year classes in High School had full examination whilst pre-school children were examined once only before entering Primary School.

In 1955, 1,365 school children and 621 pre-school children were fully examined. In addition, 430 school children received tests for eyesight and hearing only.

§ 4. Inspection and Sale of Food and Drugs.

Public health legislation in force in all States provides for the inspection of foods and drugs with the object of ensuring that all goods sold shall be wholesome, clean and free from contamination or adulteration, and that all receptacles, places and vehicles used for their manufacture, storage or carriage shall be clean. For further particulars in this connexion, *see* § 1. Public Health Legislation and Administration, p. 489.

§ 5. Supervision of Dairies, Milk Supply, Etc.

In earlier issues of the Official Year Book (*see* No. 22, p. 498), reference was made to the legislation in force in the various States to ensure the purity of the milk supply and of dairy produce generally.

§ 6. Disposal of the Dead by Cremation.

Disposal of the dead by cremation has been carried out in Australia for many years, the first crematorium having been opened in South Australia in 1903. The number of crematoria in New South Wales is six ; the first was opened in 1925. There are two crematoria in Victoria ; the first, opened in 1905, was closed in 1926, but was re-opened in 1936, while the other one was opened in 1927. There are two crematoria in Queensland, the first being opened in 1934. In South Australia, one crematorium opened in 1903 and a second opened in December, 1955. In Western Australia, there is one crematorium which opened in 1939. In Tasmania there are two crematoria ; the first was opened in 1936.

The following table shows the number of cremations in each State for the five years 1952 to 1956 :—

CREMATIONS.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1952	10,165	5,338	2,569	(a) 347	929	532	19,880
1953	10,556	5,513	2,723	(a) 348	924	538	20,602
1954	10,962	5,593	2,879	(a) 309	1,007	573	21,323
1955	11,128	6,119	2,993	431	1,169	549	22,389
1956	12,358	6,733	3,341	514	1,201	551	24,698

(a) Year ended 30th June of year shown.

B. PUBLIC HEALTH—COMMONWEALTH GOVERNMENT ACTIVITIES.

§ 1. General.

At the time of federation, the Commonwealth Constitution gave the Commonwealth Government the power to make laws with respect to quarantine. All residual health powers remained with the State Governments.

The Commonwealth Department of Health was created by an Order in Council of 3rd March, 1921. This Order specified the functions to be performed by the Department in addition to quarantine. An amendment to the Constitution in 1946 gave the Commonwealth power to make laws with respect to pharmaceutical, hospital and sickness benefits, and medical and dental services. In addition, the Commonwealth Government has used its powers under Section 96 of the Constitution to make grants to the States for health purposes.

§ 2. National Health Benefits.

1. Pharmaceutical Benefits.—Since September, 1950, under the provisions of the Pharmaceutical Benefits Act 1947–1952 and the National Health Act 1953–1956, certain life-saving and disease-preventing drugs have been provided free of charge to the general community. Such drugs are supplied free if they have been duly prescribed by a medical practitioner registered within Australia.

The number of drugs listed as available as general pharmaceutical benefits has steadily increased and at 30th June, 1956, 246 separate preparations were supplied. Before a drug is listed as being available, it must first be approved by the Pharmaceutical Benefits Advisory Committee, a body appointed by the Minister for Health.

All drugs listed in the British Pharmacopoeia and other drugs as specified, are supplied free to persons receiving an age, invalid, widow's or service pension or a tuberculosis allowance and their dependants.

Total expenditure on pharmaceutical benefits in the year 1955–56 was £11,887,434.

2. Hospital Benefits.—The payment of hospital benefits to the States is authorized under Part V. of the National Health Act 1953–1956. This Act continues the agreements entered into with the various States under the Hospital Benefits Act 1951. Under these agreements, the Commonwealth pays the States certain sums of money which vary according to the number of occupied beds in public hospitals.

The rates of payment for occupied beds in public hospitals are determined by the category into which patients are grouped. Payment of 12s. per day is made for a patient who is a pensioner or a dependant of a pensioner. The rate of 8s. per day is paid for all other qualified patients.

A payment of 8s. per day is made also for patients in approved private hospitals. This payment is made to the proprietor of the private hospital. A condition of the benefit is that an equivalent amount has been allowed against the patient's account.

An additional benefit of 4s. per day is paid in the case of patients who are members of a registered hospital benefit fund. This payment is made through the benefit organization and is normally paid to the patient with the amount payable by the organization.

Australian residents who are temporarily living overseas and their dependants who receive hospital treatment are eligible to receive the benefit of 8s. a day and the additional benefit of 4s. a day.

Total payments made for all types of hospital benefits (excluding patients in mental hospitals) in 1955-56 were £9,552,944.

The following tables show the number of registered organizations, the membership thereof, and payments of Commonwealth benefits and hospital fund benefits on account of occupied beds in public and approved private hospitals. As many persons contribute on behalf of both themselves and their dependants, the total number of persons covered by hospital benefits schemes is considerably higher than the number of members. Reliable figures for coverage are not available.

HOSPITAL BENEFITS : SUMMARY 1953-54 to 1955-56.

1. Ordinary Benefits (a). Payable to Hospitals in respect of all occupied beds.

Year Ended.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Territories and Overseas	Total.
	£	£	£	£	£	£	£	£
30th June, 1954..	2,768,923	1,760,000	1,251,000	608,000	527,000	232,916	50,928	7,138,667
30th June, 1955..	3,160,551	1,835,000	1,278,000	643,000	591,992	246,020	52,945	7,807,509
30th June, 1956..	3,112,037	1,896,789	1,308,000	665,000	617,979	255,668	58,757	7,914,230

(a) Ordinary benefits are payable in respect of :—(i) Beds occupied by pensioners in public hospitals (12/- a day); (ii) Beds occupied in certain South Australian hospitals (12/- a day); and (iii) Other occupied beds in public hospitals and approved private hospitals (8/- a day).

2. Additional Benefits. Payable through Benefit Organizations.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.
YEAR ENDED 30TH JUNE, 1954.							
Registered Organizations	No. 28	56	3	16	13	11	127
Members ..	No. 848,000	574,000	114,000	120,000	164,000	45,000	1,865,000
Commonwealth Benefit	£ 674,833	214,007	33,292	41,143	129,803	38,208	1,131,286
Fund Benefit ..	£ 1,706,910	432,630	134,316	123,773	227,473	98,726	2,723,828
YEAR ENDED 30TH JUNE, 1955.							
Registered Organizations	No. 28	56	3	16	14	11	128
Members ..	No. 942,800	618,865	152,474	161,944	174,040	61,192	2,111,315
Commonwealth Benefit	£ 839,108	344,422	63,412	68,067	153,267	44,819	1,513,095
Fund Benefit ..	£ 2,404,398	670,025	324,618	250,226	339,402	155,049	4,143,718
YEAR ENDED 30TH JUNE, 1956.							
Registered Organizations	No. 28	55	2	16	13	10	124
Members ..	No. 985,666	641,143	177,110	181,944	182,927	78,423	2,247,213
Commonwealth Benefit	£ 866,654	396,254	76,111	82,307	161,314	56,074	1,638,714
Fund Benefit ..	£ 2,743,953	701,713	455,359	353,742	386,412	217,599	4,858,778

3. **Medical Benefits.**—A Medical Benefits scheme commenced to operate from July, 1953, being authorized under the National Health (Medical Benefits) Regulations. These regulations were superseded by the National Health Act 1953.

The basic principle of the scheme is Commonwealth support of voluntary insurance against the costs of medical attention. The benefits payable by the Commonwealth are paid either on a fee-for-service basis in respect of the items set out in the first and second schedules to the National Health Act, or in the form of a subsidy, not exceeding half of the payments made to doctors by registered organizations under contract arrangements.

In order to qualify for the Commonwealth benefit, a person is required to be insured with a registered medical benefits organization. The organization pays the benefits to the contributor usually at the same time as it pays its own benefits. Reimbursements of the Commonwealth benefit is subsequently made to the organization by the Commonwealth.

An organization wishing to be registered by the Commonwealth for the purposes of the medical benefits scheme is required to provide to its contributors, subject to its rules, all benefits specified in the first schedule, at rates not less than those provided by the Commonwealth. The organization must be non-profit-making.

In 1955-56, Commonwealth expenditure on medical benefits was £5,413,319.

The following tables show the number of registered medical benefit organizations, the membership thereof, and payments of Commonwealth benefits and medical fund benefits to members of registered organizations. As many persons contribute on behalf of both themselves and their dependents, the total number of persons covered by medical benefit schemes is considerably higher than the number of contributors. Reliable figures for coverage are not available.

MEDICAL BENEFITS : SUMMARY, 1953-54 to 1955-56.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.
YEAR ENDED 30TH JUNE, 1954.							
Registered Organizations							
Members .. No.	24	21	6	9	9	10	79
Medical Services .. No.	561,964	370,674	126,974	131,501	130,745	36,479	1,358,337
Commonwealth Benefit £	1,408,441	721,362	339,331	379,613	356,533	78,454	3,283,734
Fund Benefit .. £	645,311	291,255	147,060	161,749	158,308	30,483	1,434,166
	685,151	239,436	143,872	158,272	203,705	33,977	1,464,413
YEAR ENDED 30TH JUNE, 1955.							
Registered Organizations							
Members .. No.	24	21	7	9	9	10	82
Medical Services .. No.	733,934	413,651	163,498	152,385	156,231	45,825	1,665,504
Commonwealth Benefit £	4,160,011	2,405,062	890,907	933,224	897,557	166,219	9,452,980
Fund Benefit .. £	1,855,211	1,071,664	396,368	398,518	413,165	74,569	4,209,495
	2,217,657	968,334	430,716	410,628	534,057	86,787	4,648,179
YEAR ENDED 30TH JUNE, 1956.							
Registered Organizations							
Members .. No.	25	22	7	9	9	10	82
Medical Services .. No.	855,772	447,145	192,356	170,058	171,654	63,700	1,900,685
Commonwealth Benefit £	5,543,465	2,944,861	1,194,971	1,119,653	1,206,135	249,705	12,258,790
Fund Benefit .. £	2,449,426	1,298,613	528,141	491,083	532,501	113,555	5,413,319
	3,009,192	1,245,286	602,276	525,819	677,619	143,584	6,203,776

4. **Pensioner Medical Service.**—The Pensioner Medical Service, which commenced on 21st February, 1951, was introduced under the authority of the National Health (Medical Services to Pensioners) Regulations made under the provisions of the National Health Service Act 1948–1949. The service has been continued under the provisions of the National Health Act 1953–1956.

Under this scheme, pensioners and their dependants, as defined in the section above describing pharmaceutical benefits, are provided with a free general practitioner service. Specialist services are not provided. A small fee may be charged by practitioners who attend qualified patients outside normal surgery or visiting hours. Practitioners in the scheme are remunerated on a fee-for-service basis by the Commonwealth.

At the 30th June, 1956, there were 4,730 medical practitioners enrolled in the Pensioner Medical Service to provide medical services to approximately 668,200 eligible persons. More than 80 per cent. of general practitioners are participating.

In the year ended 30th June, 1956, medical practitioners in the scheme made 5,183,245 visits or surgery consultations to persons enrolled in the scheme. For these services, they were paid a sum of £2,837,406. The average number of medical services rendered by practitioners to eligible persons in this period was 7.9.

5. **Anti-Tuberculosis Campaign.**—The main provisions of the Tuberculosis Act, which was assented to on 25th November, 1948, are as follows :—(a) Section 5, which authorizes the Commonwealth to enter into an arrangement with the States for an effectual national campaign against tuberculosis ; (b) Section 6, which empowers the Commonwealth to take over or provide specified facilities for the diagnosis, treatment and control of tuberculosis ; (c) Section 8, which provides for the setting up of an Advisory Council to advise the Commonwealth Minister for Health on matters relating to the national campaign; and (d) Section 9, which authorizes the Commonwealth to pay allowances to sufferers from tuberculosis and their dependants to enable sufferers to give up work and undergo treatment, and thus minimize the spread of infection.

The Commonwealth has completed an arrangement with each State, whereby each State is required to conduct an effectual campaign against tuberculosis and to provide adequate facilities for that purpose. In consideration of this, the Commonwealth undertakes to reimburse the State for all approved capital expenditure in relation to tuberculosis on and after 1st July, 1948, and for net maintenance expenditure to the extent that it is in excess of net maintenance expenditure for the year 1947–48. Thus the States are required to carry out the actual physical or field work of the national campaign with the Commonwealth acting in an advisory, co-ordinating and financial capacity. For this reason, the Commonwealth has not found it necessary to use its powers under Section 6 other than in its own Territories.

An Advisory Council, known as the National Tuberculosis Advisory Council, has been set up and has held seven meetings. There are eleven members under the chairmanship of the Commonwealth Director-General of Health. The members are the Commonwealth Director of Tuberculosis, the six State Directors of Tuberculosis, the Consultant (Chest Diseases) of the Department of Repatriation, two specialist private practitioners, and the Chief Administrative Officer of the Commonwealth Department of Health.

A system of tuberculosis allowances has been drawn up and is an important factor in the campaign against the disease. Payments under the scheme were commenced on 13th July, 1950. The rates of allowance from 27th October, 1955, were £9 12s. 6d. a week for a married sufferer with a dependent wife, £6 2s. 6d. a week for a sufferer without dependants (reducible to £4 when maintained free of charge in an institution), and 10s. a week for each dependent child under the age of sixteen (which is additional to child endowment). There is a means test, generous to the sufferer, which has regard only to income and not to property.

The following tables give particulars of the number of new cases of tuberculosis notified in Australia for the years 1953-54, 1954-55 and 1955-56 :—

TUBERCULOSIS : NEW CASES NOTIFIED.

State.	Age Group.					Total.
	0-14.	15-34.	35-54.	55 and over.	Not Stated.	
YEAR ENDED 30TH JUNE, 1954.						
New South Wales ..	67	609	779	640	8	2,103
Victoria	88	387	353	194	..	1,022
Queensland	33	245	285	233	10	806
South Australia ..	26	133	128	80	..	367
Western Australia ..	14	109	146	83	10	362
Tasmania	25	81	62	34	2	204
Northern Territory ..	4	28	13	3	2	50
Australian Capital Territory .. ..	..	2	3	..	..	5
Australia	257	1,594	1,769	1,267	32	4,919
YEAR ENDED 30TH JUNE, 1955.						
New South Wales ..	57	564	792	662	12	2,087
Victoria	83	406	341	231	6	1,067
Queensland	33	189	233	223	47	725
South Australia ..	23	123	113	61	..	320
Western Australia ..	26	132	189	118	5	470
Tasmania	14	80	61	38	..	193
Northern Territory ..	4	15	12	8	..	39
Australian Capital Territory .. ..	..	2	1	1	..	4
Australia	240	1,511	1,742	1,342	70	4,905
YEAR ENDED 30TH JUNE, 1956.						
New South Wales ..	72	460	692	558	1	1,783
Victoria	67	322	344	201	..	934
Queensland	21	166	231	237	30	685
South Australia ..	41	107	105	69	..	322
Western Australia ..	20	114	173	127	2	436
Tasmania	10	93	57	46	..	206
Northern Territory ..	5	12	9	9	..	35
Australian Capital Territory .. ..	..	2	3	2	..	7
Australia	236	1,276	1,614	1,249	33	4,408

6. Anti-Poliomyelitis Campaign.—The success of the 1954 United States field trials of the poliomyelitis vaccine developed by Dr. Jonas Salk and his associates at the University of Pittsburg was announced in April 1955. The Commonwealth Government immediately decided to produce the anti-polio vaccine in Australia.

With the advantage of the experiences of the campaigns in the United States and Canada, Australia has adopted a vaccine which has already been proved to possess safety and effectiveness in building up immunity against poliomyelitis.

The vaccine was being produced in Australia by the end of 1955 under the most rigid safety conditions. Plans were made for comprehensive testing procedures to be carried out at many stages both during the production process and with the finished product. These tests assured the maintenance of safety standards no less rigid than those laid down in other countries where vaccination campaigns were in progress. The Research Laboratory at the Fairfield Hospital, Melbourne, agreed to act as an independent testing authority under an arrangement with the Commonwealth Government, whilst the pathology department of the University of Melbourne also agreed to conduct tests. No vaccine was released for use unless the searching requirements of the Commonwealth Serum Laboratories, the Fairfield Hospital, and the University of Melbourne were met.

The vaccine was supplied to the States free of charge and the States accepted responsibility for the cost of their particular vaccination programmes. No child can be vaccinated without the consent of his parents or guardian.

Distribution of the Salk poliomyelitis vaccine to the States began in July, 1956. The States are responsible for the organization and running of their own campaigns and for the distribution of the vaccine in accordance with priority groups established by the National Health and Medical Research Council. The first priority group consisted of children in the 0-14 age group, expectant mothers and persons subjected to special risk. These persons have been found to be the most vulnerable. Later when supplies become adequate the vaccine will be more widely available.

Vaccination against poliomyelitis takes the form of three injections of the vaccine. The second injection is given approximately four weeks after the first, whilst the third injection is given not less than 32 weeks after the first.

From the commencement of the campaign in each State in July, 1956, up to 31st December, 1956, 1,372,351 persons had received their first injection. Of these, 1,133,769 had received their second injection.

It is expected that all children in the 0-14 age group will have received their complete course of injections by August, 1957. Where the incidence of the disease in certain areas approaches epidemic proportions, special efforts are made to vaccinate all persons giving their consent in the area as soon as possible.

There has been excellent response by the public to the poliomyelitis campaign, notwithstanding the widespread doubts which arose from mishaps overseas.

POLIOMYELITIS : NEW CASES NOTIFIED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
MALES.									
1951	909	239	610	752	57	90	5	7	2669
1952	239	183	85	385	21	66	..	1	980
1953	384	147	105	191	25	62	1	1	916
1954	343	317	81	88	244	8	..	17	1098
1955	143	145	95	91	15	4	4	1	498
FEMALES.									
1951	617	194	420	704	37	81	3	10	2066
1952	176	152	74	324	16	34	..	..	776
1953	251	104	93	201	20	49	..	..	718
1954	219	255	59	86	190	2	..	9	820
1955	75	90	80	81	18	4	..	..	348
PERSONS.									
1951	1,526	433	1,030	1,456	94	171	8	17	4,735
1952	415	335	159	709	37	100	..	1	1,756
1953	635	251	198	392	45	111	1	1	1,634
1954	562	572	140	174	434	10	..	26	1,918
1955	218	235	175	172	33	8	4	1	846

7. **Free Milk for School Children Scheme.**—In 1950, the States Grants (Milk for School Children) Act was passed. The object of this Act was to improve the diet of school children by the addition of a small quantity of milk each day. All children under the age of thirteen years attending public or private primary schools, including nursery schools, kindergartens, crèches and aboriginal missions, are eligible to receive this issue. Wherever practicable, the milk is given to the children in one-third of a pint bottles. The cost of the milk plus half the capital or incidental costs, including administrative expenses of the scheme, is reimbursed by the Commonwealth to the States. All States are now participants in the scheme, and at 30th June, 1956 approximately 1,100,000 children were receiving free milk.

In the years 1954–55 and 1955–56 the following amounts were reimbursed to the various States and Territories :—1954–55, New South Wales £980,589, Victoria £498,000, Queensland £323,340, South Australia £156,000, Western Australia £127,015, Tasmania £145,695, Northern Territory £921, Australian Capital Territory £10,760, Australia £2,242,320 ; 1955–56, New South Wales £1,042,173, Victoria £540,000, Queensland £308,000, South Australia £184,000, Western Australia £137,211, Tasmania £185,000, Northern Territory £1,016, Australian Capital Territory £14,048, Australia £2,411,448.

§ 3. Commonwealth Laboratories and Research Institutions.

1. **National Health and Medical Research Council.**—In 1926, the Commonwealth Government established a Federal Health Council, in accordance with a recommendation of the Royal Commission on Health (1925), “for the purpose of securing closer co-operation between the Commonwealth and State Health Authorities”. This council held sessions each year except in 1932. In 1936, the Commonwealth Government decided to create a body with wider functions and representation, and the National Health and Medical Research Council was established with the following functions :—

- To advise Commonwealth and State Governments on all matters of public health legislation and administration, on matters concerning the health of the public and on medical research.
- To advise the Commonwealth Government on the expenditure of money specifically appropriated to be spent on the advice of this Council.
- To advise the Commonwealth Government on the expenditure of money upon medical research and on projects of medical research generally.
- To advise Commonwealth and State Governments upon the merits of reputed cures or methods of treatment which are from time to time brought forward for recognition.

The council consists of the Commonwealth Director-General of Health (as chairman), two officers of his department, the official head of the Health Department in each State, together with representatives of the Federal Council of the British Medical Association, the Royal Australasian College of Surgeons, the Royal Australasian College of Physicians, the Australian Regional Council of the Royal College of Obstetricians and Gynaecologists, the Australian Dental Association, the Australian Council of the College of General Practitioners and (jointly) the four Australian universities having medical schools. A prominent layman and laywoman, appointed by the Commonwealth Government, also serve on the council.

The first session of the National Health and Medical Research Council met at Hobart in February, 1937. The forty-first session met at Sydney in May, 1956.

Under the Medical Research Endowment Act 1937, the Commonwealth Government has made an annual appropriation of funds to provide assistance :—(a) to departments of the Commonwealth or of a State engaged in medical research ; (b) to universities for the purpose of medical research ; (c) to institutions and persons engaged in medical research ; and (d) in the training of persons in medical research.

Approved research institutions under this system now number 51. During 1955, grants for projects numbered 50 in the following fields :—bacteriology, biochemistry, biophysics, clinical research, dental research, epidemiology, haematology, medical chemistry, neurology, neuro-physiology, obstetrics, pathology, physiology and pharmacology, tuberculosis and virus diseases. In certain instances, equipment and apparatus have been made available by the council ; this has greatly facilitated some specialized lines of research. The wide scope of work being carried out is greatly assisted by the formation of committees which meet regularly and advise the council on such subjects as industrial hygiene, public health, epidemiology, maternal and child welfare, radio-active isotopes, antibiotic distribution, tropical physiology and hygiene, tuberculosis, staphylococcus infections, dental research and the latest developments in X-ray technology and application.

The research work being done under these grants is of a high standard, many of the individual investigators enjoying international reputations. Beyond this practical achievement, the original objectives of the council are being attained in encouraging young graduates to take up research work and in securing a continuity and permanence of medical research in Australia.

Four scholarships are available each year to allow overseas study for one year; in addition, assistance is often given to scholarship holders to cover part of their travel expenses.

An insurance benefit scheme for these medical workers on the lines of the Federated Superannuation System for Universities is now in operation.

2. Commonwealth Serum Laboratories. The laboratories were established in 1916 under the administration of the Quarantine Branch, Department of Trade and Customs. Work began in temporary quarters, but new buildings were erected and occupied in 1918 at Royal Park, Melbourne, where the Commonwealth had acquired 23 acres. Administrative control was transferred to the Commonwealth Department of Health, by Order in Council, in March, 1921. In 1936, a farm of 325 acres was purchased for experimental and other purposes at Broadmeadows, 9 miles from Melbourne.

The laboratories function as a Public Health Institute and are part of the Commonwealth Department of Health, conducting research and training of laboratory personnel. In addition, biological products are prepared on a large scale for use in the diagnosis, prevention and treatment of human and animal diseases. These products consist of a full range of human bacterial vaccines, human virus vaccines, veterinary bacterial and virus vaccines, various serum products such as blood fractions, a wide range of anti-bacterial and anti-toxic sera and antivenenes. Antibiotics including penicillin, endocrines such as insulin, A.C.T.H., pituitrin and thyroid, allergy test materials and desensitising vaccines, medical and veterinary clinical and laboratory diagnostic agents, culture media of wide range and numerous related products are fully prepared.

Since their foundation, the laboratories have been greatly extended in size and scope. The number and variety of biologicals available for issue have thus been increased to the extent that Australia is practically independent of oversea supplies.

Continuous research is being conducted into all relevant aspects of bacteriology and immunology and related fields of work. New kinds of biological agents are prepared and tested as the growth of medical or scientific knowledge provides fresh means of diagnosis, prevention and treatment. Investigations are also made into other aspects of public health work. For the past 30 years, the production of veterinary biologicals has been a feature of the work, and in recent years extensive development has occurred in this direction.

The result of the increasing employment of veterinary products in the prevention of diseases of domestic animals and stock is reflected in the diminution of incidence of certain infectious diseases amongst stock with economic benefit to the community.

The laboratories also serve as a national centre for the maintenance in Australia of the International Standards of the Permanent Commission on Biological Standards (World Health Organization), and act as the regional reference centre for the World Health Organization in collating reports of the prevalence of certain infectious diseases in Australia, and at the same time conduct laboratory investigations for the identification of diseases thus reported.

3. The Commonwealth Health Laboratories. The fourteen health laboratories of the Department are situated at various points throughout Australia. They are located at Canberra, Darwin, Cairns, Townsville, Rockhampton, Toowoomba, Bendigo, Launceston, Hobart, Port Pirie, Kalgoorlie, Lismore, Tamworth and Albury. These laboratories were established as an essential part of the quarantine system but were also to undertake research into local health problems and to provide medical practitioners of each district with up-to-date facilities for laboratory investigation and diagnosis. It was realized that co-operation between the general practitioner with his clinical observations and knowledge of the environment of disease on the one hand, and the staff of a well-equipped laboratory on the other hand, is essential to the efficient investigation of disease and the effective operation of control measures.

From this standpoint, the laboratories have already proved their value in the determination of leptospirosis and endemic typhus in North Queensland, in the investigation of special local problems in Darwin, of undulant fever throughout Australia, of silicosis and tuberculosis in Kalgoorlie and of plumbism in Port Pirie. In these investigations, close co-operation has existed with State and local health and hospital services; especially is this

so in Queensland where collaboration has yielded exceptionally valuable results in differentiating the groups of fevers previously unclassified in that State. In this investigational work, as well as in more routine activities, the laboratories have at their disposal the full resources and technical and specialist facilities available at the Commonwealth Serum Laboratories and the School of Public Health and Tropical Medicine, Sydney.

4. Commonwealth Acoustic Laboratories. In January, 1947, the Department of Health established the first of the series of Acoustic Laboratories in Sydney. The laboratory continued and expanded the work of the Acoustic Research Laboratory which was sponsored by the National Health and Medical Research Council during the years 1942-46 for the purpose of investigating problems of noise and difficulties of intercommunication in aircraft and tanks. After the 1939-45 War, the Acoustic Research Laboratory directed its attention to the problem of deafness in children, particularly the group whose affliction was caused by the mothers contracting rubella in the early months of pregnancy.

The taking over of the Acoustic Research Laboratory by the Department of Health was influenced by a request from the Repatriation Commission for technical assistance in the matter of providing hearing aids for deafened ex-servicemen. Arrangements for this purpose were completed and branch laboratories were established in all other State capital cities.

During 1948, the Acoustic Laboratories Act was passed to allow the expansion of activities on the following lines:—(1) To carry out the requirements of the Repatriation Commission for deafened ex-Service personnel and to provide a similar service for the Commonwealth Department of Social Services in respect of deafened ex-Service personnel whose disability was not caused by war service; (2) to assist the Education Departments of the States in measuring deafness, by providing and maintaining portable audiometric equipment; (3) to act on behalf of various State and other authorities who desire to have independent tests made before assisting financially in the purchase of hearing aids for people under their care; (4) to investigate problems associated with noise in industry; (5) to make hearing tests of Civil Aviation aircrew as required by international agreement; (6) to give advice to the armed services on noise problems as required; and (7) to provide hearing aids to school children.

The laboratory in Sydney is responsible for the training of personnel for the whole Acoustic Service, the production of equipment, the calibration of hearing aids and audiometers and the technical administration of the branch laboratories.

5. Commonwealth X-ray and Radium Laboratory. The persistent increase in cancer mortality has led to the development in Australia of a national organization directed towards the control of this disease. The Commonwealth Department of Health has actively participated in this movement. Annual cancer conferences, convened by the Department from 1928 up to the beginning of the 1939-45 War, provided an opportunity each year for those actively engaged in the campaign against the disease to meet for the discussion of problems and the determination of lines of action for further development.

Cancer conferences were not held during the war and have not been revived, primarily because facilities for the discussion of the various aspects of the treatment of cancer have been provided by the regular congresses of the British Medical Association and of the different specialist colleges and associations. The department has, however, continued to maintain liaison in the general programme against cancer and in March, 1955, convened a conference in Canberra of representatives of the Commonwealth and States to discuss the co-ordination of anti-cancer activities. This conference recommended that an annual conference of State-sponsored anti-cancer organizations should be convened by the Commonwealth Government and that consideration should be given to the formation of a nationwide Anti-Cancer Organization comprising representatives of the statutory Anti-Cancer Organizations.

A total of 10 grams of radium, purchased in 1928 by the Commonwealth Government for use in treatment and research, has been distributed on loan to treatment centres throughout Australia. Under the terms of this loan, treatment at well-equipped clinics is available to all requiring it, irrespective of ability to pay. This work is co-ordinated by the department. From time to time, portions of the original radium holding have been remounted by the department in forms more suitable for the more modern techniques which have been developed.

Realizing the essential importance of accuracy in determining the quality of radiation used in the treatment of cancer and in measuring the dosage of this radiation actually delivered to the tumour, and the need for the investigation of physical problems in connexion with the utilization of X-rays and radium in the treatment of disease, the Commonwealth Department of Health, in 1935, extended the work of the Commonwealth Radium Laboratory, established in 1929, to include the investigation of the physical problems of radiation therapy generally. This laboratory, known as the Commonwealth X-ray and Radium Laboratory, is situated, by agreement with the University of Melbourne, within the University grounds, and is maintained, controlled, and staffed by the Commonwealth Department of Health. It is accommodated in a building specially designed for work with X-ray and radium, and is amply provided with all necessary equipment for research work, including a 500,000 volt high tension generator. The free air chamber which acts as the Australian standard X-ray dosimeter is maintained in the laboratory.

The laboratory co-operates closely with the local physical services which have been developed in the other capital cities of Australia to provide local facilities for the production of radon, for the calibration of X-ray therapy equipment, and for the measurement of radiation exposure of X-ray and radium workers. It also undertakes investigations into physical problems arising in the use of X-rays and radium in treatment. In recent years, the laboratory has widened its functions to include investigations of the physical aspects of the diagnostic use of X-rays with particular emphasis on miniature radiography.

During the year 1955-56, a total of 91,353 millicuries of radon was prepared and issued from the laboratory in the form of implants, needles and tubes for use in Victoria, Tasmania, South Australia and Western Australia. A further 28,777 millicuries were issued by the associated centres in Sydney and Brisbane. The corresponding figures for 1954-55 were 94,774 and 30,663 millicuries respectively. The issue of radon from a few centres to serve hospitals all over the continent is a unique Australian development and enables a very efficient use to be made of the radium available.

The development of atomic energy programmes overseas has made available supplies of artificial radio-isotopes which can be used either as an alternative to natural isotopes such as radium and radon, or may be applied internally when they are selectively secreted in a particular organ. All radio-isotopes in use in Australia in medicine, research and industry are subject to the approval of the laboratory and are imported by the laboratory. Regular supplies of radio-phosphorus and radio-iodine are obtained and are distributed free of charge for the treatment of patients throughout Australia according to a policy developed by the Committee on Radio-isotopes of the National Health and Medical Research Council. The laboratory has been responsible for the development of a scheme of physical measurements required in the use of radio-iodine which can be readily carried out in individual hospitals.

Supplies of radio-gold and radio-chromium have also been obtained when required, while applicators for special purposes, containing radio-strontium and radio-cobalt have been purchased and issued to some hospitals. During 1955-56, 29 different radio isotopes were imported for all purposes.

The laboratory provides an advisory service on aspects of protection arising in the use of X-rays and radio-active materials.

Close co-operation is maintained between the medical men engaged in the clinical investigation and treatment of cancer and research workers, physicists, and biochemists, so that problems are mutually investigated and treatment applied with the highest obtainable degree of scientific accuracy.

6. **The School of Public Health and Tropical Medicine.**—On the 4th March, 1930, the Commonwealth Government, under an agreement with the University of Sydney, established a School of Public Health and Tropical Medicine at the University of Sydney for the purpose of training medical graduates and students in the subjects of public health and tropical medicine. The organization of the Australian Institute of Tropical Medicine at Townsville was merged in the new school, and the staff, equipment and material were transferred to Sydney.

The work of the school comprises both teaching and investigation. Courses are held for the University post-graduate diploma of public health and the diploma of tropical medicine and hygiene. Lectures are given in public health and preventive medicine as prescribed for the fifth year of the medical curriculum. Other classes include students, in architectural, social, and school hygiene, lay officers and nurses in the tropical services, and missionaries, while training is also provided for certain personnel of the Armed Services, for sister tutors, and for laboratory workers from various services and institutions.

Investigational work covers a wide field of public health and medical subjects, both in the laboratory and in the field. Field work has been carried out not only in Australia but in co-operation with the local administrations in Papua, New Guinea, Norfolk Island and Nauru and with the South Pacific Commission. Sections of Child Health, Occupational Health and Medical statistics have been recently added.

7. Commonwealth Bureau of Dental Standards.—The National Health and Medical Research Council sponsored the Dental Materials Research Laboratory during the years 1939–46, for the purpose of assisting the Defence Services, the Medical Equipment Control Committee and other Government Departments in the selection and purchase of suitable dental equipment and materials. Valuable assistance was also given to Australian manufacturers of dental materials in relation to improvement of their products and the development of new materials.

Much of the work was of a routine nature and after the 1939–45 War the National Health and Medical Research Council decided to cease its sponsorship, but recommended that the Department of Health should take over the laboratory as it was serving a good purpose. This was done in January, 1947, and the laboratory was renamed the Commonwealth Bureau of Dental Standards. It is at present situated in the grounds of the University of Melbourne.

The functions of the Bureau are as follows:—(1) Original research into dental equipment, materials, techniques and processes; (2) the development, through the Standards Association of Australia, in consultation with a committee representative of the Commonwealth Department of Health, of the Australian Dental Association and of manufacturers and distributors, of specifications for dental materials and equipment; (3) regular systematic surveys of dental materials on sale to the profession in Australia, and the reporting of the results of such investigations in recognized Australian scientific journals; and (4) the provision of a consultative service and testing facilities for local manufacturers and distributors of dental materials with a view to assisting them in the improvement of existing products and the development of new materials.

8. The Australian Institute of Anatomy. The Australian Institute of Anatomy, situated in Canberra, occupies a monumental building erected by the Commonwealth Government under the Zoological Museum Agreement Act of 1924 on a site which adjoins that of the Australian National University. Prior to the passing of this Act, the Commonwealth Government had expressed regret that the Australian nation possessed neither a collection of specimens of the unique and fast disappearing fauna of Australia, nor a museum in which such specimens could be preserved for future generations. Comparative anatomy is the basis of medical science, and while the importance of a study of Australian animals in the solution of various medical problems had for years been recognized by other countries and steps taken by them to procure specimens for their museums, national effort in this direction was neglected in Australia. The late Sir Colin MacKenzie, the first Director of the Institute of Anatomy, however, very kindly presented to the Commonwealth Government his entire private collection, and this magnificent gift was acquired and provision was made for its proper housing under special legislation by the Commonwealth Government. In 1931, the Institute became an integral part of the Commonwealth Department of Health.

The original collection has been greatly augmented. A list of gifts to the Australian nation may be found in Official Year Book No. 39, p. 1277. In addition to these donations of material, there have been several endowments for orations and lectures, particulars of which are shown in previous issues of the Official Year Book.

The Institute consists of two separate and distinct entities, a museum section and a laboratory section. In the museum section, there is displayed a portion of the original collection of anatomical specimens assembled by the late Sir Colin MacKenzie, together with ethnological collections which have been added since the foundation of the Institute. The materials in the museums, which are open to the general public, have been arranged so as to present simple lessons in human hygiene, to display the anatomical features and peculiarities of the Australian fauna, and to display interesting aspects of the character of Australian Aborigines and Natives of Papua and New Guinea.

A number of Health Department units are now concentrated within the Institute. These include the Museum and Medical Artistry Section; the Nutrition Section; the Diabetes and Enzyme Research Section; the Commonwealth Health Laboratory for the Australian Capital Territory; the Veterinary Laboratory; and the office of the Australian Pre-school Association.

The scientific research work of the Institute has now been concentrated on problems of nutrition. These take the form of field surveys of the dietary status of the Australian population and laboratory investigations into the biochemistry of nutrition and metabolism. For further information concerning the Institute see Year Book No. 32 pp. 919-21.

§ 4. Control of Infectious and Contagious Diseases.

1. **General.**—The provisions of the various Acts in regard to the compulsory notification of infectious diseases and the precautions to be taken against the spread thereof may be conveniently dealt with under the headings of quarantine and notifiable diseases, including venereal diseases.

2. **Quarantine.**—The Quarantine Act is administered by the Commonwealth Department of Health, and has three sections of disease control, as follows :—(i) Human quarantine, which controls the movements of persons arriving from overseas until it is apparent that they are free of quarantinable disease ; (ii) Animal quarantine, which controls the importation of animals and animal products from overseas and the security of other animals present on vessels in Australian ports ; and (iii) Plant quarantine, which regulates the conditions of importation of all plants and plant products with the object of excluding plant diseases, insect pests and weeds.

In respect of interstate movements of animals and plants, the Act becomes operative only if the Governor-General considers that Federal action is necessary for the protection of any State or States ; in general, the administration of interstate movements of animals and plants is left in the hands of the States.

(i) *Human Quarantine.* All passengers and crews arriving in Australia from overseas, whether by air or sea, are subjected to a medical inspection by quarantine officers for the purpose of preventing the introduction of disease into Australia. At the major ports full-time quarantine officers carry out the work but in the minor ports use is made of local medical practitioners acting as part-time quarantine officers. In each State, quarantine activities are controlled by a medical officer of the Commonwealth Department of Health with the title of Commonwealth Director of Health.

The main concern of the examining officers is to detect cases of the quarantinable diseases smallpox, cholera, yellow fever, plague and typhus fever. These diseases are not endemic in Australia and it is a matter of extreme moment to prevent their entry. In addition, persons on vessels arriving in Australia and suffering from infectious diseases such as chicken pox, mumps, scarlet fever and measles are directed to appropriate care and placed in isolation where necessary. For the quarantinable diseases, quarantine stations are provided at the major ports and at Darwin, Thursday Island and Townsville. These are kept ready for occupation at all times.

The increasing use of air travel has created particular quarantine problems. Before the use of air transport, persons suffering from an infectious or quarantinable disease would show the rash or other signs on arrival and before disembarkation. Passengers travelling by air, however, can arrive well within the incubation period, even from as far as England, which is only four days away by air.

It is for this reason that all intending passengers are required to be vaccinated against smallpox before departure and those from an area infected with cholera or yellow fever are in addition required to be inoculated against the particular disease prevalent in that area. Passengers arriving by air are required to report any sickness which they might suffer within the fourteen days after arrival. All passengers are required to give their intended place of residence so that they may be traced if a case of disease occurs among the passengers on the aircraft or ship. It will be seen that the security given to Australia for many years by its isolated geographic position is no longer complete and increasing reliance needs to be placed on a vigilant and flexible quarantine organization.

The number of cases of infectious (non-quarantinable) diseases which have been discovered among the passengers and crew of overseas vessels calling at Australian ports during the year ended 30th June, 1956, and during the preceding five years, are shown in the following tables.

HUMAN QUARANTINE: CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASES ON OVERSEA VESSELS AND AIRCRAFT CALLING AT AUSTRALIAN PORTS, YEAR ENDED 30th JUNE, 1956.

Disease.	Number of Oversea Vessels and Aircraft on which Cases were Found.	Number of Cases of Infectious Disease.	
		Passengers.	Crew.
Chicken Pox	16	39	2
Infective Hepatitis	2	2	..
Leprosy	1	..	1
Measles	10	30	..
Mumps	6	12	..
Rubella	2	20	1
Whooping Cough	1	1	..
Total	26	104	4

HUMAN QUARANTINE : OVERSEA VESSELS AND AIRCRAFT ARRIVING IN AUSTRALIA AND CASES OF INFECTIOUS (NON-QUARANTINABLE) DISEASE FOUND THEREON,

Year ended 30th June.	Number of Overseas Vessels and Aircraft Cleared.		Number of Oversea Vessels and Aircraft on which Cases were Found.	Number of Cases of Infectious Disease.	
	Ships.	Aircraft.		Passengers.	Crew.
1951	1,649	1,030	46	658	8
1952	2,100	1,057	47	252	9
1953	2,231	1,173	54	365	7
1954	2,254	1,221	44	319	5
1955	2,319	1,310	48	267	3
1956	2,592	1,417	26	104	4

(ii) *Animal Quarantine.* Animal quarantine is authorized by the provisions of the Quarantine Act 1908-1950 and has as its objective the prevention of the introduction or spread of diseases of animals. This legislation covers the importation of all animals, raw animal products, biological cultures, etc., associated with animal diseases and goods associated with animals.

Domesticated animals, i.e., horses, cattle, pigs, sheep, goats, dogs, cats and poultry are admitted from a limited number of countries depending on diseases present in the country of origin. All must be accompanied by health certificates which include prescribed tests. On arrival in Australia, they are subject to quarantine detention.

Zoological specimens are imported into registered zoos where they remain in permanent quarantine. Circuses are also registered if exotic species of animals are kept. In a somewhat similar manner, animals for scientific purposes are imported to approved laboratories. All these premises are kept under constant surveillance. Raw animal products such as hair, special types of wool, skins, hides, etc., are subjected to special treatment under quarantine control, whilst such items as raw meat, sausage casings and eggs, which cannot be sterilized, are admitted from very few countries. Other items such as harness, fittings, fodder, ship's refuse, etc., are appropriately treated to destroy possible infection.

The Division of Veterinary Hygiene was created in 1926 to deal with the administration of animal quarantine; formerly the full responsibility for this administration fell on the Director of Quarantine; The organization of the Division provides an excellent example of Commonwealth and State co-operation. The central administration is situated within the Health Department at Canberra, with a Director, an Assistant Director and Veterinary Officers. By provision in the Quarantine Act and by arrangement with the States, the Principal Veterinary Officer of the Department of Agriculture in each State is appointed

Chief Quarantine Officer (Animals) of the State, and members of his staff Quarantine Officers (Animals). These State officers, acting in their Commonwealth capacity, carry out the quarantine policy formulated by the central administration. Quarantine accommodation is provided in permanent animal quarantine stations at each capital city.

The division participates in world-wide international notification of the more serious contagious diseases of animals and maintains a census of such diseases throughout the world. Information regarding animal diseases and parasites in Australia is also collected and disseminated by means of service publications. Consultation on technical matters is maintained with various scientific institutions, notably the Commonwealth Scientific and Industrial Research Organization. In matters of policy and the quarantine control of imports, there is a close liaison with the Department of Customs and Excise.

The division collaborates with the "General" and "Plant" divisions of the quarantine service. Many diseases of animals are communicable to man and for this reason "Animal" and "General" quarantine administration are in some respects inseparable. Similarly the interests of "Animal" and "Plant" divisions overlap, many items such as insects, fodder, straw, etc., being the subject of combined control.

In each alternate year, the Director of the division convenes the Biennial Conference of Principal Commonwealth and State Veterinarians which meets under the aegis of the Australian Agricultural Council. At this conference, problems of animal health and disease control are discussed from a national point of view and consideration is given to animal quarantine matters. A report is made to the Agricultural Council.

In the Australian Capital Territory, the control of animal disease, dairy and piggy hygiene, advice to stockowners and management of the Canberra abattoir are carried out by veterinary officers of the division.

(iii) *Plant Quarantine.* Since 1st July, 1909, the importation into Australia of all plants or parts of plants, cuttings, seeds and fruits, whether living or dead, has been subject to an increasingly stringent quarantine with the object of preventing the introduction of insect pests, plant diseases and weeds not yet established in this country. Under the Quarantine Act 1908-1950, general powers are held by which the quarantine inspectors are required to examine all plant material at the first port of entry and to release only such material as is free from diseases and pests. Everyone entering Australia is required to declare if he or she has any plant material in luggage or personal effects. Heavy penalties are laid down for those found deliberately evading the regulations. All plant material entering as cargo must also be declared.

When the Commonwealth became responsible for all plant quarantine, the State Governments agreed to co-operate by providing and maintaining inspection facilities and personnel for which they are reimbursed by the Commonwealth. In 1921, the administration of the regulations came under the newly-formed Department of Health, and in 1927 the Division of Plant Quarantine was created, under a Director who is responsible for policy and legislation and for co-ordinating the work of the State Officers, who carry out the detailed administration in their capacity as Commonwealth Officers.

Any plant material found carrying diseases or pests or suspected of doing so may be ordered into quarantine for remedial treatment, or if the treatment be impracticable may be destroyed. Such treatments are paid for by the importer. Air transport has created many new problems in maintaining effective control. It is impossible in this summary to give details of regulations governing the different types of plants, but the following will indicate certain broad principles in them:—(a) The importation of plants likely to be infected with plant diseases, noxious fungi or poison plants is prohibited; (b) Agricultural seed must conform to standards of purity, insect pest and disease freedom; (c) Many commodities such as hops, cotton, peanuts in shell, nursery stock, potatoes, certain crop seeds, vines and specified plants may only be imported by approved importers under special conditions; (d) Certain plant products such as bulbs and timber (in logs or sawn) from specified areas may be imported only if accompanied by certificates showing that prescribed treatment has been given in the country of origin.

3. *Notifiable Diseases.*—(i) *General.* (a) *Methods of Prevention and Control.* Provision exists in the Health Acts of all the States for the observance of precautions against the spread and of, the compulsory notification of, infectious disease. When any such disease occurs, the local authority must at once be notified, and in some States notification must be made also to the Health Department. The duty of making this notification is generally imposed, first, on the head of the house to which the patient belongs, failing whom on the nearest relative present, and, on his default, on the person in charge of or in attendance on the patient, and, on his default, on the occupier of the building. Any medical practitioner visiting the patient is also bound to give notice.

As a rule, the local authorities are required to report from time to time to the Central Board of Health in each State as to the health, cleanliness and general sanitary state of their several districts, and must report the appearance of certain diseases. Regulations

are prescribed for the disinfection and cleansing of premises, and for the disinfection or destruction of bedding, clothing, or other articles which have been exposed to infection. Bacteriological examinations for the detection of plague, diphtheria, tuberculosis, typhoid and other infectious diseases within the meaning of the Health Acts are continually being carried out. Regulations are provided in most of the States for the treatment and custody of persons suffering from certain dangerous infectious diseases, such as smallpox and leprosy.

(b) *Diseases Notifiable and Cases Notified in each State and Territory.* The following table, which has been compiled by the Commonwealth Department of Health, shows for each State and Territory the diseases notifiable in 1955 and the number of cases notified. Diseases not notifiable in a State or Territory are indicated by an asterisk.

DISEASES NOTIFIABLE IN EACH STATE AND TERRITORY OF AUSTRALIA AND NUMBER OF CASES REPORTED DURING THE YEAR ENDED 31st DECEMBER, 1955.

Disease.	N.S.W.	Vic.	Q'ld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Acute rheumatism	202	127	178	16	39	*	5	..	567
Amoebiasis	*	3	5	1	9	1	2	..	21
Ankylostomiasis	18	3	265	1	1	..	25	..	313
Anthrax .. .. .	*	..	..	..	..	..	..	..	..
Bilharziasis .. .. .	*	..	..	..	..	..	..	..	..
Brucellosis	5	23	4	3	5	1	..	..	41
Chorea	24	16	1	1	4	*	..	..	46
Dengue .. .. .	..	..	*	..	..	*	..	..	..
Diarrhoea, infantile	277	690	222	7	30	3	8	31	1,268
Diphtheria	140	167	68	26	480	3	8	..	892
Dysentery, bacillary	*	137	206	63	127	12	2	3	550
Encephalitis	30	49	4	29	..	2	..	1	115
Erythema Nodosum	*	21	2	6	..	..	..	..	29
Filariasis .. .. .	*	..	..	..	..	..	..	..	..
Homologous serum jaundice .. .. .	*	..	..	..	..	*	..	..	..
Hydatid .. .. .	..	11	*	..	1	16	..	..	28
Infective hepatitis	2,489	3,770	*	502	254	27	17	17	7,076
Lead poisoning	*	..	24	3	3	*	..	..	30
Leprosy .. .. .	..	2	6	..	29	..	2	..	39
Leptospirosis	2	..	191	..	..	..	..	..	193
Malaria .. .. .	..	12	*	..	5	..	56	..	73
Meningococcal infection	128	105	53	10	13	18	1	..	328
Ophthalmia	*	*	*	..	35	..	..	..	35
Ornithosis	1	2	*	..	..	*	..	..	3
Paratyphoid fever	5	2	..	..	4	..	..	..	11
Poliomyelitis	222	235	190	182	33	7	4	1	874
Puerperal fever	43	4	48	1	5	1	..	..	102
Rubella	*	2,345	14	179	227	..	..	2	2,767
Salmonella infection	*	*	*	4	58	*	6	..	68
Scarlet fever	619	1,003	716	289	68	14	..	..	2,709
Tetanus	*	20	25	5	9	*	2	..	61
Trachoma	*	2	*	..	1,470	*	..	..	1,472
Trichinosis .. .. .	*	*	*	..	..	*	..	..	..
Tuberculosis	1,909	967	748	327	440	163	46	2	4,602
Typhoid fever	12	14	10	1	13	2	5	..	57
Typhus—flea, mite or tick borne	7	..	55	1	22	..	..	..	85

* Not notifiable.

NOTE.—No cases of cholera, plague, smallpox, epidemic typhus or yellow fever were notified.

(ii) *Veneral Diseases.* The prevention and control of venereal diseases are undertaken by the States. Each State has a Veneral Diseases Act, or provisions in the Health Act govern the control of these diseases. Under these Acts, treatment has been made compulsory in every State. Consequent steps have been taken to ensure free treatment by medical practitioners or in subsidized hospitals and clinics. Registered pharmaceutical chemists are allowed to dispense only prescriptions signed by medical practitioners. Clinics have been established and, in some cases beds in public hospitals have been set aside for patients suffering from these diseases.

Penalties may be imposed on a patient who fails to continue under treatment. Clauses are inserted in the Acts which aim at preventing the marriage of any infected person and the employment of an infected person in the manufacture or distribution of foodstuffs.

§ 5. Commonwealth Grants to Organizations Associated with Public Health.

1. *General.*—In addition to providing the services mentioned in sections 1–4 above, the Commonwealth Government gives financial assistance to certain organizations associated with public health which it desires to encourage. Examples of organizations included in this category are the Lady Gowrie Child Centres, the National Fitness Organizations, The Royal Flying Doctor Service of Australia, and the Red Cross Blood Transfusion Service.

2. **Lady Gowrie Child Centres.**—Sessions of the National Health and Medical Research Council and the reports of the Commonwealth Advisory Council on Nutrition have called attention to the need for greater effort throughout Australia directed towards the care of the growing child, especially during the pre-school period. Movements for the welfare of the school child and the care of the infant are already developed by State authorities as recorded in sections 2 and 3 of division A of this chapter (see pp. 493–497). The Commonwealth Government felt that more could be done for the child of pre-school age, and it was decided to give a lead by assisting in the provision of facilities to demonstrate what could be done and the practical methods which could be applied.

The Commonwealth Government therefore decided to establish in each capital city a pre-school demonstration centre, known as the Lady Gowrie Child Centre, and in order to achieve the best results in association with those who have had experience in this field, it secured the co-operation of the Federal Organization of Kindergarten Unions which operated under the title of "The Australian Association for Pre-school Child Development". A suitable site was secured in each capital city and the necessary school structure was built. This organization has since been extended to include all pre-school organizations and its title has been changed to "The Australian Pre-school Association".

This body administers the Lady Gowrie Child Centres for the Commonwealth Department of Health. An annual grant of £33,500 is received of which £29,850 is divided equally among six centres; £2,000 is allocated for the payment of salary and travelling for the Federal Pre-school Officer of the association and £150 is a contribution to office expenses of the A.P.A. The Commonwealth Department of Health retains £1,500 per annum for the maintenance of buildings.

The specialized function of the centres is that of demonstration and research and the programmes are carried out under the supervision of the Federal Officer.

Each centre has a committee of management responsible for the disbursement of funds.

Each centre is concerned with a study of the factors promoting and retarding physical and mental health in young children, and in demonstrating an educational health programme based on the developing needs of children aged 3 to 6 years. Detailed case history records are kept for each child and these are discussed at weekly staff meetings of teachers, the sister, and social worker, and form the basis for the guidance of child and parents. (These records are available for approved research students).

The centres are used for observation by university students of Medicine, Psychology, Education, Social Studies, Architecture, Physical Education, Teacher Training Colleges, Nursing Colleges, and Domestic Science. A number of research projects have been carried out into problems relating to the pre-school child.

In Sydney and Brisbane, the centres are used as a laboratory for a Social Paediatrics Course for advanced medical students.

A research project at the Perth Centre is now in progress on "The Development of Concepts of Social Relations in Pre-school Children", under the direction of the University of Western Australia. All centres are gathering material on possible stress in children—when (1) mothers are working outside the home, (2) mothers are hospitalized, or (3) families are migrants.

In June, 1956, the Commonwealth Government allocated a grant of £3,000 to cover a two-year research study at the Sydney centre, under the supervision of the Institute of Child Health.

3. **National Fitness.**—A national fitness movement was launched in Australia in 1939 following the world-wide movement for the advancement of physical fitness which preceded the last world war. In 1938, arising from a recommendation of the National Health and Medical Research Council, the Commonwealth Government agreed to appoint a Commonwealth Council for National Fitness, under the Commonwealth Minister for Health, to effect collaboration of Commonwealth, State and Local Government authorities in the movement. Meetings of this Council are held at regular intervals, and an annual report submitted to Parliament. Autonomous State National Fitness Councils operate in all States, each sending one representative to the Commonwealth Council meetings. Following the recommendations of the first Commonwealth Council meeting in 1939, the Commonwealth Government agreed to make available an annual sum of £20,000 for five years and grants were allocated to each State for purposes of organization and to each of the six Australian universities to establish lectureships in physical education. In July, 1941, a National Fitness Act was passed by the Commonwealth Parliament to ensure greater continuity in the movement, and in June, 1942, the Commonwealth grant was increased to £72,500 to include grants to State Education Departments and for the work in the Australian Capital Territory. In 1955, the Commonwealth decided to allocate its grant on an annual basis instead of for fixed periods as formerly. The movement continues to develop and to gain public interest and support throughout Australia, particularly through its physical and recreational activities with voluntary youth organizations and amateur sports organizations.

4. **Royal Flying Doctor Service of Australia.**—The purpose of the Royal Flying Doctor Service of Australia is to provide medical and dental services to the white and aboriginal populations in isolated areas. By means of wireless transceiver sets installed in most homesteads, persons in remote localities may seek medical advice. Standard medicine chests are made available by the service. Each chest contains a first-aid book and instructions on the use of the various drugs and medical supplies in it. Further instructions are given by doctors over the air. In cases of major illnesses and injuries, persons in remote localities may use wireless transceiver sets to summon medical aid. A doctor holding an aeroplane pilot's licence flies to the homestead and, if necessary, flies the patient to the nearest hospital.

From time to time, special purpose work is undertaken in connexion with flood relief, searching for lost parties and co-ordinating cattle movements.

The service is not conducted with a view to profit. In some sections, small charges are made for particular services or a fixed annual charge is levied on graziers. Other sections rely on voluntary contributions from those who use their services. Donations and Government contributions help to provide much of the overhead and capital expenditure incurred each year.

The Commonwealth has made an annual grant to this organization for operational expenses since 1936. Prior to that, from 1928 to 1931, the Commonwealth subsidized the Australian Inland Mission Aerial Medical Service. On 21st July, 1954, the Commonwealth annual grant to the Royal Flying Doctor Service of Australia towards maintenance was increased from £12,500 to £20,000 per annum. The Commonwealth grant towards capital expenditure was increased from £10,000 to £15,000 per annum for three years. This capital expenditure grant is made on a pound for pound basis, in respect of approved projects.

The Royal Flying Doctor Service of Australia is conducted by a federal council comprising representatives of six sections, namely Queensland, New South Wales, Victoria, South Australia, Western Australia and the Eastern Goldfields of Western Australia. The Queensland, New South Wales and South Australian Sections are centred in their own States but in Western Australia there are three centres, that in the far north being under the control of the Victorian Section, and that in the south-east under the control of the Eastern Goldfields Section. The third one, which has bases at Port Hedland and Meekatharra, is sponsored by the Western Australian Section.

5. **The Red Cross Blood Transfusion Service.**—The Australian Red Cross Society conducts a Blood Transfusion Service in all States.

Before 1952–53, the cost of the Red Cross Blood Transfusion service was borne by the Red Cross Society with assistance from the State Governments. In 1952, the Commonwealth agreed to make an amount of £50,000 available to the Red Cross Society through the State Governments. The States were to continue to assist the society at the same level as previously and make arrangements with the society to share any deficit still remaining.

The Commonwealth recognized that the proper maintenance of a blood transfusion service was of the utmost importance to the welfare of the community and that the service was one eminently suited for operation by the Australian Red Cross Society. Hence, in March, 1954, the Commonwealth offered each State Government a grant equal to 30 per cent. of the certifiable operating expenses incurred by the society in the conduct of the blood transfusion service in that State. The grant was to be made subject to the conditions that the government of the State concerned agreed to meet 60 per cent. of the cost of operating the service in that State, leaving the society to meet the remaining 10 per cent. of the cost. All States accepted this proposal.

C. INSTITUTIONS.

§ 1. General.

In Australia, institutions related to public health may be classified to three groups: (a) State, (b) public, and (c) private. To the first group belong those institutions wholly provided for by the State, such as the principal mental hospitals in the various States and the Government and leased hospitals in Western Australia. To the second group belong public institutions of two kinds, namely:—(i) those partially subsidized by the State or by State endowments for maintenance, but receiving also private aid, and (ii) those wholly dependent upon private aid. To the first of these two kinds belong such institutions as the principal metropolitan hospitals; in the second are included institutions established and endowed by individuals for the benefit of the needy generally. All institutions of a private character are included in the third group. A more or less accurate statistical account is possible in classes (a) and (b), but in regard to (c) general tabulation is impossible. Owing to differences in the dates of collection and tabulation, it is impossible to bring statistics of some charitable institutions to a common year.

§ 2. Public Hospitals (other than Mental Hospitals).

1. General.—All the State capitals have several large and well-equipped hospitals, and there is at least one in every important town. In large centres, there are hospitals for infectious diseases, tubercular patients, women, children and chronic diseases.

The particulars given herein refer to public hospitals at the latest available date and include all institutions affording hospital relief, whether general or special, with the exception of mental hospitals, repatriation hospitals and private hospitals conducted commercially. The particulars for New South Wales in the following tables relate to public hospitals operating under the control of the Hospitals Commission.

2. Number, Staff and Accommodation, 1954-55.—Details regarding the number of hospitals, staff and accommodation for the year 1954-55 are given in the following table:—

PUBLIC HOSPITALS: NUMBER, STAFF AND ACCOMMODATION, 1954-55.

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Total.
Number of Hospitals	262	117	140	63	96	26	4	1	709
Medical Staff—									
Honorary ..	3,256	1,261	179	402	264	86	..	27	5,475
Salaried ..	724	632	575	125	88	102	13	4	2,263
Total ..	3,980	1,893	754	527	352	188	13	31	7,738
Nursing Staff ..	10,450	7,108	4,469	1,960	2,257	1,118	99	105	27,566
Accommodation—									
Number of beds and cots ..	19,764	11,810	10,657	3,586	4,258	2,289	365	250	52,979

(a) Fifteen months ended 30th June, 1955.

The figures for accommodation shown in the table above include particulars, where available, of a considerable number of beds and cots for certain classes of cases in outdoor or verandah sleeping places.

3. In-Patients (Cases) Treated.—The following table furnishes particulars of in-patients treated (newborn are excluded).

PUBLIC HOSPITALS: IN-PATIENTS (CASES) TREATED, 1954-55.

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Total.
In-patients at beginning of year—									
Males ..	6,313	3,318	3,566	1,218	1,309	791	97	72	16,684
Females ..	8,542	4,658	3,686	1,243	1,287	904	131	81	20,532
Total ..	14,855	7,976	7,252	2,461	2,596	1,695	228	153	37,216
Admission and re-admissions during year—									
Males ..	153,116	94,360	83,008	26,628	34,393	12,186	3,190	1,678	408,559
Females ..	238,930	157,498	102,251	35,221	41,145	19,669	2,947	2,735	600,396
Total ..	392,046	251,858	185,259	61,849	75,538	31,855	6,137	4,413	1,008,955
Total in-patients (cases) treated—									
Males ..	159,429	97,678	86,574	27,846	35,702	12,977	3,287	1,750	425,243
Females ..	247,472	162,156	105,937	36,464	42,432	20,573	3,078	2,816	620,928
Total ..	406,901	259,834	192,511	64,310	78,134	33,550	6,365	4,566	1,046,171
Discharges—									
Males ..	146,464	88,993	79,668	25,237	33,018	11,552	3,006	1,634	389,572
Females ..	233,635	153,253	99,994	34,074	40,199	19,150	2,915	2,688	585,908
Total ..	380,099	242,246	179,662	59,311	73,217	30,702	5,921	4,322	975,480
Deaths—									
Males ..	6,663	5,163	3,762	1,503	1,334	643	130	54	19,252
Females ..	5,137	3,935	1,671	1,040	859	492	63	40	13,237
Total ..	11,800	9,098	5,433	2,543	2,193	1,135	193	94	32,489
In-patients at end of year—									
Males ..	6,302	3,522	3,144	1,106	1,350	782	151	62	16,419
Females ..	8,700	4,968	4,272	1,350	1,374	931	100	88	21,783
Total ..	15,002	8,490	7,416	2,456	2,724	1,713	251	150	38,202
Average daily number resident ..	15,819	8,201	7,071	2,397	2,626	1,672	253	140	38,179

(a) Fifteen months ended 30th June, 1955.

In addition to those admitted to the hospitals, there are large numbers of out-patients. During 1954-55, there were 1,090,879 out-patients (cases) treated in New South Wales, 598,647 in Victoria, 561,088 in Queensland, 110,879 in South Australia, 117,000 (estimated) in Western Australia, 109,279 in Tasmania, 57,473 in the Northern Territory and 5,383 in the Australian Capital Territory, making an estimated total for Australia of 2,651,000.

4. Revenue and Expenditure.—Details of the revenue and expenditure for the year 1954-55 are shown in the next table. The revenue includes the Commonwealth Hospital Benefits Scheme which operated in Victoria, Queensland, Western Australia and Tasmania from 1st January, 1946, in South Australia from 1st February, 1946, and in New South Wales and the Australian Capital Territory from 1st July, 1946.

PUBLIC HOSPITALS: REVENUE AND EXPENDITURE. 1954-55.

(£'000.)

Particulars.	N.S.W. (a)	Vic.(b)	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total.
Revenue—									
Government aid ..	14,523	13,089	7,889	2,762	3,209	1,413	396	228	49,928
Commonwealth Hospital Benefits, etc.		2,665	2,342	637	484	235	33	23	
Municipal aid ..	(c)	63	..	110	1	..	..	..	174
Public subscriptions, legacies, etc. ..	128	1,416	3	147	78	..	..	..	1,772
Fees	5,142	3,629	583	513	869	310	..	37	11,083
Other	286	277	92	240	84	7	..	..	986
Total	20,079	21,139	10,909	4,409	4,725	1,965	429	288	63,943
Expenditure—									
Salaries and wages	13,043	8,769	4,936	2,176	2,404	1,262	270	119	32,979
Upkeep and repair of buildings and grounds ..	836	499	239	269	229	48	98	9	2,227
All other ordinary ..	6,437	6,729	3,710	1,237	1,462	702	48	75	20,400
Capital(d)	(e)	5,047	1,788	742	549	362	14	85	8,587
Total	20,316	21,044	10,673	4,424	4,644	2,374	430	288	64,193

(a) Excludes loan receipts and expenditure. (b) Fifteen months ended 30th June, 1955.
 (c) Included in "Other". (d) Includes such items as purchases of land, cost of new buildings and additions to buildings. (e) Not available. (f) Incomplete.

5. Summary, 1938-39 and 1951-52 to 1954-55.—A summary, for the years 1938-39 and 1951-52 to 1954-55, of the number of public hospitals in Australia, medical and nursing staffs, beds, admissions, in-patients treated, out-patients, deaths, average daily number resident, revenue, and expenditure is given in the following table. The figures relate to both general and special hospitals.

PUBLIC HOSPITALS: AUSTRALIA.

Particulars.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.
Hospitals	563	675	694	699	709
Medical Staff	4,059	6,889	7,246	7,487	7,738
Nursing Staff	13,582	24,556	25,940	26,116	27,566
Beds and cots	35,711	47,328	50,076	50,812	52,979
Admissions during year ..	527,055	863,058	905,492	925,571	1,008,955
Total in-patients (cases) treated	552,051	896,020	939,856	961,288	1,046,171
Out-patients (cases) (a) ..	1,272,147	2,286,183	2,422,302	2,458,631	2,651,000
Deaths	23,372	28,746	28,604	29,403	32,489
Average daily no. resident ..	25,608	33,552	34,552	34,587	38,179
Revenue £	7,106,642	41,216,677	51,141,059	54,814,436	63,943,446
Expenditure £	6,351,055	43,327,700	50,541,100	53,884,574	64,192,550

(a) Partly estimated.

§ 3. Leper Hospitals.

Isolation hospitals for the care and treatment of persons suffering from Hansen's disease (leprosy) have been established in New South Wales (Little Bay), Queensland (Peel Island, near Brisbane, and Fantome Island, North Queensland), Western Australia (Derby), and the Northern Territory (East Arm Settlement, near Darwin). At the end of 1956 there were 6 cases in residence at Little Bay, 20 at Peel Island, 29 at Fantome Island, 198 at Derby, 201 at East Arm Settlement, 5 in Victoria and 5 cases at Woorlooloo, Western Australia. Of the 464 cases, 382 were full-blood aborigines, 44 half-caste aborigines, 2 Asians and 36 Europeans.

§ 4. Mental Hospitals.

1. General.—The methods of compiling statistics of mental diseases are fairly uniform throughout the States, but there is an element of uncertainty about possible differences in diagnosis in the early stages of the disease. The figures for the States cannot be brought to a common year; consequently the following particulars relate to a combination of calendar and financial years. Licensed houses are included in all particulars excepting revenue and expenditure for New South Wales. The figures exclude those of reception-houses and observation wards in gaols. In New South Wales, the expenditure includes the cost of Broken Hill patients treated in South Australian mental hospitals:

2. Hospitals, Staff, etc., 1954-55.—Particulars regarding the number of hospitals, the medical and nursing staffs, and accommodation are given in the following table for the year 1954-55 :—

MENTAL HOSPITALS : NUMBER, STAFF, ACCOMMODATION, 1954-55.

Particulars.	N.S.W.	Vic. (a)	Q'land. (b)	S. Aust.	W. Aust. (a)	Tas.	Total.
Number of Hospitals	13	10	5	2	4	1	35
Medical Staff—							
Males	30	63	12 1	13	6	4	135
Females	6						
Total	(c) 36	63	13	13	6	4	135
Nursing Staff and Attendants—							
Males	994	888	526	207	197	94	2,906
Females	1,012	922	424	205	104	83	2,750
Total	2,006	1,810	950	412	301	177	5,656
Accommodation—							
Number of beds and cots ..	12,589	7,219	4,753	2,615	1,670	810	29,656

(a) Year 1954. (b) Includes the Epileptic Home. (c) In addition there are 59 visiting specialists who are paid for their services.

3. Patients, 1954-55.—Information regarding patients treated, deaths, etc., for 1954-55 is given in the following table :—

MENTAL HOSPITALS : PATIENTS, DEATHS, ETC., 1954-55.

Particulars.	N.S.W.	Vic. (a)	Q'land. (b)	S. Aust.	W. Aust. (a)	Tas.	Total.
Number of distinct persons treated during year(c)—							
Males	7,470	4,236	3,017	1,579	1,144	547	17,993
Females	7,991	4,853	2,745	1,581	835	586	18,591
Total	15,461	9,089	5,762	3,160	1,979	1,133	36,584

(a) Year 1954. (b) Includes the Epileptic Home. (c) Excludes transfers to other institutions.

MENTAL HOSPITALS : PATIENTS, DEATHS, ETC., 1954-55—*continued.*

Particulars.	N.S.W.	Vic. (a)	Q'land. (b)	S. Aust.	W. Aust. (a)	Tas.	Total.
Number of patients at beginning of year—							
Males	6,402	3,652	2,410	1,329	1,006	363	15,162
Females	6,767	4,284	2,211	1,315	715	408	15,700
<i>Total</i>	<i>13,169</i>	<i>7,936</i>	<i>4,621</i>	<i>2,644</i>	<i>1,721</i>	<i>771</i>	<i>30,862</i>
Admissions and re-admissions (excluding absconders retaken and transfers from other hospitals)—							
Males	1,068	584	607	250	138	184	2,831
Females	1,224	569	534	266	120	178	2,891
<i>Total</i>	<i>2,292</i>	<i>1,153</i>	<i>1,141</i>	<i>516</i>	<i>258</i>	<i>362</i>	<i>5,722</i>
Discharges (including absconders not retaken)—							
Males	489	372	346	149	49	165	1,570
Females	620	389	331	173	28	140	1,681
<i>Total</i>	<i>1,109</i>	<i>761</i>	<i>677</i>	<i>322</i>	<i>77</i>	<i>305</i>	<i>3,251</i>
Deaths—							
Males	448	254	192	106	52	29	1,081
Females	482	279	189	119	52	39	1,160
<i>Total</i>	<i>930</i>	<i>533</i>	<i>381</i>	<i>225</i>	<i>104</i>	<i>68</i>	<i>2,241</i>
Number of patients at end of year—							
Males	6,533	3,610	2,479	1,324	1,043	353	15,342
Females	6,889	4,185	2,225	1,289	755	407	15,750
<i>Total</i>	<i>13,422</i>	<i>7,795</i>	<i>4,704</i>	<i>2,613</i>	<i>1,798</i>	<i>760</i>	<i>31,092</i>
Average daily number resident—							
Males	5,479	3,227	2,332	1,319	972	359	13,688
Females	6,287	3,823	2,101	1,230	662	408	14,511
<i>Total</i>	<i>11,766</i>	<i>7,050</i>	<i>4,433</i>	<i>2,549</i>	<i>1,634</i>	<i>767</i>	<i>28,199</i>
Number of patients at end of year per 1,000 of population—							
Males	3.73	2.90	3.59	3.19	3.11	2.19	3.31
Females	3.97	3.39	3.40	3.19	2.40	2.66	3.48
<i>Total</i>	<i>3.85</i>	<i>3.14</i>	<i>3.50</i>	<i>3.19</i>	<i>2.77</i>	<i>2.42</i>	<i>3.40</i>
Average number of patients resident in mental hospitals per 1,000 of population—							
Males	3.15	2.62	3.43	3.22	2.94	2.25	2.99
Females	3.65	3.13	3.26	3.09	2.14	2.66	3.25
<i>Total</i>	<i>3.40</i>	<i>2.87</i>	<i>3.34</i>	<i>3.16</i>	<i>2.55</i>	<i>2.45</i>	<i>3.12</i>

(a) Year 1954.

(b) Includes the Epileptic Home.

Persons who are well advanced towards recovery are allowed to leave the hospitals and live with their relatives or friends, but they are under supervision and their names are kept in the records. They are included in the figures shown in the above table.

4. Revenue and Expenditure, 1954-55.—The revenue of Government mental hospitals is small in comparison with their cost, and consists chiefly of patients' fees, and mental

institution benefits. The agreements made between the Commonwealth and the States under the 1948 Mental Institution Benefits Act lapsed in the latter half of 1954.

Under the State Grants (Mental Institutions) Act 1955, the Commonwealth is authorised to make payments to the States of amounts equal to one-third of the amounts expended by the States for or in connexion with the buildings or equipment of mental institutions on or after 1st July, 1955. The Commonwealth grants are limited to the following maximum amounts—

New South Wales, £3,830,000; Victoria, £2,740,000; Queensland, £1,460,000; South Australia, £895,000; Western Australia, £720,000; Tasmania, £355,000; Total, £10,000,000.

The proportion of expenditure borne by the State amounts to about 95 per cent. In New South Wales, the expenditure includes the cost of Broken Hill patients treated in South Australian mental hospitals :—

MENTAL HOSPITALS : FINANCES, 1954-55.
(£.)

Particulars.	N.S.W.	Vic.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	Total.
<i>Revenue (excluding Government Grants)—</i>							
Fees of patients	220,388	..	12,554	38,553	31,276	18,397	321,168
Mental Institution Benefits	106,524	53,819	..	15,420	9,453	..	185,216
Other ..	(b) 76,922	16,971	4,982	40,360	8,247	620	148,102
<i>Total ..</i>	<i>403,834</i>	<i>70,790</i>	<i>17,536</i>	<i>94,333</i>	<i>48,976</i>	<i>19,017</i>	<i>654,486</i>
<i>Expenditure—</i>							
Salaries and wages	2,056,966	1,885,798	828,453	440,867	371,377	201,512	5,784,973
Upkeep and repair of buildings, etc.	214,291	331,705	15,024	64,548	37,817	7,276	671,561
All other ..	1,489,455	1,797,275	631,072	314,900	227,779	105,204	4,565,685
Capital(c) ..	462,664	999,570	282,894	177,739	67,156	177,027	2,167,050
<i>Total ..</i>	<i>4,223,376</i>	<i>5,014,348</i>	<i>1,758,343</i>	<i>998,054</i>	<i>704,129</i>	<i>491,019</i>	<i>13,189,269</i>
Expenditure per average daily resident ..	£358/18/11	£711/5/11	£396/13/0	£391/10/11	£430/4/8	£640/3/8	£467/14/5

(a) Includes the Epileptic Home. (b) Includes £30,171 Commonwealth Hospital Benefits.
(c) Capital expenditure includes purchases of land, cost of new buildings, and additions to buildings.

5. Summary for Australia, 1938-39 and 1951-52 to 1954-55.—The following table gives a summary relating to mental hospitals in Australia during 1938-39 and for each of the years 1951-52 to 1954-55 :—

MENTAL HOSPITALS : SUMMARY, AUSTRALIA.

Particulars.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.
Hospitals	35	33	33	34	35
Medical Staff	92	167	149	140	135
Nursing Staff and Attendants	4,922	4,985	5,132	5,415	5,656
Beds	25,654	27,573	28,546	29,089	29,656
Admissions	3,757	5,508	5,753	5,864	5,722
Discharged as recovered, relieved, etc.	1,800	2,711	2,823	3,028	3,251
Deaths	1,632	2,166	2,303	2,164	2,241
Patients at end of year	26,509	29,563	30,190	30,862	31,092
Average daily resident	24,063	26,489	27,259	27,788	28,199
Revenue (excluding Government Grants) £	262,817	861,083	866,561	888,681	654,486
Expenditure—Total £	1,903,817	8,749,187	10,713,747	11,680,996	13,189,269
„ —Per average daily resident	£79/2/4	£330/5/11	£393/0/7	£420/7/3	£467/14/5

6. Number of Mental Patients, 1938-39 and 1951-52 to 1954-55.—The total number returned as under treatment at the end of each year shows a slight increase during the period but the proportion to total population shows a slight decline. A more rational attitude towards the treatment of mental cases has resulted in a greater willingness in recent years to submit afflicted persons to treatment at an early stage, and an increase in the number of recorded cases, therefore, does not necessarily imply an increase in mental diseases.

PATIENTS IN MENTAL HOSPITALS.

State.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.
NUMBER.					
New South Wales	11,678	12,873	12,979	13,169	13,422
Victoria	7,326	7,568	7,707	7,936	7,795
Queensland(a)	3,650	4,388	4,554	4,621	4,704
South Australia	1,747	2,425	2,534	2,644	2,613
Western Australia	1,477	1,599	1,666	1,721	1,798
Tasmania	631	710	750	771	760
Australia	26,509	29,563	30,190	30,862	31,092
PER 1,000 OF POPULATION.					
New South Wales	4.25	3.85	3.84	3.85	3.85
Victoria	3.92	3.29	3.26	3.28	3.14
Queensland(a)	3.59	3.48	3.53	3.51	3.50
South Australia	2.93	3.21	3.27	3.32	3.19
Western Australia	3.16	2.71	2.72	2.72	2.77
Tasmania	2.66	2.40	2.47	2.50	2.42
Australia	3.81	3.46	3.46	3.47	3.40

(a) Includes the Epileptic Home.

The difference between States in the number of patients in mental hospitals per 1,000 of population may also to some extent be the result of differences in classification.

CHAPTER XV.

WELFARE SERVICES.

A. COMMONWEALTH SOCIAL SERVICE BENEFITS.

§ 1. Introduction.

Under the provisions of section 51 of the Constitution, the Commonwealth Government is empowered to legislate on :—

“(xxiii) Invalid and old-age pensions :

(xxiiiia) *The provision of maternity allowances, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorise any form of civil conscription), benefits to students and family allowances:”.*

The latter paragraph was inserted in the constitution after being accepted by the electors at a referendum on the 28th September, 1946. The enabling act was assented to on the 19th December, 1946.

Before 1947, each social service benefit was paid under a separate act. On the 1st July, 1947, all acts providing social service benefits were amalgamated with the passage of the Social Services Consolidation Act 1947. This act eliminated certain anomalies and obsolete provisions and changed the title “old-age pension” to “age pension”. The word “Consolidation:” was dropped from the short title of the act in 1954. The act is at present styled the *Social Services Act 1947-1956*.

The social service benefits provided by the Commonwealth Government, and the date on which each came into operation, are :—

Age pension	..	..	..	..	1st July, 1909
Child endowment (for other than first child)	..	..	..	..	1st July, 1941
Child endowment (for first child)	..	..	..	..	20th June, 1950
Commonwealth Rehabilitation Service	..	..	..	..	10th December, 1948
Funeral benefit	...	..	..	..	1st July, 1943
Invalid pension	..	..	..	..	15th December, 1910'
Maternity allowance	..	..	..	..	10th October, 1912
Sickness benefit	..	..	..	..	1st July, 1945
Special benefit	..	..	..	..	1st July, 1945
Tuberculosis allowance	..	..	..	..	13th July, 1950
Unemployment benefit	..	..	..	..	1st July, 1945
Widow's pension	..	..	..	..	30th June, 1942

Particulars of benefits provided under the National Health Service appear in Chapter XIV.—Public Health and Related Institutions, pp. 498-504.

§ 2. Commonwealth Expenditure on Social and Health Services.

The Commonwealth expenditure in each State and Territory on social and health services excluding cost of administration for the year 1955-56 is shown in the following table:—

COMMONWEALTH EXPENDITURE ON SOCIAL AND HEALTH SERVICES, 1955-56.

(£'000.)

Social and Health Services.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Over-seas.	Total.
Social Benefits—										
Age and Invalid Pension ..	42,406	24,836	15,178	8,859	6,681	3,450	33	110	72	101,625
Child Endowment ..	21,971	16,165	9,383	5,498	4,684	2,285	150	239	6	60,381
Commonwealth Rehabilitation Service ..	119	165	56	88	61	16	..	..	..	505
Funeral Benefits ..	131	83	44	29	23	9	..	..	..	319
Maternity Allowances ..	1,207	935	526	304	276	137	8	15	2	3,410
Tuberculosis Allowances ..	651	413	276	163	112	75	..	..	..	1,690
Unemployment, Sickness and Special Benefits—										
Unemployment(a) ..	215	70	288	11	77	10	..	1	..	672
Sickness(a) ..	641	350	244	134	94	51	2	3	..	1,519
Special(b) ..	125	127	69	20	16	14	..	1	..	372
Widows' Pensions ..	3,160	1,799	1,328	609	531	268	3	12	13	7,723
National Health Services—										
Hospital Benefits ..	3,979	2,293	1,384	748	779	312	37	21	..	9,553
Medical Benefits ..	2,449	1,299	528	491	533	113	..	..	..	5,413
Medical Benefits for Pensioners ..	1,346	668	347	254	198	55	..	6	..	2,874
Nutrition of Children ..	1,040	539	307	183	135	185	1	14	..	2,405
Pharmaceutical Benefits ..	4,329	2,900	1,352	805	718	201	..	75	..	10,380
Pharmaceutical Benefits for Pensioners ..	709	314	223	137	96	29	..	..	..	1,508
Tuberculosis Campaign Maintenance Payments ..	1,484	1,108	576	283	397	145	..	14	..	4,007
Miscellaneous ..	46	33	73	8	11	19	7	(c) 313	..	510
Total	86,008	54,097	32,182	18,624	15,423	7,374	241	824	93	214,866

(a) Does not include special variations of advances for payments in regional areas, made at the end of the year. (b) Includes payments to migrants. (c) Includes an amount of £250,000 for the production of poliomyelitis vaccine.

The amount of Commonwealth expenditure on social and health services, excluding cost of administration, during the years 1938-39 and 1951-52 to 1955-56, for Australia, is shown in the following table:—

COMMONWEALTH EXPENDITURE ON SOCIAL AND HEALTH SERVICES. (£'000.)

Social and Health Services.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Social Benefits—						
Age and Invalid Pensions ..	15,992	59,788	72,424	81,293	88,006	101,625
Child Endowment ..	..	46,625	53,244	50,761	52,530	60,381
Commonwealth Rehabilitation Service ..	..	361	454	429	451	505
Funeral Benefits ..	..	276	270	288	304	319
Maternity Allowances ..	436	3,157	3,248	3,226	3,362	3,410
Tuberculosis Allowances ..	..	1,777	1,908	1,877	1,904	1,690
Unemployment, Sickness and Special Benefits ..	(a)	1,008	6,255	4,543	2,640	2,563
Widows' Pensions ..	(b)	5,615	6,334	6,626	6,862	7,723
National Health Services—						
Hospital Benefits ..	..	6,683	7,223	8,330	9,321	9,553
Medical Benefits ..	..	..	..	1,434	4,210	5,413
Medical Benefits for Pensioners ..	..	1,036	1,740	2,115	2,516	2,874
Nutrition of Children ..	..	815	1,521	1,999	2,237	2,405
Pharmaceutical Benefits ..	..	7,327	6,487	8,219	9,445	10,380
Pharmaceutical Benefits for Pensioners ..	..	358	729	1,011	1,295	1,508
Mental Institution Benefits ..	..	518	523	495	225	..
Tuberculosis Campaign(c) ..	..	2,102	2,968	3,703	3,753	4,007
Miscellaneous ..	..	162	183	216	258	(d) 510
Total	16,428	137,608	165,511	176,565	189,319	214,866

(a) Unemployment relief was paid by State Governments in 1938-39. (b) Widows' pensions were paid by some of the State Governments in 1938-39. (c) Includes reimbursements to States for the maintenance of hospitals. (d) Includes an amount of £250,000 for the production of poliomyelitis vaccine.

§ 3. Age and Invalid Pensions.

Age pensions are payable to men, 65 years of age and over, and women, 60 years of age and over, who have resided in Australia continuously for at least 20 years, which need not be immediately prior to the date of claim for a pension. Absence in a Territory of the Commonwealth does not break continuity of residence. Any periods of absence during which a person's home remained in Australia, and absences in certain other circumstances, and in the case of a claimant who has had at least 18 years' residence, occasional absences aggregating up to 2 years plus 6 months for every year of residence in excess of 18 years, are counted as residence.

Invalid pensions are payable to persons, 16 years of age and over, who have resided in Australia for a continuous period of five years (including any occasional absences not exceeding, in total, six months), and who are permanently incapacitated for work or permanently blind. The degree of permanent incapacity has to be not less than 85 per cent. and the claimant must have become permanently incapacitated or permanently blind while in Australia or during a temporary absence from Australia, but this condition is waived if he has resided in Australia for not less than 20 years (continuous or otherwise), whether any such period was before or after the occurrence of the permanent incapacity or blindness.

Pensions may be granted to aboriginal natives of Australia who have been granted exemption from State control laws, or who, in any State where exemption is not provided for, are considered, by reason of their character, intelligence and social development, to be suitable persons to receive pensions.

A pension is not payable to:—an alien (except a woman who, before marriage, was a British subject); a person who has deprived himself of property or income, or who has brought about his incapacity, in order to qualify for a pension; a person in receipt of income of £390 per annum (£780 per annum for a married couple); a person who owns property, apart from his permanent home and other exempt property, to the net value of more than £1,750 (£3,500 for married persons); a person who has deserted his spouse or children for six months immediately preceding the date of the claim (age pension only).

Since the 27th October, 1955, the maximum rate of pension has been £208 per annum.

A pensioner who is an inmate of a benevolent home is paid so much of his pension as does not exceed £72 16s. per annum (£1 8s. per week) and the balance, if any, of the pension is paid to the institution for his maintenance.

The wife of an invalid pensioner (or an age pensioner who is permanently incapacitated for work or permanently blind) may be granted a wife's allowance of not more than £91 per annum (£1 15s. per week). A child's allowance of £29 18s. per annum (11s. 6d. per week) is also paid to an invalid pensioner who is maintaining one or more children under 16 years of age.

Age and invalid pensions (other than invalid pensions paid to blind persons) and allowances paid to wives of invalid pensioners (but not allowances paid on behalf of children of invalid pensioners) are subject to a means test. They are reduced by the amount by which a pensioner's income from sources other than his pension exceeds £182 per annum (£3 10s. per week). For this purpose, certain types of allowances received are not counted as income. These include gifts or allowances received from the pensioner's children, benefits from friendly societies, payments for illness, infirmity or old age from a trade union, State food relief, maternity allowances, child endowment or any other payment received for children maintained by the pensioner, allowances received under the national health service, and interest on war gratuities. From October, 1954, income received from property owned by a pensioner or his spouse and income such as dividends on shares and interest from bonds or on money in the bank is also disregarded.

The annual rate of pension or allowance is further reduced by £1 per annum for every complete £10 by which the value of property owned by a pensioner or his spouse exceeds £200, and the pension cuts out altogether if the value of the property exceeds £1,750. For this purpose, certain types of property are disregarded. They include the permanent home of the pensioner, his furniture and personal effects, the surrender value (up to £750) of life insurance policies, the capital value of annuities or contingent interests, the present value of any reversionary interests, inheritances not received and war gratuities.

For the purposes of the administration of the means test, the income and property of a married person is deemed to be half the total income and property of the husband and wife (unless they are legally separated). This provision means that the pension of a married pensioner, whether or not his spouse is a pensioner, will not be reduced because of his income from other sources unless that income exceeds £364 per annum (£7 per week), nor will his pension be reduced on account of the value of his property unless that value exceeds £400.

The following statement shows the rates of pension at 1st July, 1909 and the rates as they have been varied since that date, subject in all cases, to income and property qualifications :—

MAXIMUM RATES OF PENSION PAYABLE.

Date from which Operative.	Maximum Pension Payable.		Limit of Income (including Pension) per Annum.	Date from which Operative.	Maximum Pension Payable.		Limit of Income (including Pension) per Annum.		
	Per Week.	Per Annum.			Per Week.	Per Annum.			
	s. d.	£ s.	£ s.		s. d.	£ s.	£ s.		
1st July, 1909 ..	10	0	26	0	1st October, 1942(b) ..	25	6	66	6
12th October, 1916 ..	12	6	32	10	7th January, 1943(b) ..	26	0	67	12
1st January, 1920 ..	15	0	39	0	1st April, 1943(b) ..	26	6	68	18
13th September, 1923 ..	17	6	45	10	19th August, 1943(b) ..	27	0	70	4
8th October, 1925 ..	20	0	52	0	25th November, 1943(b) ..	26	6	68	18
23rd July, 1931 ..	17	6	45	10	25th November, 1943(d) ..	27	0	70	4
13th October, 1932(a) ..	17	0	39	0	5th July, 1945 ..	32	6	84	10
26th October, 1933 ..	17	6	45	10	13th August, 1946 ..	32	6	84	10
4th July, 1935(b) ..	18	0	46	16	3rd July, 1947 ..	37	6	97	10
24th September, 1936 ..	19	0	49	8	21st October, 1948 ..	42	6	110	10
9th September, 1937 ..	20	0	52	0	2nd November, 1950 ..	50	0	130	0
26th December, 1940 ..	21	0	54	12	1st November, 1951 ..	60	0	156	0
3rd April, 1941(b) ..	21	6	55	18	2nd October, 1952 ..	67	6	175	10
11th December, 1941 ..	23	6	61	2	29th October, 1953 ..	70	0	182	0
2nd April, 1942(b) ..	24	0	62	8	14th October, 1954 ..	70	0	182	0
2nd April, 1942(c) ..	25	0	65	0	27th October, 1955 ..	80	0	208	0

(a) Additional pension of £6 10s. per annum (2s. 6d. per week) was payable to a pensioner with no income. Pensioners with income of less than 2s. 6d. per week were paid additional pension of 2s. 6d. less the amount of income. (b) Variation according to change in retail price index number. (c) Increase paid on 9th July, 1942, retrospective to 2nd April, 1942. (d) Rate restored to £70 4s. per annum under National Security (Supplementary) Regulation 112A—Statutory Rule 315 of 1943.

NOTE.—Provision for variations according to retail price index numbers was repealed on 6th April, 1944.

During 1955–56, 54,328 age pension claims were granted and 1,848 pensioners were transferred from the invalid pension list, while 36,260 pensions expired through cancellations and deaths. The number of age pensioners at 30th June, 1956 was 446,207, of whom 152,954 (or 34 per cent.) were males, and 293,253 (or 66 per cent.) were females.

The recorded ages of the 54,328 persons (20,023 males and 34,305 females) to whom age pensions were granted during the year 1955–56 varied considerably, ranging from 9,013 at age 60 to four at age 100, but 38,223 were in the 60–69 years age-group. The conjugal condition of these new pensioners was as follows :—Males—single, 2,228 ; married, 14,451 ; and widowed, 3,344 ; Females—single, 4,322 ; married, 17,619 ; and widowed, 12,364.

During 1955–56, 11,681 invalid pension claims were granted, 5,557 pensions ceased through cancellations or deaths, and 1,848 were transferred to the age pension list. The number of invalid pensioners at the 30th June, 1956, was 82,775, of whom 46,774 (or 57 per cent.) were males and 36,001 (or 43 per cent.) were females.

The recorded ages of the 11,681 persons (7,063 males and 4,618 females) to whom invalid pensions were granted during 1955–56 varied from 16 to 97, 5,998 (or 51 per cent.) being in the 45–59 years age-group, and 2,406 (or 21 per cent.) being in the 60–64 years age-group.

The conjugal condition of persons to whom invalid pensions were granted during the year was as follows :—Males—single, 2,249 ; married, 4,356 ; and widowed, 458 ; Females—single, 1,737 ; married, 2,002 ; and widowed, 879.

AGE AND INVALID PENSIONS, 30th JUNE, 1956.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total.
Age Pensions in force—									
Males	65,359	33,016	25,543	13,067	11,110	4,585	71	203	152,954
Females	115,184	79,633	40,656	28,716	19,134	9,489	67	374	293,253
Persons	180,543	112,649	66,199	41,783	30,244	14,074	138	577	446,207
Masculinity(a)	56.74	41.46	62.83	45.50	58.06	48.32	105.97	54.28	52.16
Invalid Pensions in force—									
Males	23,755	10,036	6,669	2,439	2,542	1,275	21	37	46,774
Females	16,764	8,077	5,496	2,421	1,883	1,321	7	32	36,001
Persons	40,519	18,113	12,165	4,860	4,425	2,596	28	69	82,775
Masculinity(a)	141.70	124.25	121.34	100.74	135.00	96.52	300.00	115.63	129.92
Age and Invalid Pensioners—									
Total Payments 1955-56(b) £'000.	42,406	24,836	15,178	8,859	6,681	3,450	33	110	101,625
Annual Liability—									
Age Pensioners .. £'000.	36,303	22,352	13,162	8,309	6,018	2,802	28	114	89,088
Invalid Pensioners	8,319	3,632	2,480	996	901	532	6	14	16,880
Total Annual Liability £'000.	44,622	25,984	15,642	9,305	6,919	3,334	34	128	105,968

(a) Number of males to each 100 females. (b) Includes amounts paid to benevolent homes for the maintenance of 6,244 pensioners, allowances paid to 12,556 wives and allowances payable on behalf of 7,932 children of invalid pensioners. (c) Includes £72,000 paid abroad.

The sum disbursed in age and invalid pensions in 1955-56, including the amount paid to homes for the maintenance of pensioners and allowances to wives of invalid pensioners, represented an expenditure of £10 18s. 2d. per head of population as compared with £9 13s. 8d. in 1954-55.

The following table gives details of age and invalid pensions for the years 1938-39 and 1951-52 to 1955-56 :—

AGE AND INVALID PENSIONS : SUMMARY, AUSTRALIA.

Year ended 30th June—	Pensioners at End of Year.				Amount Paid to Pensioners.	Total Payment to Pensioners and Homes.(b)	Average Fortnightly Pension as at 30th June.		
	Age.		Invalid.	Total.			Age.	Invalid.	Age and Invalid Com- bined.
	No.	Rate. (a)							
1939 ..	232,836	376	88,812	321,648	£ 15,798,038	£ 15,991,782	s. d. (c)	s. d. (c)	s. d. 38 5
1952 ..	352,049	397	67,963	420,012	59,512,514	59,788,003	114 2	116 4	114 6
1953 ..	374,791	410	70,232	445,023	72,087,074	72,423,900	128 4	130 11	128 9
1954 ..	397,784	423	73,732	471,516	80,898,725	81,293,003	134 2	136 10	134 7
1955 ..	425,556	439	78,498	504,054	87,614,112	88,006,077	134 7	137 7	135 1
1956 ..	446,207	449	82,775	528,982	101,242,275	101,625,068	153 7	156 10	154 1

(a) Per 1,000 persons of pensionable age (males aged 65 years and over and females aged 60 years and over). (b) Includes allowances to wives of invalid pensioners payable from the 8th July, 1943, but excludes funeral benefits in respect of deaths of pensioners, £275,850 in 1951-52; £270,448 in 1952-53; £287,798 in 1953-54; £303,784 in 1954-55; and £318,941 in 1955-56. (c) Not available.

§ 4. Commonwealth Rehabilitation Service.

The Commonwealth Rehabilitation Service has been set up to help persons who are too disabled to work or who have had to give up their employment because of sickness or injury. It aims at restoring disabled persons so they can earn a living and lead useful lives. They are given suitable treatment and training, the cases selected being those in which the person's disability is remediable and where there are reasonable prospects of his engaging in a suitable vocation within three years after the commencement of treatment or training.

The benefits are available to invalid pensioners, persons receiving unemployment or sickness benefits and persons receiving tuberculosis allowances. The treatment of certain other disabled persons may also be approved by the Director-General of Social Services. During the treatment stage of rehabilitation the payment of pension or benefit is continued. If, however, vocational training is provided the pension or benefit is suspended and the trainee is paid instead a rehabilitation allowance equivalent to the amount of invalid pension for which he is qualified, or which would be payable if he were qualified to receive an invalid pension, together with the amount of any wife's and child's allowances, plus a training allowance of £1 10s. per week.

Living-away-from-home allowances, where necessary, are paid by the Commonwealth. Fares and living expenses (including those of an attendant where required) incurred in connexion with treatment, training or attendance for an interview or for medical examination may also be paid. A person receiving treatment or training may be provided, free of charge, with necessary artificial replacements, surgical aids and appliances. He may also be provided with books, equipment and tools of trade, costing not more than £40. If these are retained by him, he is required to pay the cost, but payments may be made by small instalments after he has commenced employment.

If the treatment or vocational training does not result in the trainee being able to engage in employment, his right to the continuance of his pension or benefit is not prejudiced.

The numbers of persons receiving benefits who were examined, accepted, trained and placed in employment during the years 1954-55 and 1955-56 are shown in the following table :—

COMMONWEALTH REHABILITATION SERVICE : OPERATIONS, AUSTRALIA.

Type.	Examined.	Accepted.	Completed Training.	Placed in Employment.		
				After Training.	Without Training.	
Invalid Pensioners ..	1954-55	10,724	337	112	101	104
	1955-56	10,947	306	92	83	103
Unemployment and Sick- ness Beneficiaries	1954-55	9,933	829	120	98	581
	1955-56	8,815	815	105	100	481
Recipients of Tuberculosis Allowances	1954-55	1,085	344	177	175	54
	1955-56	788	288	172	202	69
Special Cases ..	1954-55	73	73	..	..	55
	1955-56 ^a	310	173	1	1	91

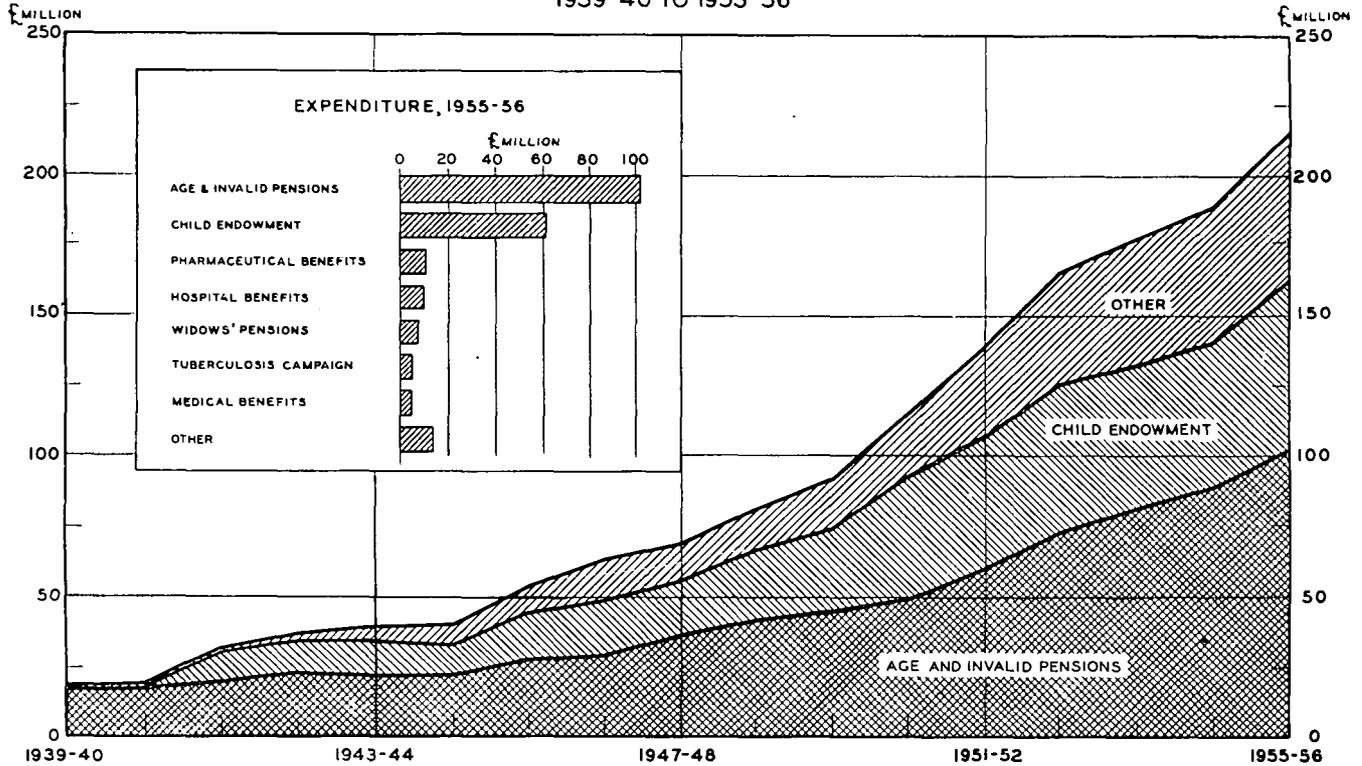
(a) Includes persons aged 14-15 years not eligible in previous years.

§ 5. Funeral Benefits.

From 1st July, 1943, a funeral benefit of up to £10 has been payable to the person who has paid, or is liable to pay, the cost of the funeral of an age or invalid pensioner or of a claimant who, but for his death, would have been granted an age or invalid pension. This provision has been extended to include payment in respect of the death of a person who at the time of his death was receiving, or was a claimant for, a tuberculosis allowance, if he was otherwise qualified to receive an age or invalid pension. Where the cost of the funeral has been partly met by payment from a contributory funeral benefit fund of an organization other than a friendly society, funeral benefit is payable to the extent of the amount (not above £10) by which the cost of the funeral exceeded the amount paid from the fund. A funeral benefit is not payable to a person administering a contributory funeral benefit fund.

COMMONWEALTH EXPENDITURE ON SOCIAL AND HEALTH SERVICES

1939-40 TO 1955-56



The following table shows the number of funeral benefits which were paid in each State and Territory for the years 1951-52 to 1955-56 :

FUNERAL BENEFITS GRANTED, AUSTRALIA.

State.	Benefits Granted.(a)				
	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
New South Wales	11,367	11,405	11,397	13,108	13,148
Victoria	7,925	7,537	8,269	7,921	8,216
Queensland	3,868	3,813	4,051	4,590	4,501
South Australia	2,169	2,394	2,529	2,668	2,864
Western Australia	1,970	1,817	1,871	2,045	2,335
Tasmania	895	864	913	1,053	918
Northern Territory	(b)	(b)	(b)	3	6
Australian Capital Territory ..	(c)	(c)	(c)	20	31
Australia	28,194	27,830	29,030	31,408	32,019

(a) Includes benefits granted to recipients of, or claimants for, a tuberculosis allowance, who would otherwise be qualified to receive an age or invalid pension. (b) Included with South Australia.
(c) Included with New South Wales.

§ 6. Maternity Allowances.

A maternity allowance is payable to a woman who, at the date of giving birth to a child, is residing in Australia. The allowance is payable in respect of a birth which occurs in Australia or on board a ship proceeding from a port in Australia or a Territory of the Commonwealth to another port in Australia or a Territory of the Commonwealth, or on board a ship proceeding to Australia, provided the mother receives no maternity benefit in respect of the birth from the country whence she came. Payment may be made in respect of the birth of a still-born child, or a child which lives for less than twelve hours, if the period of intra-uterine life of the child was at least 5½ calendar months. There is no means test.

Payment may be made to an alien mother if she was a British subject prior to her marriage, or if she or her husband resided in Australia for at least twelve months immediately prior to the birth of the child. Payment in respect of a birth which occurs within twelve months of the mother's arrival in Australia may be made at the end of that time, but may be made immediately if the mother is likely to remain in Australia. Payment may also be made to Australian residents who are temporarily abroad.

The allowances may be paid only to those aboriginal natives of Australia who have been granted exemption from State control laws or who, in any State where exemption is not provided for, are considered suitable persons to receive the allowance by reason of their character, standard of intelligence and social development.

Since 1st July, 1947, the amount of a maternity allowance has been £15 where there are no other children, £16 where there are one or two other children and £17 10s. where there are three or more other children. "Other children" means children under the age of sixteen years who were in the custody, care and control of the claimant on the date of the birth in respect of which the claim is made. The amount payable is increased by £5 in respect of each additional child born at a birth. Payment of £5 on account of a maternity allowance may be made within a period of four weeks prior to the expected date of birth. The balance is payable immediately after the birth.

The following table gives details of the maternity allowance claims paid and rejected and of the amount paid for the years 1938-39 and 1950-51 to 1955-56 :—

MATERNITY ALLOWANCES : SUMMARY, AUSTRALIA.

Particulars.		1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Claims Paid ..	No.	80,916	191,587	195,722	203,042	199,814	208,179	212,865
Claims Rejected ..	..	6,272	306	180	190	229	204	227
Amount Paid ..	£	436,614	3,057,519	3,156,992	3,248,305	3,225,919	3,362,307	3,410,408

NOTE.—The means test was abolished from 1st July, 1943.

The following table shows the number of maternity allowance claims paid in each State or Territory during the years 1938-39 and 1951-52 to 1955-56 :—

MATERNITY ALLOWANCES : NUMBER OF CLAIMS PAID IN EACH STATE.

Year ended 30th June—	N.S.W. (a)	Vic.	Q'land.	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Over-seas.	Total.
1939	30,860	20,819	12,880	7,204	5,213	3,940	..	..	..	80,916
1952	72,688	52,144	30,737	17,380	15,074	7,626	..	..	73	195,722
1953	74,011	55,297	31,058	19,068	15,535	7,983	..	..	90	203,042
1954	72,380	54,219	30,889	18,749	15,803	7,726	..	..	48	199,814
1955	76,614	55,720	31,782	18,506	16,261	7,940	481	787	88	208,179
1956	75,591	58,385	32,764	19,036	17,180	8,328	510	961	110	212,865

(a) Includes Australian Capital Territory to June, 1954.

(b) Includes Northern Territory to June, 1954.

The following table shows the number of claims paid in each State at the several rates of maternity allowances during the year 1955-56 :—

MATERNITY ALLOWANCES : NUMBER OF CLAIMS PAID AT EACH RATE, 1955-56.

State or Territory.	Single Births.			Multiple Births.						Total Claims Paid.	
	£15.	£16.	£17 10s.	Twins.			Triplets.				Quad-rup-lets.
				£20.	£21.	£22 10s.	£25.	£26.	£27 10s.			£30.
New South Wales ..	24,392	36,405	13,914	202	460	211	1	3	3	..	75,591
Victoria	18,659	28,412	10,590	176	365	181	1	1	..	..	58,385
Queensland	9,733	15,230	7,422	90	166	120	..	..	2	1	32,764
South Australia ..	5,636	9,500	3,654	71	126	46	1	1	1	..	19,036
Western Australia ..	5,070	8,340	3,544	46	119	60	..	1	..	..	17,180
Tasmania	2,361	3,883	1,989	27	43	24	..	1	..	..	8,328
Northern Territory ..	159	234	110	3	2	2	..	..	..	..	510
Australian Capital Territory ..	289	482	173	5	5	6	1	..	..	..	961
Overseas	46	59	5	..	..	..	..	..	..	..	110
Total	66,345	102,545	41,401	620	1,286	650	4	7	6	1	212,865

§ 7. Child Endowment.

A person who is resident in Australia and has the custody, care and control of one or more children under the age of sixteen years, and an approved institution of which children are inmates shall be qualified to receive an endowment in respect of each child. Both the claimant and the child must either have been born in Australia or have been living

in Australia for the preceding twelve months, but this requirement is waived if the claimant and the child are likely to remain permanently in Australia. A child born during the mother's temporary absence from Australia is deemed to have been born in Australia. There is no means test.

Endowment may be paid in respect of a child whose father is not a British subject if the child was born in Australia, the mother is a British subject, or the child is likely to remain permanently in Australia. Endowment is payable to aboriginal natives of Australia unless they are nomadic, or unless the child concerned is wholly or mainly dependent on the Commonwealth or a State, and also in respect of children of members of the Naval, Military or Air Forces of the United Kingdom who are serving with the Australian Forces from the time of arrival of the children in Australia.

Since 20th June, 1950, the rate of endowment payable has been (a) where the endowee has the custody of one child only—5s. per week; (b) where the endowee has the custody of two or more children—in respect of the elder or eldest child 5s. per week and in respect of each other child 10s. per week; and (c) in the case of an approved institution—10s. per week for each child inmate. From 1st July, 1941, the rate of endowment was 5s. per week for each child in excess of one in a family, and for each child under sixteen years in an approved institution. The rate was increased to 7s. 6d. per week on 25th June, 1945, and to 10s. per week on 9th November, 1948. There are provisions to meet cases of families divided by reason of divorce, separation, unemployment or death of a parent.

The number of families with one or more endowed children at 30th June, 1956 was 1,339,807 an increase of 35,580 or 2.7 per cent. during the year. The following table shows particulars of the operations in each State and Territory during 1955-56:—

CHILD ENDOWMENT : SUMMARY, 1955-56.

State or Territory.	Family Groups.					Total Payments to Endowees and Institutions.
	Claims in force at end of year.	Endowed Children.		Annual Liability at 30th June, 1956.		
		Total.	Average per claim.	Total.	Average Annual Liability per claim.	
	No.	No.	No.	£	£	£
New South Wales ..	506,512	1,049,901	2.07	20,712,770	40.89	21,970,665
Victoria ..	361,848	760,667	2.10	15,073,318	41.66	16,165,052
Queensland ..	194,028	437,588	2.26	8,854,924	45.64	9,382,484
South Australia ..	122,425	261,074	2.13	5,196,399	42.45	5,498,475
Western Australia ..	100,047	220,792	2.21	4,439,981	44.38	4,684,167
Tasmania ..	47,552	108,285	2.28	2,197,234	46.21	2,284,644
Northern Territory ..	2,419	5,311	2.20	106,639	44.08	149,945
Australian Capital Territory ..	4,847	10,643	2.20	213,707	44.09	238,937
Overseas ..	129	263	2.04	5,161	40.01	6,317
Total ..	1,339,807	2,854,524	2.13	56,800,133	42.39	60,380,686

In addition to the endowments paid in respect of children in families, child endowment benefits were paid in respect of 21,140 children in 392 approved institutions during 1955-56.

The following table shows, as at 30th June, 1956, the number of claims in force and the number of endowed children classified according to the number of endowed children in the family:—

CHILD ENDOWMENT : NUMBER OF ENDOWED CHILDREN UNDER 16 YEARS OF AGE IN FAMILIES, 30th JUNE, 1956.

Number of Endowed Children in Family.		Claims in Force.	Number of Endowed Children.	Number of Endowed Children in Family.		Claims in Force.	Number of Endowed Children.
1	.. ..	485,695	485,695	10	.. ..	299	2,990
2	.. ..	454,937	909,874	11	.. ..	81	891
3	.. ..	237,317	711,951	12	.. ..	18	216
4	.. ..	100,898	403,592	13	.. ..	9	117
5	.. ..	36,907	184,535	14	.. ..	..	..
6	.. ..	14,880	89,280	15	.. ..	3	45
7	.. ..	5,595	39,165				
8	.. ..	2,339	18,712				
9	.. ..	829	7,461				
				Total	..	1,339,807	2,854,524

§ 8. Widows' Pensions.

As from 18th October, 1955, widows' pensions have been payable to the following classes of women at the rates shown for each class.

Class "A"—A widow who has the custody, care and control of one or more children under the age of 16 years.—£221 per annum (£4 5s. per week).

Class "B"—A widow who has no children under 16 years of age in her custody, care and control, and who is not less than 50 years of age or who, after having attained the age of 45 years, ceased to receive a Class "A" widow's pension by reason of the fact that she no longer had the custody, care and control of a child—£175 10s. per annum (£3 7s. 6d. per week).

Class "C"—A widow, under 50 years of age and who has no children under the age of 16 years in her custody, care and control, but is in necessitous circumstances at the time of or within 26 weeks after the death of her husband.—£3 7s. 6d. per week for not more than 26 weeks. If at the time of her husband's death, a widow is with child, this period will be extended until the birth of the child. She would then become eligible for a class "A" widow's pension.

Class "D"—A woman whose husband has been serving a term of imprisonment for a least six months, if she has the custody, care and control of one or more children under the age of 16 years or is not less than 50 years of age.—£175 10s. per annum (£3 7s. 6d. per week).

The term "widow" includes; (i) a woman who was wholly or mainly maintained by a man as his wife on a permanent and bona fide domestic basis for not less than three years immediately before his death; (ii) a woman who has been deserted by her husband without just cause for not less than six months; (iii) a divorcee who has not remarried; and (iv) a woman whose husband is an inmate of a mental hospital.

The residential qualification is five years' continuous residence in Australia immediately prior to the date of lodgment of the claim, but this period may be reduced to one year under certain circumstances.

A widow's pension is not payable to a woman who is not a British subject (unless she was a British subject before her marriage), a woman who is in receipt of an age or invalid pension, tuberculosis allowance, or a war widow's pension, a woman who has deprived herself of property or income in order to qualify for a pension, a deserted wife or a divorcee who has not taken reasonable action to obtain maintenance from her husband or former husband, a woman who is not of good character, or a woman who is not deserving of a pension. Widow's pensions may be granted to aboriginal native women of Australia under the same conditions as age pensions.

Widows' pensions are subject to a means test. They are reduced by the amount by which a pensioner's income from sources other than her pension exceeds £182 per annum (£3 10s. per week).

The pension of a woman in Class "B" or "D" is further reduced by £1 per annum for every complete £12 by which the value of her property exceeds £200.

No pension is payable to a woman who owns property valued at more than £1,750. The types of income and property disregarded in the case of widow's pensions are the same as in the case of age and invalid pensions except that any amount in excess of 15s. per week received by a deserted wife, or a divorcee from her husband or former husband, for the maintenance of a child is taken into account in the claimant's income.

The pension payable to a Class "A" widow may be continued after her child reaches 16 years and until the age of 18 years is reached if the child continues with full time education at a school or university and is still dependent on the widow and is not in employment.

The number of widows' pensions by class, current at the 30th June, 1956, was as follows:—Class "A", 19,511; Class "B", 22,991; Class "C", 204; Class "D", 224; total, 42,930. The amount paid in pensions during 1955-56 was £7,722,796. The following table shows the details of widows' pensions paid in each State and Territory in the year 1955-56:—

WIDOWS' PENSIONS AT 30th JUNE, 1956.

State or Territory.	Pensions Current.(a)			Average Fort-nightly rate of Pension.	Amount paid in Pensions during 1955-56.	
	Class "A".	All Classes.	Total per 10,000 of Population.		Amount.	Per head of Population. (b)
			No.	£ s. d.	£	s. d.
New South Wales ..	8,260	17,357	49	7 9 4	3,159,863	17 11
Victoria ..	4,302	10,246	39	7 6 0	1,799,184	14 0
Queensland ..	3,493	7,293	53	7 7 9	1,328,033	19 8
South Australia ..	1,548	3,505	41	7 5 9	608,900	14 7
Western Australia ..	1,143	3,015	45	7 2 8	530,751	15 10
Tasmania ..	718	1,419	44	7 9 4	268,296	16 10
Northern Territory ..	10	25	14	6 16 11	3,177	3 8
Australian Capital Territory ..	37	70	20	(c)	12,022	7 2
Overseas ..	(d)	(d)	..	(d)	12,570	..
Total ..	19,511	42,930	46	7 7 6	7,722,796	16 7

(a) Excludes seventeen pensions in respect of pensioners in benevolent homes. (b) Based on mean population for the financial year. (c) Included in average rate for New South Wales. (d) Included in figures for State in which pensioner is permanently domiciled.

§ 9. Unemployment, Sickness and Special Benefits.

Since 1st July, 1945, men over 16 and under 65 years of age, and women over 16 and under 60 years of age and qualified in other respects, have been eligible to apply for an unemployment benefit or a sickness benefit. There is a twelve months' residential requirement but this is waived if the claimant is likely to remain permanently in Australia. A person in receipt of an age, invalid or widow's pension, or a service pension (as distinct from a war pension) under the Repatriation Act, or a tuberculosis allowance is ineligible to receive a benefit.

To qualify for an unemployment benefit, a person must establish that he is unemployed and that his unemployment is not due to his being a direct participant in a strike, that he is capable and willing to undertake suitable work, and that he has taken reasonable steps to obtain such work. Registration with the local Commonwealth District Employment Officer is necessary.

To qualify for a sickness benefit, a person must establish that he is temporarily incapacitated for work by reason of sickness or accident and that he has thereby suffered a loss of salary, wages or other income.

A married woman is not eligible to receive a sickness benefit if it is reasonably possible for her husband to maintain her. Where her husband is able to maintain her only partially, a benefit may be paid at such rate as is considered reasonable in the circumstances. In exceptional cases, a married woman may qualify for an unemployment benefit in her own right.

A benefit may be paid only to those aboriginal natives of Australia who are considered suitable, by reason of character, standard of intelligence and social development.

The maximum weekly rates of benefit payable and permissible income from 22nd September, 1952, are as follows:—

Age and Marital Status of Claimant.	Maximum Weekly Benefit Payable.	Permissible Weekly Income.
	£ s. d.	£ s. d.
Person over 21 years of age	2 10 0	1 0 0
Married person under 21 years of age	2 0 0	15 0
Unmarried person 18–20 years of age	1 10 0	10 0
Unmarried person 17 years of age	1 10 0	5 0

An additional benefit of £2 per week may be paid for a dependent spouse and 5s. for one dependent child under 16 years of age. If no allowance is paid for a dependent spouse, a similar benefit may be paid for a claimant's housekeeper, provided there are one or more children under 16 years of age in the home and the woman is substantially dependent on the claimant but is not employed by him.

The weekly rate of benefit is reduced by the amount by which a beneficiary's income from sources other than his pension exceeds the amount shown in the final column of the relevant line in the above table. For unemployment benefit purposes, the incomes of the claimant and his spouse are taken into account, unless they are permanently separated. For sickness benefit purposes, the income of the claimant only is taken into account, while up to £2 per week is disregarded of any payment received from an approved friendly society or other similar approved body in respect of the incapacity for which sickness benefit is payable. "Income" does not include child endowment, or other payments in respect of children, the Commonwealth hospital benefits and pharmaceutical benefits, or a tuberculosis allowance or an amount paid in reimbursement of medical, dental or similar expenses actually paid. There is no means test on property.

Where a person qualified for sickness benefit receives or is entitled to receive (in respect of the same period and the same incapacity for which sickness benefit is payable) any payment by way of compensation (including workers' compensation), damages, or otherwise under any law (except payments for which he has contributed), the amount of the compensation, etc., is not taken into account as income but is deducted from the rate of sickness benefit otherwise payable.

There is a waiting period of seven days in respect of which unemployment or sickness benefit is not payable. A special benefit may be granted to a person not qualified for unemployment or sickness benefit who is not in receipt of an age, invalid or widow's pension or a service pension, if by reason of age, physical or mental disability or domestic circumstances, or for any other reason, he is unable to earn a sufficient livelihood for himself and his dependants. Unemployment and sickness beneficiaries are eligible to participate in the Commonwealth Rehabilitation Service under the same conditions as invalid pensioners. Payment of an unemployment or sickness benefit may be refused if the claimant or beneficiary, on being required, fails to undergo a medical examination or to receive treatment or undertake training or to do any suitable work. The following table shows the number admitted to benefit during 1955–56, the number of persons on benefit at 30th June, 1956, and the amount paid for each benefit during 1955–56.

UNEMPLOYMENT, SICKNESS AND SPECIAL BENEFITS, 1955-56.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total.
<i>Admissions to Benefit—</i>									
<i>Unemployment—</i>									
Males	8,061	3,169	13,115	750	4,781	358	3	65	30,302
Females	2,578	974	2,718	311	386	96	6	13	7,082
Persons	10,639	4,143	15,833	1,061	5,167	454	9	78	37,384
<i>Sickness—</i>									
Males	16,866	9,261	7,907	4,164	3,486	1,675	64	79	43,502
Females	5,500	3,049	2,067	872	695	275	9	16	12,483
Persons	22,366	12,310	9,974	5,036	4,181	1,950	73	95	55,985
<i>Special—(a)</i>									
Males	811	371	603	203	137	63	2	4	2,194
Females	424	648	202	88	65	52	..	6	1,485
Persons	1,235	1,019	805	291	202	115	2	10	3,679
<i>Total—(a)</i>									
Males	25,738	12,801	21,625	5,117	8,404	2,096	69	148	75,998
Females	8,502	4,671	4,987	1,271	1,146	423	15	35	21,050
Persons	34,240	17,472	26,612	6,388	9,550	2,519	84	183	97,048
<i>Persons on benefit at end of year—</i>									
<i>Unemployment—</i>									
Males	1,585	1,134	897	210	1,499	63	..	7	5,395
Females	728	278	373	109	107	8	..	5	1,608
Persons	2,313	1,412	1,270	319	1,606	71	..	12	7,003
<i>Sickness—</i>									
Males	2,298	1,234	828	498	328	202	4	9	5,401
Females	806	440	320	153	82	39	2	1	1,843
Persons	3,104	1,674	1,148	651	410	241	6	10	7,244
<i>Special—(a)</i>									
Males	197	71	89	37	23	13	1	1	432
Females	482	458	326	88	76	82	..	3	1,515
Persons	679	529	415	125	99	95	1	4	1,947
<i>Total—(a)</i>									
Males	4,080	2,439	1,814	745	1,850	278	5	17	11,228
Females	2,016	1,176	1,019	350	265	129	2	9	4,966
Persons	6,096	3,615	2,833	1,095	2,115	407	7	26	16,194
<i>Benefits Paid—</i>									
Unemployment (b) £	215,672	69,664	287,871	10,961	76,888	9,963	73	728	671,820
Sickness (b) .. £	641,550	350,172	243,952	134,243	93,854	50,901	1,487	2,914	1,519,073
Special (c) .. £	124,747	127,437	69,178	20,086	16,291	13,710	124	674	372,220
<i>Total Benefits Paid c</i> £	981,969	547,273	601,001	165,290	187,033	74,574	1,684	4,289	2,563,113

(a) Excludes migrants. (b) Does not include special variations of advances for payments in regional areas, made at the end of the year. (c) Includes payments to migrants.

The following table shows the number of persons who were admitted to benefit, the number receiving benefit at the end of the year and the amount paid for each benefit for Australia during the years 1951-52 to 1955-56.

SUMMARY : AUSTRALIA.

Year.	Number Admitted to Benefits.			Persons on Benefit at end of Year.			Amount Paid in Benefits.		
	Un-employment.	Sick-ness.	Special. (a)	Un-employment.	Sick-ness.	Special. (a)	Un-employment.	Sick-ness.	Special. (b)
1951-52 ..	27,486	51,043	2,786	8,294	6,378	1,148	£ 187,011	£ 709,887	£ 110,759
1952-53 ..	175,082	50,325	2,989	25,914	8,135	1,985	4,569,747	1,391,294	292,431
1953-54 ..	62,133	56,536	3,631	6,083	7,802	1,852	2,505,463	1,675,593	362,398
1954-55 ..	24,300	57,766	3,548	2,679	7,905	2,045	679,438	1,607,842	352,587
1955-56 ..	37,384	55,985	3,679	7,003	7,244	1,947	c 671,820	c 1,519,073	372,220

(a) Excludes migrants. (b) Includes payments to migrants. (c) Does not include special variations of advances for payments in regional areas, made at the end of the year.

§ 10. Reciprocal Agreements with Other Countries.

1. **New Zealand.**—An agreement between the Governments of Australia and New Zealand for reciprocity in social services came into operation on 1st July, 1949.

The reciprocal arrangements cover age and invalid pensions, widows' pensions, child endowment and unemployment and sickness benefits, and apply to both permanent and temporary changes of residence.

Residence in one country counts as residence in the other country in relation to entitlement to benefits in which a residential qualification applies.

Persons from one country taking up permanent residence in the other country become eligible for any of the specified benefits of the new country under the same conditions (with one or two exceptions) as apply to citizens of that country.

Persons in receipt of any of the specified benefits in one country may continue to receive those benefits while temporarily absent in the other country. These payments are made on an agency basis by the appropriate authority of the country in which the person is temporarily resident.

2. **United Kingdom.**—A reciprocal agreement on social services between the United Kingdom and Australia came into operation on the 7th January, 1954.

Under this agreement, former residents of the United Kingdom who were in the National Insurance Scheme when they left the United Kingdom are eligible to receive age, invalid and widows' pensions, child endowment and unemployment and sickness benefits without complying with the Australian residential requirements. Subject to the means test, persons entitled to receive United Kingdom pensions on account of age, invalidity and widowhood are entitled to have their United Kingdom pensions supplemented by the Commonwealth Government to bring their total payments up to the maximum pension rate in Australia.

Australians going to the United Kingdom for permanent residence are treated in the United Kingdom as if they had been insured under the National Insurance Scheme while in Australia, so that they can qualify for various National Insurance benefits.

Families who go from one country to the other qualify for child endowment, or family allowances, as soon as they arrive in their new country.

There is also provision for the safeguard of social service rights for Australians going to the United Kingdom for temporary residence, and vice versa.

B. OTHER SERVICES.

§ 1. Benevolent Homes.

1. **General.**—The public provisions for the care of indigent old people have been a feature of the social development of recent years in most countries. Numerous establishments exist in Australia for the housing and protection of persons no longer able to provide for themselves. These homes are supported by government and municipal aid, public subscriptions, bequests, etc., while in many cases relatives of poor and afflicted persons contribute to their maintenance.

An entirely satisfactory statistical tabulation in regard to all forms of charitable aid is especially difficult in the case of benevolent institutions, because the services provided by these institutions are not always identical.

2. **Principal Institutions.**—Particulars respecting the accommodation and the number of inmates of the principal institutions were published in earlier issues of the Official Year Book (*see* No. 22, p. 485).

3. **Revenue and Expenditure.**—Details regarding revenue and expenditure for the year 1954–55 are given in the following table.

BENEVOLENT HOMES : REVENUE AND EXPENDITURE, 1954-55.
(£.)

Particulars.	N.S.W.(a)	Vic.(b)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Revenue—</i>							
Government Aid ..	819,691	800,358	347,310	76,885	337,720	212,225	2,594,189
Municipal Aid ..	..	1,525	..	..	..	..	1,525
Public Subscriptions, Legacies..		68,210	18,013	..	678	..	
Fees (c) ..	250,756	469,556	170,940	32,393	136,989	34,076	1,241,153
Other ..								17,322	35,906	3,700	1,551	1,063
<i>Total</i> ..	<i>1,070,447</i>	<i>1,356,971</i>	<i>572,169</i>	<i>112,978</i>	<i>476,938</i>	<i>247,364</i>	<i>3,836,867</i>
<i>Expenditure—</i>							
Salaries and Wages	436,015	701,824	270,413	77,988	175,126	144,473	1,805,839
Upkeep and Repair of Buildings ..	158,625	48,130	8,803	6,398	7,425	7,104	236,485
All Other ..	281,963	330,614	286,234	26,330	77,588	92,136	1,094,865
Capital (d) ..	193,844	230,817	3,322	2,262	216,799	..	647,044
<i>Total</i> ..	<i>1,070,447</i>	<i>1,311,385</i>	<i>568,772</i>	<i>112,978</i>	<i>476,938</i>	<i>243,713</i>	<i>3,784,233</i>

(a) These figures relate to the three State hospitals and homes only. (b) 15 months ended 30th June, 1955. (c) Includes Commonwealth hospital benefits and age and invalid pension receipts. (d) Includes such items as purchase of land, cost of new buildings and additions to buildings.

4. The Aged Persons Homes Act.—The *Aged Persons Homes Act* 1954 operated from 16th December, 1954. The purpose of the act is to encourage and assist the provision of suitable homes for aged persons ("aged person" means a man who has reached the age of 65 years or a woman who has reached 60 years and includes the wife or husband of an aged person residing or desiring to reside with the aged person), and in particular, homes at which aged persons may reside in conditions approaching as nearly as possible normal domestic life, and, in the case of married people, with proper regard to the companionship of husband and wife.

To be eligible for assistance under this act an organization must be—

- (a) carried on otherwise than for purposes of profit or gain to the individual members; and
- (b) a religious organization, an organization the principal objects or purposes of which are charitable or benevolent, an organization of former members of the Defence Forces established in every State or a State branch of such an organization, or an organization approved by the Governor-General for the purpose of this Act.

An organization conducted or controlled by, or by persons appointed by, the Government of the Commonwealth or of a State or a local governing body established under the law of a State, is not eligible for assistance under this Act.

The Director-General of Social Services may make a grant of money to an organization as assistance towards meeting the cost of the construction or purchase of a home to be used permanently for the accommodation of aged persons.

A grant under this section shall be made at such time, or by such instalments and at such times, as are determined by agreement between the Director-General and the organization or, in the absence of agreement, by the Director-General.

The grant is made on a £1 for £1 basis with money raised by the organization, not counting money which the organization received from a governmental body or borrowed. Before a grant is made, the Director-General must be satisfied that the sum of the moneys expended, and the moneys presently available for expenditure, by the organization towards the capital cost of the home, together with the amount of the grant, will be not less than the capital cost of the home.

§ 2. Orphanages, Industrial Schools, etc.

1. **General.**—The methods of caring for orphans and neglected children differ extensively, inasmuch as some of the children are more or less segregated in orphanages and industrial schools, while others are boarded out with their mothers or female relatives or with approved foster-mothers. The children in orphanages and similar institutions may receive, in addition to primary education, some craft training. In all cases employment is found for the children on their discharge from the institution, and they remain for some time under the supervision of the proper authorities. The conditions under which orphans, neglected children and children boarded out live are subject to frequent departmental inspections.

2. **Principal Institutions.**—Particulars concerning the principal institutions in each State were published in earlier issues of the Official Year Book (*see* No. 22, p. 486).

3. **Children under Government Authority.**—The following table summarizes the transactions of State Departments during 1954–55 in connexion with children under their control or supervision. In addition to neglected children, the figures include uncontrollable and convicted children who are wards of a Government authority, as well as poor children whose parents obtain assistance from the Government without giving up the legal right of custody.

CHILDREN UNDER GOVERNMENT AUTHORITY : SUMMARY, 1954-55.

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<i>A. Children maintained or subsidized by the State.</i>							
In State shelters, industrial schools, reformatories, etc.(b)	828	221	1,148	214	47	35	5,247
In licensed or approved institutions	673	1,425						61	386	209
Boarded out—							
With own mothers ..	5,756	2,478	3,494	19	1,386	..	19,083
With licensed foster-mothers, guardians, relatives and friends ..	1,633	391	282	3,535				109
<i>Total children maintained or subsidized by the State</i>	<i>8,890</i>	<i>4,515</i>	<i>4,924</i>	<i>3,829</i>	<i>1,819</i>	<i>353</i>	<i>24,330</i>
<i>B. Children not maintained or subsidized by the State.</i>							
In licensed or approved institutions	(c) 1,708	..	..	80	628	..	2,416
Boarded out	190	..	..	1,807	286	..	2,283
On probation (from Institutions or Children's Courts)	2,643	805	168	279	862	..	4,757
In service or apprenticed	44	147	287	190	148	..	816
Adopted or otherwise placed	324	132	..	430	100	..	986
<i>Total children not maintained or subsidized by the State</i>	<i>4,909</i>	<i>1,084</i>	<i>455</i>	<i>2,786</i>	<i>2,024</i>	<i>..</i>	<i>11,258</i>
<i>Total children under State control or supervision ..</i>	<i>13,799</i>	<i>5,599</i>	<i>5,379</i>	<i>6,615</i>	<i>3,843</i>	<i>353</i>	<i>35,588</i>
	£	£	£	£	£	£	£
Gross cost of children's relief	1,113,736	576,583	406,674	258,165	130,097	31,280	2,516,535
Receipts from parents' contributions, etc. ..	83,307	33,745	29,327	43,842	19,290	2,755	212,266
<i>Net Cost to State ..</i>	<i>1,030,429</i>	<i>542,838</i>	<i>377,347</i>	<i>214,323</i>	<i>110,807</i>	<i>28,525</i>	<i>2,304,269</i>

(a) Year ended 31st December, 1954.
463 after-care ex-institution inmates.

(b) Includes inmates of hospitals.

(c) Includes

The total expenditure on children's relief in the foregoing table shows considerable variation amongst the States owing to the different methods of treating assistance to mothers with dependent children. In South Australia, Western Australia and Tasmania, large amounts have been excluded from the total expenditure on this account owing to the difficulty of obtaining separate amounts for allowances made in respect of the dependent children only.

§ 3. Protection of Aborigines.

For the protection of the aboriginal Australian race, there are institutions, under the supervision of Aborigines Boards, where these people are housed and encouraged to work, the children receiving elementary education. The work is usually carried on at mission stations, but many of the natives are nomadic, and receive food and clothing when they call, while others only rarely come near the stations. The aboriginal native race is extinct in Tasmania. The expenditure from Consolidated Revenue in 1954-55 was as follows (figures in brackets are for year 1953-54):—New South Wales, £170,694 (£151,100); Victoria, £13,131 (£10,960); Queensland, £592,218 (£512,549); South Australia, £84,989 (£83,844); Western Australia, £327,253 (£180,517); Northern Territory, £413,833 (£354,266); Australian Capital Territory, £3,241 (£3,227); total for Australia £1,605,359 (£1,296,463).

§ 4. Lifesaving.

There are three lifesaving societies in Australia—The Royal Lifesaving Society, the Australian Lifesaving Society and the Surf Lifesaving Association. The object of these societies is the saving of life from drowning and other forms of asphyxiation. Among other things, they aim to encourage an ability to swim and a knowledge of lifesaving techniques on the part of pupils in schools and colleges. Numerous certificates of proficiency in various grades are issued annually throughout Australia.

§ 5. Royal Humane Society.

The Royal Humane Society of Australasia with head office at 188 Collins-street Melbourne has as its main object the granting of awards to all who with bravery, skill and perseverance promptly risk their own lives in saving or attempting to save those of their fellow creatures. The classes of awards are (a) Gold Medal; (b) Silver Medal; (c) Bronze Medal; and (d) Certificate of Merit. The Clarke Medal is awarded for the outstanding case of the year, and the Rupert Wilks Trophy is awarded for the most outstanding bravery by a child under 13 years of age. About 75 awards are made annually.

§ 6. The Order of St. John.

The Priory in Australia of the Most Venerable Order of the Hospital of St. John of Jerusalem is the governing body of the various activities of the Order which comprises the St. John Ambulance Association, the St. John Ambulance Brigade and the Hospitallers' Clubs in all States and Commonwealth Territories.

The teaching of first aid to the injured, home nursing, hygiene and child welfare are undertaken by the Association and carried out in a practical manner by the Brigade and qualified members of the public throughout the Commonwealth, in times of peace and war.

The Hospitallers' Clubs in each State undertake the collection of funds for the St. John Ophthalmic Hospital in Jerusalem, and other duties which tend to bring together all persons interested in the work of St. John.

The Order of St. John has established ambulance transport services in some States, acts as an ancillary to such services in other States, and provides technical reserves for the medical services of the Crown.

The Life Saving Medal is awarded by the Order as warranted.

§ 7. Other Charitable Institutions.

Owing to the variety of name and function of other charitable institutions it has been found impracticable to give detailed results. The aid given in kind—food, clothing, tools of trade, etc.—is considerable, whilst the shelter and treatment afforded range from a bed for a night for casual callers in establishments ministering minor charity to indoor treatment over long periods in those that exist for the relief of the aged and the infirm. The institutions not so particularized include homes for the deaf, dumb and blind, infant homes, homes for the destitute and aged poor, industrial colonies, night shelters, crèches, rescue homes for females, free kindergartens, auxiliary medical charities, free dispensaries, benevolent societies and nursing systems, ambulance and health societies, boys' brigades, humane and animals' protection societies, prisoners' aid associations, shipwreck relief societies, bush fire, flood and mining accident relief funds.

CHAPTER XVI.

POPULATION.

NOTE.—The figures shown throughout this chapter for the Census of 30th June, 1954, are the final results, and population estimates shown for the intercensal period 1947 to 1954 are revised figures which have been adjusted in accordance with these results.

In general, the remaining statistics in this chapter cover the year 1956. More detailed figures will be found in the annual bulletin, *Demography*.

§ 1. Population Statistics.

Population statistics relating to Australia or to the component States and Territories as at specific dates are of two types—

- (i) *Those ascertained by census enumeration.* These results attain a very high degree of accuracy and may generally be accepted without reservation.
- (ii) *Estimates derived by the application of vital and migration statistics to census data.* In general, three estimates are made for any specific date :
 - (a) Original estimates for dates subsequent to a census made before another census is taken.
 - (b) Two-stage revision of the original estimates for each newly completed intercensal period to adjust for the difference between the new census result and the comparable estimate. This is to bring intercensal estimates into line with the two census populations. The first revision is reconciled with preliminary census results and the second revision with final census results.

Final revised figures become the permanent population estimates. For purposes requiring a mean population for any twelve-month period such mean is calculated as described in § 4. As populations at specific dates are used in these calculations, consequential revisions are made in mean populations when the estimates for specific dates are revised as described above.

In accordance with this policy, all Australian population statistics shown in this issue of the Official Year Book for dates up to 30th June, 1954, and all mean populations for calendar years up to 1953 and financial years up to 1953-54 are final. Population statistics for dates or years subsequent to these are subject to revision when another census is taken.

Since the establishment of the Commonwealth Bureau of Census and Statistics the populations of the States and Territories have been estimated in a comparable manner and attention has been given to the improvement of the basic demographic data from which the estimates are compiled. The principal source of error in early estimates lay in the migration records, both overseas and interstate, and efforts were directed towards their improvement. The 1911 Census disclosed an error in the precensal estimates equivalent to proportions of 14.5 per cent. and 10.0 per cent., respectively, of recorded male and female overseas departures from Australia. These proportions were used as adjusting factors to recorded overseas departures during the intercensal period 1911-21. These adjusting factors were reduced after the 1921 Census to 1 per cent. for males and 4.5 per cent. for females and were discontinued altogether after the 1933 Census. From the results of the 1954 Census it appears that the accuracy of the records of overseas migration is such that in future little adjustment to recorded figures will be necessary for Australia as a whole.

It is improbable that the same degree of accuracy as has been attained in the record of overseas migration can be reached in the case of interstate movements. Records are made of interstate passengers by sea, rail and air, but it is impracticable, with occasional important exceptions, to record the movements by road.

§ 2. The Census.

1. **Census-taking.**—Although “musters” of the population were carried out at least annually from 1788 to 1825, the first regular census in Australia was not taken until 1828 when a count of the population of the Colony of New South Wales was made. Subsequent censuses were taken sporadically in the various colonies until 1881, when a census was taken on the same date throughout Australia.

In 1891 and 1901, census-taking was still in the hands of the Government Statisticians of the States, but, in 1911, under the provisions of the Commonwealth Census and Statistics Act, which provides for the enumeration to be made from one centre instead of by each State as formerly, the Commonwealth Statistician undertook the first census of the Commonwealth of Australia. The second was taken in 1921, the third in 1933, the fourth in 1947 and the fifth as on the night of 30th June, 1954.

2. **Population recorded at Censuses.**—State and Territorial populations recorded at the Australia-wide censuses taken over the period 1881 to 1954 are shown in the following table. The figures relate to the political boundaries of the several States (or Colonies) and Territories as they existed at the date of each census, except that the Northern Territory has been shown separately from South Australia for three censuses prior to its transfer from that State. The years of formation of the separate Colonies and transfer of the Territories are shown in Chapter 1, § 4 and § 5. The total populations recorded at the censuses taken in the Colonies from 1828 to 1876 were shown in Official Year Book No. 40, page 326.

POPULATION : AUSTRALIAN CENSUSES, 1881 TO 1954.

Census.	Population Enumerated (Excluding Full-blood Aborigines).								
	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T. (a)	Aust.
MALES.									
3rd April, 1881 ..	410,211	451,623	125,325	146,183	17,062	61,162	3,347	..	1,214,913
5th April, 1891 ..	609,666	598,222	223,779	162,241	29,807	77,560	4,560	..	1,705,835
31st March, 1901	710,005	603,720	277,003	180,485	112,875	89,624	4,216	..	1,977,928
3rd April, 1911 ..	857,698	655,591	329,506	207,358	161,565	97,591	2,734	992	2,313,035
4th April, 1921 ..	1,071,501	754,724	398,969	248,267	177,278	107,743	2,821	1,567	2,762,870
30th June, 1933 ..	1,318,471	903,244	497,217	290,962	233,937	115,097	3,378	4,805	3,367,111
30th June, 1947 ..	1,492,211	1,013,867	567,471	320,031	258,076	129,244	7,378	9,092	3,797,370
30th June, 1954 ..	1,720,860	1,231,099	676,252	403,903	330,358	157,129	10,288	16,229	4,546,118
FEMALES.									
3rd April, 1881 ..	339,614	409,943	88,200	130,231	12,646	54,543	104	..	1,035,281
5th April, 1891 ..	517,471	541,866	169,939	153,292	19,975	69,107	338	..	1,471,988
31st March, 1901	644,841	597,350	221,126	177,861	71,249	82,851	595	..	1,795,873
3rd April, 1911 ..	789,036	659,960	276,307	201,200	120,549	93,620	576	722	2,141,970
4th April, 1921 ..	1,028,870	776,556	357,003	246,893	155,454	106,037	1,046	1,005	2,672,864
30th June, 1933 ..	1,282,376	917,017	450,317	289,987	204,915	112,502	1,472	4,142	3,262,728
30th June, 1947 ..	1,492,627	1,040,834	538,944	326,042	244,404	127,834	3,490	7,813	3,781,988
30th June, 1954 ..	1,702,669	1,221,242	642,007	393,191	309,413	151,623	6,181	14,086	4,440,412
PERSONS.									
3rd April, 1881 ..	749,825	861,566	213,525	276,414	29,708	115,705	3,451	..	2,250,194
5th April, 1891 ..	1,127,137	1,140,088	393,718	315,533	49,782	146,667	4,898	..	3,177,823
31st March, 1901	1,354,846	1,201,070	498,129	358,346	184,124	172,475	4,811	..	3,773,801
3rd April, 1911 ..	1,646,734	1,351,551	605,813	408,558	282,114	191,211	3,310	1,714	4,455,005
4th April, 1921 ..	2,100,371	1,531,280	755,972	495,160	332,732	213,780	3,867	2,572	5,435,734
30th June, 1933 ..	2,600,847	1,820,261	947,534	580,949	438,852	227,599	4,850	8,947	6,629,839
30th June, 1947 ..	2,984,838	2,054,701	1,106,415	646,073	502,480	257,078	10,868	16,905	7,579,358
30th June, 1954 ..	3,423,529	2,452,341	1,318,259	797,094	639,771	308,752	16,469	30,315	8,986,530

(a) Part of New South Wales prior to 1911.

The final results of the 1954 Census of the Australian External Territories will be found in § 13 of this chapter.

3. **Increase since 1881 Census.**—The increases in the populations of the several States and Territories and of Australia as a whole during the last seven intercensal periods are shown in the following table, which distinguishes the numerical increases, the proportional increases (which do not allow for the differences in the length of the intercensal periods) and the average annual rates of increase.

POPULATION : INTERCENSAL INCREASES.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

State or Territory.	1881-1891 (10 years).	1891-1901 (10 years).	1901-1911 (10 years).	1911-1921 (10 years).	1921-1933 (12½ years).	1933-1947 (14 years).	1947-1954 (7 years).
NUMERICAL INCREASE.							
New South Wales(a)	377,312	227,709	293,602	453,637	500,476	383,991	438,691
Victoria ..	278,522	60,982	114,481	215,729	288,981	234,440	397,640
Queensland ..	180,193	104,411	107,684	150,159	191,562	158,881	211,844
South Australia ..	39,119	42,813	50,212	86,602	85,789	65,124	151,021
Western Australia	20,074	134,342	97,990	50,618	106,120	63,628	137,291
Tasmania ..	30,962	25,808	..	18,736	22,569	13,819	29,479
Northern Territory	1,447	-87	-1,501	557	983	6,018	5,601
Aust. Cap. Terr.(b)	..	..	..	858	6,375	7,958	13,410
Australia ..	927,629	595,978	681,204	980,729	1,194,105	949,519	1,407,172

PROPORTIONAL INCREASE—PER CENT.							
New South Wales(a)	50.32	20.20	21.67	27.55	23.83	14.76	14.70
Victoria ..	32.33	5.35	9.53	16.40	18.87	12.88	19.35
Queensland ..	84.39	26.52	21.62	24.79	25.34	16.77	19.15
South Australia ..	14.15	13.57	14.01	21.20	17.33	11.21	23.38
Western Australia	67.57	269.86	53.22	17.94	31.89	14.50	27.32
Tasmania ..	26.76	17.60	10.86	11.80	6.46	12.95	20.10
Northern Territory	41.93	-1.78	-31.20	16.83	25.42	124.08	51.54
Aust. Cap. Terr.(b)	..	..	..	50.06	247.86	88.95	79.33
Australia ..	41.22	18.75	18.05	22.01	21.97	14.32	18.57

AVERAGE ANNUAL RATE OF INCREASE—PER CENT.							
New South Wales(a)	4.16	1.86	1.97	2.46	1.76	0.99	1.98
Victoria ..	2.84	0.52	0.91	1.53	1.42	0.87	2.56
Queensland ..	6.31	2.38	1.98	2.24	1.86	1.11	2.53
South Australia ..	1.33	1.28	1.32	1.94	1.31	0.76	3.05
Western Australia	5.30	13.97	4.36	1.66	2.29	0.97	3.51
Tasmania ..	2.40	1.63	1.04	1.12	0.51	0.87	2.65
Northern Territory	3.56	-0.18	-3.67	1.57	1.87	5.93	6.12
Aust. Cap. Terr.(b)	..	..	..	4.14	10.71	4.65	8.70
Australia ..	3.51	1.73	1.67	2.01	1.63	0.96	2.46

(a) Includes Australian Capital Territory prior to 1911. (b) Part of New South Wales prior to 1911.

NOTE.—Minus sign (—) denotes decrease.

§ 3. Growth and Distribution of Population.

1. Growth of Population.—The table which follows shows the growth in the population of each sex in the various States and Territories as measured by the estimated population at 31st December in 1880 and thereafter at decennial intervals to 1950. Each year from 1951 to 1956 is included in order to show recent fluctuations in greater detail.

ESTIMATED POPULATION : 1880 TO 1956.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

At 31st Dec.—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T. (b)	Australia.
MALES.									
1880	404,952	450,558	124,013	147,438	16,985	60,568	..	..	1,204,514
1890	602,704	595,519	223,252	166,049	28,854	76,453	..	..	1,692,831
1900	716,047	601,773	274,684	180,349	110,088	89,763	4,288	..	1,976,992
1910	858,181	646,482	325,513	206,557	157,971	98,866	2,738	..	2,296,308
1920	1,067,945	753,803	396,555	245,300	176,895	107,259	2,911	1,062	2,751,730
1930	1,294,419	892,422	481,559	288,618	232,868	113,505	3,599	4,732	3,311,722
1940c	1,402,297	947,037	536,712	297,885	248,734	123,650	6,337	7,856	3,570,508
1950	1,627,618	1,114,497	620,329	364,705	294,758	147,103	9,414	13,021	4,191,445
1951	1,667,566	1,150,009	636,935	375,188	304,454	153,721	9,370	13,690	4,310,933
1952	1,695,899	1,189,262	652,974	388,433	316,700	157,702	9,477	15,081	4,425,528
1953	1,713,639	1,212,060	666,348	397,610	326,372	161,305	9,854	16,090	4,503,278
1954	1,738,385	1,246,591	679,012	409,858	334,886	162,801	9,974	16,502	4,598,009
1955	1,770,966	1,288,058	692,920	423,413	345,487	165,994	10,345	17,746	4,714,929
1956	1,802,142	1,328,357	708,246	437,426	353,082	171,151	10,545	19,772	4,830,721

For footnotes see next page.

ESTIMATED POPULATION : 1880 TO 1956—*continued.*

(EXCLUDING FULL-BLOOD ABORIGINALS.)

At 31st Dec.—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T. (b)	Australia.
FEMALES.									
1880	336,190	408,047	87,027	128,955	12,576	54,222	..	..	1,027,017
1890	510,571	538,209	168,864	152,898	19,648	68,334	..	..	1,458,524
1900	644,258	594,440	219,163	176,901	176,879	83,137	569	..	1,788,347
1910	785,674	654,926	273,503	200,311	118,861	94,937	563	..	2,128,775
1920	1,023,777	774,106	354,069	245,706	154,428	105,493	1,078	910	2,659,567
1930	1,251,934	900,183	435,177	285,849	198,742	111,792	1,365	3,987	3,189,029
1940(c)	1,388,651	967,881	494,740	301,171	225,342	120,352	2,637	6,304	3,507,078
1950	1,613,439	1,122,685	585,089	358,138	277,891	143,230	5,006	10,558	4,116,036
1951	1,647,106	1,149,529	601,343	368,597	285,885	148,066	5,244	11,204	4,216,974
1952	1,672,087	1,177,457	618,282	380,137	296,235	151,856	5,294	12,693	4,314,041
1953	1,695,370	1,203,975	632,072	388,055	305,371	155,160	5,781	13,624	4,399,408
1954	1,723,928	1,234,286	643,740	398,385	314,529	156,710	6,166	14,642	4,492,386
1955	1,754,957	1,266,963	657,764	411,222	325,263	159,807	6,662	15,724	4,598,362
1956	1,786,202	1,304,266	670,701	424,486	331,753	161,659	7,308	16,238	4,702,613

PERSONS.

1880	741,142	858,605	211,040	276,393	29,561	114,790	..	..	2,231,531
1890	1,113,275	1,133,728	392,116	318,947	48,502	144,787	..	..	3,151,355
1900	1,360,305	1,196,213	493,847	357,250	179,967	172,900	4,857	..	3,765,339
1910	1,643,855	1,301,408	599,016	406,868	276,832	193,803	3,301	..	4,425,083
1920	2,091,722	1,527,909	750,624	491,006	331,323	212,752	3,989	1,972	5,411,297
1930	2,546,353	1,792,605	916,736	574,467	431,610	225,297	4,964	8,719	6,500,751
1940(c)	2,790,948	1,914,918	1,031,452	599,056	474,076	244,002	8,974	14,160	7,077,586
1950	3,241,057	2,237,182	1,205,418	722,843	572,649	290,333	14,420	23,579	8,307,481
1951	3,314,672	2,299,538	1,238,278	743,785	590,339	301,787	14,614	24,894	8,527,907
1952	3,367,986	2,366,719	1,271,256	768,570	612,935	309,558	14,771	27,774	8,739,569
1953	3,409,009	2,416,035	1,298,420	785,665	631,743	316,465	15,635	29,714	8,902,686
1954	3,462,313	2,480,877	1,322,752	808,243	649,415	319,511	16,140	31,144	9,090,395
1955	3,525,923	2,555,021	1,350,684	834,635	670,750	325,801	17,007	33,470	9,313,291
1956	3,588,344	2,632,623	1,378,947	861,912	684,835	332,810	17,853	36,010	9,533,334

(a) Northern Territory figures included with South Australia prior to 1900. (b) Part of New South Wales prior to 1911. (c) Includes all defence personnel enlisted in Australia irrespective of movements subsequent to enlistment.

Estimates of population for intercensal years are obtained in the manner outlined in § 1.

The estimated population at 31st December each year from 1788 to 1946 on the same basis as in the table above is shown in *Demography*, Bulletin No. 67, 1949 and for the period 1881 to 1955 in *Demography*, Bulletin No. 73. A graph illustrating the growth of the population of Australia and of each State and Territory appears on page 561.

2. **Present Numbers.**—The population of Australia at 31st December, 1956, was estimated at 9,533,334 persons of whom 4,830,721, or 50.67 per cent., were males and 4,702,613, or 49.33 per cent., were females. The increase during 1956 was 220,043, equal to 2.36 per cent., males having increased by 115,792 or 2.46 per cent., and females by 104,251 or 2.27 per cent. This increase was the result of an excess of births over deaths of 126,045, and a net gain by migration of 93,998 persons.

3. **Proportion of Area and Population, Density and Masculinity.**—The previous table shows the number of persons in each of the States and Territories at 31st December, 1956. In the following table the proportions of the total area and of the total population represented by each State and Territory are given, together with the density and the masculinity of the population.

DENSITY AND MASCULINITY OF POPULATION, 1956.
(EXCLUDING FULL-BLOOD ABORIGINALS.)

State or Territory.	Proportion of Total Area. (Per cent.)	Proportion of Estimated Population, 31st December, 1956. (Per cent.)			Density. (a)	Masculinity. (b)
		Males.	Females.	Persons.		
New South Wales	10.40	37.31	37.98	37.64	11.60	100.89
Victoria	2.96	27.50	27.73	27.62	29.96	101.85
Queensland	22.54	14.66	14.26	14.46	2.06	105.60
South Australia	12.78	9.05	9.03	9.04	2.27	103.05
Western Australia	32.81	7.31	7.05	7.18	0.70	106.43
Tasmania	0.88	3.54	3.44	3.49	12.70	105.87
Northern Territory	17.60	0.22	0.16	0.19	0.03	144.29
Australian Capital Territory	0.03	0.41	0.35	0.38	38.35	121.76
Australia	100.00	100.00	100.00	100.00	3.20	102.72

(a) Number of persons per square mile.

(b) Number of males per 100 females.

Additional information regarding density and masculinity of population appears in later sections of this chapter.

4. Urban and Rural Distribution.—Particulars of the distribution of the population amongst metropolitan urban, other urban and rural areas in each State and Territory is available only from a census. Particulars of the distribution at the 1947 Census were shown in Official Year Book No. 39, pages 521–524.

At the census of 30th June, 1954, the number of persons and the proportion of the total population of Australia in each division were:—metropolitan urban 4,845,230, 53.92 per cent.; other urban 2,230,039, 24.81 per cent.; rural 1,887,892, 21.01 per cent. Migratory population (23,369) accounted for the remaining 0.26 per cent.

Of the States, Victoria had the largest proportion of population residing in the metropolitan area (62.15 per cent.) but was closely followed in this respect by South Australia (60.66 per cent.). Percentages for the other States were:—New South Wales, 54.42; Queensland, 38.10; Western Australia, 54.50; and Tasmania, 30.84.

A feature of the metropolitan population is its higher femininity as compared with the population of extra-metropolitan areas. In 1933, 52.5 per cent. of the metropolitan population was composed of females; in 1947, the proportion had fallen slightly to 51.9 per cent., being highest in Tasmania at 52.3 per cent.; at the Census of 30th June, 1954, the proportion had fallen to 51.0 per cent., there being little difference in the proportions as between the several States. The proportion of females in extra-metropolitan areas was between 46 per cent. and 48 per cent. at each of these three censuses.

Metropolitan Urban Divisions include the capital cities of the States and (included in 1954 for the first time) Canberra, the capital city of Australia, the boundaries of the capital cities being determined for census purposes by the Statisticians of the States in collaboration with the Commonwealth Statistician, and normally include the city proper and all contiguous urban areas. In order to conform to the growth of the metropolitan urban population the boundaries are reviewed at each census and adjustments made, wherever necessary, to embrace contiguous urban areas that have developed since the previous census. Amendments were made prior to the Census of 1954 to the boundaries of the Metropolitan Urban Divisions in New South Wales, Victoria and Tasmania.

Other Urban Divisions comprise the capital city of the Northern Territory, all separately incorporated cities and towns, and all other towns with a population of 1,000 persons or more (750 in Tasmania), outside the Metropolitan Urban Divisions. The inclusion in the Other Urban Divisions in 1954 of the larger towns not separately incorporated was a significant departure from the classification adopted at previous censuses, when these towns (in all States except Tasmania) were included in the Rural Divisions, and the Other Urban Divisions (or Provincial Urban Divisions) were restricted to provincial separately incorporated cities and towns only. As it is not possible to provide 1947 particulars for all these towns, the particulars for the Other Urban and Rural Divisions for 1947 have been combined in the table below.

Rural Divisions comprise the remaining portions of each State and Territory, and are affected by the intercensal changes in the areas of the Metropolitan Urban and Other Urban Divisions. As already mentioned, the Rural Divisions in 1954 exclude the towns of 1,000 persons or more (750 in Tasmania) which were not separately incorporated.

The term "Migratory" used in the following tables refers to persons not elsewhere enumerated who at midnight between 30th June and 1st July, 1954 were travelling on ships in Australian waters or on long-distance trains or aircraft.

URBAN AND RURAL POPULATION^(a) : CENSUS, 30th JUNE, 1954.
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Division.	1954 Census.			Proportion of Total Population of State. (Per cent.)		Percentage Increase since the 1947 Census.
	Males.	Females.	Persons.	1947 Census.	1954 Census.	
NEW SOUTH WALES.						
Urban—						
Metropolitan ^(b)	909,978	953,183	1,863,161	55.14	54.42	13.20
Other ..	485,128	480,259	965,387	44.62	28.20	16.02
Rural ..	319,562	268,549	588,111		17.18	
Migratory ..	6,192	678	6,870	0.24	0.20	-6.43
<i>Total</i> ..	<i>1,720,860</i>	<i>1,702,669</i>	<i>3,423,529</i>	<i>100.00</i>	<i>100.00</i>	<i>14.70</i>
VICTORIA.						
Urban—						
Metropolitan ^(b)	747,712	776,399	1,524,111	62.91	62.15	17.91
Other ..	233,083	236,980	470,063	36.90	19.17	20.74
Rural ..	243,809	206,317	450,126		18.35	
Migratory ..	6,495	1,546	8,041	0.19	0.33	108.80
<i>Total</i> ..	<i>1,231,099</i>	<i>1,221,242</i>	<i>2,452,341</i>	<i>100.00</i>	<i>100.00</i>	<i>19.35</i>
QUEENSLAND.						
Urban—						
Metropolitan	244,904	257,416	502,320	36.34	38.10	24.95
Other ..	230,157	229,923	460,080	63.49	34.90	15.73
Rural ..	198,605	154,283	352,888		26.77	
Migratory ..	2,586	385	2,971	0.17	0.23	57.45
<i>Total</i> ..	<i>676,252</i>	<i>642,007</i>	<i>1,318,259</i>	<i>100.00</i>	<i>100.00</i>	<i>19.15</i>
SOUTH AUSTRALIA.						
Urban—						
Metropolitan	237,651	245,857	483,508	59.20	60.66	26.42
Other ..	55,853	54,254	110,107	40.54	13.81	18.83
Rural ..	108,199	92,934	201,133		25.23	
Migratory ..	2,200	146	2,346	0.26	0.30	37.92
<i>Total</i> ..	<i>403,903</i>	<i>393,191</i>	<i>797,094</i>	<i>100.00</i>	<i>100.00</i>	<i>23.38</i>
WESTERN AUSTRALIA.						
Urban—						
Metropolitan	171,832	176,815	348,647	54.24	54.50	27.93
Other ..	53,868	51,550	105,418	45.17	16.48	27.27
Rural ..	102,753	80,686	183,439		28.67	
Migratory ..	1,905	362	2,267	0.59	0.35	-23.95
<i>Total</i> ..	<i>330,358</i>	<i>309,413</i>	<i>639,771</i>	<i>100.00</i>	<i>100.00</i>	<i>27.32</i>

(a) See letterpress preceding this table. (b) Adjustments have been made to the 1947 Census figures for the Metropolitan Divisions of New South Wales, Victoria and Tasmania in order to provide approximate comparisons on the 1954 Census basis. See letterpress preceding this table.

NOTE.—Minus sign (—) denotes decrease.

URBAN AND RURAL POPULATION(a): CENSUS, 30TH JUNE, 1954—continued.

Division.	1954 Census.			Proportion of Total Population of State. (Per cent.)		Percentage Increase since the 1947 Census.
	Males.	Females.	Persons.	1947 Census.	1954 Census.	
TASMANIA.						
Urban—						
Metropolitan(b)	46,544	48,662	95,206	30.19	30.84	22.67
Other ..	53,521	54,607	108,128	} 69.53	{ 35.02	} 18.63
Rural ..	56,418	48,350	104,768			
Migratory ..	646	4	650	0.28	0.21	-7.54
<i>Total</i> ..	<i>157,129</i>	<i>151,623</i>	<i>308,752</i>	<i>100.00</i>	<i>100.00</i>	<i>20.10</i>
NORTHERN TERRITORY.						
Urban—						
Metropolitan						
Other ..	6,378	4,478	10,856	} 98.73	{ 65.92	} 51.40
Rural ..	3,692	1,697	5,389			
Migratory ..	218	6	224	1.27	1.36	62.32
<i>Total</i> ..	<i>10,288</i>	<i>6,181</i>	<i>16,469</i>	<i>100.00</i>	<i>100.00</i>	<i>51.54</i>
AUSTRALIAN CAPITAL TERRITORY.						
Urban—						
Metropolitan	15,076	13,201	28,277	89.65	93.28	86.57
Other ..	..	..	..	..	..	..
Rural ..	1,153	885	2,038	10.35	6.72	16.52
Migratory ..	..	..	..	..	..	..
<i>Total</i> ..	<i>16,229</i>	<i>14,086</i>	<i>30,315</i>	<i>100.00</i>	<i>100.00</i>	<i>79.33</i>
AUSTRALIA.						
Urban—						
Metropolitan(b)	2,373,697	2,471,533	4,845,230	53.94	53.92	18.52
Other ..	1,117,988	1,112,051	2,230,039	} 45.82	{ 24.81	} 18.59
Rural ..	1,034,191	853,701	1,887,892			
Migratory ..	20,242	3,127	23,369	0.24	0.26	25.62
<i>Total</i> ..	<i>4,546,118</i>	<i>4,440,412</i>	<i>8,986,530</i>	<i>100.00</i>	<i>100.00</i>	<i>18.57</i>

(a) See letterpress on page 545. (b) Adjustments have been made to the 1947 Census figures for the Metropolitan Divisions of New South Wales, Victoria and Tasmania in order to provide approximate comparisons on the 1954 Census basis. See letterpress on page 545.

NOTE.—Minus sign (—) denotes decrease.

5. Capital Cities : Australia and Other Countries.—In Australia there is an abnormal concentration of population in the capital cities, which are the only cities of outstanding importance in the various States. A comparison with the capitals of various other countries is given in the following table.

POPULATION OF CAPITAL CITIES: AUSTRALIA AND OTHER COUNTRIES.
(*000.)

State or Country.	Metropolis.	Year.	Metro- politan Popu- lation.	Country.	Metropolis.	Year.	Metro- politan Popu- lation.
New South Wales	Sydney	1956	a 1,936	Brazil	Rio de Janeiro	1951	2,490
Victoria	Melbourne	1955	a 1,595	Czechoslovakia	Prague	1949	933
Queensland	Brisbane	1956	(a) 528	Denmark	Copenhagen	1950	975
South Australia	Adelaide	1956	(a) 514	Egypt	Cairo	1951	2,373
Western Australia	Perth	1956	(a) 369	France	Paris	1954	2,850
Tasmania	Hobart	1956	(a) 100	Germany	Berlin	1955	3,495
Australian Cap. Ter.	Canberra	1956	(a) 32	Greece	Athens(c)	1951	1,368
England	London(b)	1955	8,290	Hungary	Budapest(d)	1955	1,757
Scotland	Edinburgh	1955	468	Italy	Rome	1953	1,760
Northern Ireland	Belfast	1952	444	Japan	Tokyo(e)	1953	6,330
Ireland, Republic of	Dublin	1951	522	Netherlands	Amsterdam	1955	864
Canada	Ottawa	1951	202	Norway	Oslo	1953	444
New Zealand	Wellington	1955	227	Poland	Warsaw	1955	1,001
Union of South Africa	Capetown	1951	578	Portugal	Lisbon	1952	795
Argentina	Buenos Aires	1955	3,583	Spain	Madrid	1954	1,700
Belgium	Brussels	1954	976	Sweden	Stockholm	1955	777
				U.S.A.	Washington	1950	802

(a) Excludes full-blood aboriginals.
Piraeus.

(b) Greater London.
(c) Greater Athens, including
Greater Tokyo.

(c) Greater Athens, including
Greater Tokyo.

6. **Principal Urban Areas.**—The following table shows the estimated population of the principal urban incorporated areas (population 5,000 or more) in each State and Territory of Australia at the latest date available.

**ESTIMATED POPULATION OF PRINCIPAL URBAN INCORPORATED AREAS :
AUSTRALIA.**
(EXCLUDING FULL-BLOOD ABORIGINALS.)

City or Town.	Popu- lation.	City or Town.	Popu- lation.	City or Town.	Popu- lation.
New South Wales.(a)		Victoria.(d)		South Australia.	
Sydney and Suburbs(b)	1,935,880	Melbourne and Suburbs(b)	1,595,300	Adelaide and Suburbs(a)(b)	514,000
Newcastle and Suburbs(c)	185,250	Geelong and Suburbsc	78,530	Port Pirie	(e) 14,223
Greater Wollongong	101,420	Ballarat and Suburbsc	49,500	Mount Gambier	(e) 10,331
Broken Hill	32,170	Bendigo and Suburbsc	38,130	Whyalla	(e) 8,598
Blue Mountains	23,130	Moe(f)	12,950	Port Augusta	(e) 6,704
Maitland	21,980	Warrnambool	12,800	Port Lincoln	(e) 5,871
Goulburn	20,310	Shepparton	11,880	Gawler	(e) 5,117
Wagga Wagga	19,990	Wangaratta	11,310		
Penrith	19,740	Mildura	11,280	Western Australia.(a)	
Orange	18,780	Hamilton	8,850	Perth and Suburbs(b)	369,000
Lismore	17,820	Colac	8,300	Kalgoorlie and Suburbs(c)	23,000
Albury	17,510	Horsham	8,050	Bunbury	10,642
Bathurst	16,590	Ararat	7,610	Geraldton	8,922
Lithgow	15,110	Maryborough	7,010	Albany	8,860
Cessnock	14,810	Sale	6,790	Norham	6,193
Grafton and South	14,590	Castlemaine	6,710		
Tamworth	14,210	Benalla	6,310	Tasmania.(a)	
Dubbo	12,540	Yallourn Works Area	5,800	Hobart and Suburbsb	99,540
Campbelltown	10,440	Echuca	5,700	Launceston and Suburbs(c)	52,170
Windsor	10,390	Stawell	5,570	Burnie	(e) 11,193
Armidale	8,990	Swan Hill	5,470	Devonport	(e) 10,597
Parkes	8,170	Portland	5,020	Ulverstone	(e) 5,005
Casino	8,130				
Queanbeyan	7,820	Queensland.(a)		Northern Territory.	
Inverell	7,800	Brisbane and Suburbsb	527,500	Darwin(d)	8,330
Taree	7,800	Toowoomba	45,000		
Kempsey	7,790	Rockhampton	42,250	Australian Capital Territory.(a)	
Cooma	7,530	Townsville	42,200	Canberra(b)	32,440
Forbes	6,670	Ipswich	40,860		
Shellharbour	6,470	Cairns	22,000		
Cowra	6,250	South Coast	22,000		
Glen Innes	5,940	Bundaberg	20,800		
Cootamundra	5,870	Maryborough	18,580		
Muswellbrook	5,850	Redcliffe	15,500		
Moree	5,710	Mackay	15,180		
Young	5,650	Gympie	10,300		
Gunnedah	5,440	Warwick	9,540		
Mudgee	5,400	Gladstone	7,230		
Deniliquin	5,050	Charters Towers	6,840		
Camden	5,010	Dalby	6,620		

(a) At 30th June, 1956.
31st December, 1955.

(b) Metropolitan Area.
(c) Census, 30th June, 1954.

(c) Entire Urban Area.

(d) At 31st May, 1955.

7. **Urban Areas Outside Metropolitan Areas.**—The proportion of the total population of each State which was located in incorporated urban provincial areas at the 1933 and 1947 Censuses was shown in Official Year Book No. 39, pages 522-3. In Official Year Book No. 40, page 334, a table was given showing aggregate population at the 1947 Census of all cities and towns outside the metropolitan area of each State with 2,000 or more and 3,000 or more inhabitants, irrespective of whether such centres were incorporated separately or not. In addition, the proportion of the aggregate population of these cities and towns to the total population of the State was shown. The following table shows similar particulars for the 1954 Census.

AGGREGATE POPULATION OF CITIES AND TOWNS OF SPECIFIED SIZE :
CENSUS, 30th JUNE, 1954.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

State or Territory.	Cities and Towns outside Metropolitan Area with Population of—					
	2,000 and over.			3,000 and over.		
	Number.	Population.	Proportion of Total Population.	Number.	Population.	Proportion of Total Population.
			%			%
New South Wales(a) ..	98	881,391	25.75	67	806,373	23.55
Victoria ..	56	415,690	16.95	40	376,347	15.35
Queensland ..	41	404,520	30.69	29	374,328	28.40
South Australia ..	14	74,502	9.35	9	62,008	7.78
Western Australia(b) ..	13	82,139	12.84	7	67,440	10.54
Tasmania ..	8	89,003	28.83	6	84,312	27.31
Northern Territory ..	2	10,856	65.92	1	8,071	49.01
Australian Capital Territory (c) ..	..	..	..	..	..	..
Total ..	232	1,958,101	21.79	159	1,778,879	19.79

(a) Excludes that part of Liverpool Municipality outside the Metropolitan Area of Sydney.
(b) Excludes that part of Fremantle suburbs outside the Metropolitan Area of Perth. (c) The only city or town is Canberra, the capital city of Australia, classed as metropolitan.

In the foregoing table, "Urban Areas" comprising two or more Local Government Areas or portions thereof are treated as units. The "Urban Areas" so treated are: in New South Wales, Newcastle; in Victoria, Ballarat, Bendigo, and Geelong; in Western Australia, Kalgoorlie; and in Tasmania, Launceston. The figures in each instance include the populations of the adjoining areas which, together with the city proper, constitute the entire "Urban Area".

The numbers of towns of 2,000 or more inhabitants in New South Wales and Victoria, and of 3,000 or more in New South Wales, show considerable decreases as compared with the figures for the 1947 Census. This is due to the absorption, by the increased metropolitan areas, of towns within these ranges which were formerly outside the metropolitan limits, and, in New South Wales, to similar absorptions by the City of Blue Mountains, Greater Wollongong and Newcastle Urban Area.

8. **Principal Cities in the World.**—The following table shows the population of the world's largest cities at the latest available date:—

POPULATION OF THE WORLD'S LARGEST CITIES.

(Names of cities in Commonwealth countries are printed in italics.)

Country.	City.	Year.	City Population ('000).	Country.	City.	Year.	City Population ('000).
England	<i>London(a)</i>	1955	8,290	Persia	Tehran	1955	1,200
U.S.A.	New York	1955	8,005	China	Wuhan	1950	1,200
Japan	Tokyo(b)	1953	6,330	Philippines	Manila	1953	1,200
China	Shanghai	1953	6,204	Singapore	<i>Singapore</i>	1954	1,165
U.S.S.R.	Moscow	1955	4,839	England	<i>Birmingham</i>	1954	1,118
U.S.A.	Chicago	1950	3,621	Canada	<i>Toronto(h)</i>	1951	1,117
Argentina	Buenos Aires	1955	3,583	Japan	Kyoto	1950	1,102
Germany	Berlin	1955	3,495	India	<i>Hyderabad</i>	1951	1,086
U.S.S.R.	Leningrad(c)	1955	3,176	Scotland	<i>Glasgow</i>	1954	1,083
India	<i>Calcutta(d)</i>	1951	2,982	China	Dairen	1950	1,054
France	Paris	1954	2,850	Korea	Pusan	1955	1,045
India	<i>Bombay</i>	1951	2,839	Romania	Bucharest	1952	1,042
China	Peking	1953	2,768	Egypt	Alexandria	1951	1,041
China	Tientsin	1953	2,694	Japan	Nagoya	1950	1,031
Indonesia	Djakarta	1953	2,500	Italy	Naples	1951	1,028
Brazil	Rio de Janeiro	1951	2,490	China	Nanking	1950	1,020
Egypt	Cairo	1951	2,373	Pakistan	<i>Karachi</i>	1951	1,009
Mexico	Mexico City	1950	2,234	Poland	Warsaw	1955	1,001
Brazil	Sao Paulo	1950	2,228	Venezuela	Caracas	1955	1,000
Japan	Osaka	1952	2,115	U.S.S.R.	Kiev	1955	991
U.S.A.	Philadelphia	1950	2,071	Japan	Kobe	1955	979
U.S.A.	Los Angeles	1950	1,970	Belgium	Brussels	1954	976
Australia	<i>Sydney</i>	1956	1,936	Denmark	Copenhagen	1950	975
U.S.A.	Detroit	1950	1,850	Thailand	Bangkok	1952	971
Germany	Hamburg	1955	1,764	Japan	Yokohama	1950	951
Italy	Rome	1953	1,760	U.S.A.	Baltimore	1950	950
Hungary	Budapest(e)	1955	1,757	Germany	Munich	1955	947
Spain	Madrid	1954	1,700	Czechoslovakia	Prague	1949	933
China	Chungking	1953	1,620	India	Delhi	1951	915
Austria	Vienna	1955	1,618	U.S.A.	Cleveland	1950	915
Australia	<i>Melbourne</i>	1955	1,595	U.S.S.R.	Baku	1955	901
Korea	Seoul	1955	1,575	South Africa	<i>Johannesburg</i>	1951	884
China	Shenyang	1950	1,551	U.S.S.R.	Kharkov	1955	877
China	Canton	1950	1,496	U.S.S.R.	Gorky City	1955	876
India	<i>Madras</i>	1951	1,416	Netherlands	Amsterdam	1955	864
Canada	<i>Montreal(f)</i>	1951	1,395	U.S.A.	St. Louis	1950	857
Greece	Athens(g)	1951	1,368	China	Tsingtao	1948	850
Chile	Santiago	1952	1,348	Pakistan	<i>Lahore</i>	1951	849
Spain	Barcelona	1954	1,322	Uruguay	Montevideo	1953	838
Italy	Milan	1951	1,273	U.S.A.	Washington	1950	802
Turkey	Istanbul	1955	1,215	U.S.A.	Boston	1950	801

(a) Greater London. (b) Greater Tokyo. (c) Greater Leningrad. (d) Includes Howrah.
 (e) Greater Budapest. (f) Greater Montreal. (g) Greater Athens, including Piraeus. (h) Greater Toronto.

§ 4. Mean Population.

1. **General.**—Mean populations are calculated for twelve-month periods to provide a satisfactory average basis for calculations requiring allowance for the continuous change in population figures during such periods.

2. **Method of Calculation.**—From 1901 onwards the mean population for any year has been calculated by the formula:—

$$\text{Mean Population} = \frac{a + 4b + 2c + 4d + e}{12}$$

where *a*, *b*, *c*, *d* and *e*, respectively, are the populations at the end of the quarter immediately preceding the year and at the end of each of the four succeeding quarters; e.g., in the case

of a calendar year, 31st December of the preceding year and 31st March, 30th June, 30th September and 31st December of the year under consideration. This formula gives a close approximation to the mean of a theoretical population progressing smoothly through the five values *a*, *b*, *c*, *d*, *e*.

3. Results.—(i) *Calendar Years.* The following table shows the mean population of each State and Territory for the calendar years 1947 to 1956:—

MEAN POPULATION : CALENDAR YEARS.
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Year ended 31st Dec.—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1947 ..	2,983,810	2,053,916	1,105,882	646,686	502,951	257,636	10,866	17,029	7,578,776
1948 ..	3,020,058	2,091,581	1,127,318	661,370	514,621	263,445	11,984	19,182	7,709,559
1949 ..	3,093,277	2,142,529	1,155,638	680,287	532,603	270,327	13,068	21,161	7,908,890
1950 ..	3,193,208	2,209,013	1,191,081	709,475	557,878	278,785	14,309	23,545	8,177,294
1951 ..	3,279,415	2,276,272	1,223,719	732,537	580,317	288,294	15,179	24,658	8,420,391
1952 ..	3,341,476	2,343,610	1,255,896	755,042	600,615	298,361	15,087	26,570	8,636,657
1953 ..	3,386,556	2,395,851	1,287,231	776,355	621,034	306,318	15,534	28,724	8,817,603
1954 ..	3,428,488	2,453,458	1,313,055	796,361	640,140	311,128	16,214	30,383	8,989,227
1955 ..	3,492,385	2,526,275	1,338,995	820,143	658,747	316,153	17,040	32,412	9,202,150
1956 ..	3,555,854	2,604,283	1,366,496	848,531	677,317	322,216	17,896	34,698	9,427,291

(ii) *Financial Years.* The following table shows the mean population of each State and Territory for the years ended 30th June, 1947 to 1956:—

MEAN POPULATION : FINANCIAL YEARS.
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Year ended 30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1947(a)	2,963,056	2,039,348	1,097,303	640,352	497,006	254,553	10,676	16,381	7,518,675
1948 ..	3,001,662	2,070,116	1,114,634	653,852	508,747	261,202	11,209	18,097	7,639,519
1949 ..	3,049,051	2,115,830	1,140,816	669,828	521,932	266,518	12,539	19,965	7,796,479
1950 ..	3,145,699	2,174,844	1,173,232	694,582	545,134	274,493	13,737	22,571	8,044,292
1951 ..	3,238,406	2,242,882	1,207,194	721,845	570,346	283,526	14,827	24,017	8,303,043
1952 ..	3,311,840	2,309,708	1,239,868	743,310	589,887	293,340	15,131	25,545	8,528,629
1953 ..	3,366,358	2,372,366	1,272,244	766,538	611,191	302,529	15,241	27,721	8,734,188
1954 ..	3,405,414	2,422,839	1,300,464	785,981	630,705	309,416	15,930	29,595	8,900,344
1955 ..	3,459,538	2,488,115	1,325,336	807,501	648,930	312,987	16,536	31,249	9,090,192
1956 ..	3,524,379	2,564,849	1,352,629	834,465	669,040	319,192	17,474	33,642	9,315,670

(a) Includes all defence personnel enlisted in Australia irrespective of movements subsequent to enlistment.

§ 5. Elements of Increase.

1. *Natural Increase.*—(i) *General.* The two factors which contribute to the growth of a population are the "natural increase", i.e., the excess of births over deaths, and the "net migration", i.e., the excess of arrivals over departures. In earlier issues of the Official Year Book particulars of the natural increase from 1861 were given for each sex and for each State and Territory (see No. 22, page 899.) Figures for more recent years will be found in *Demography*, Bulletin No. 73.

During the present century, the rate of natural increase grew until it reached its maximum at a rate of 17.44 per thousand of population in 1914, but it steadily declined after that year to 7.07 in 1934. There was little change until 1939, but during the war and in the post-war period the rate rose sharply, reaching the level of 14.37 in 1947, and it has since remained at between 13 and 14 per 1,000 of population.

In the following table particulars of the natural increase in each State and Territory are given for each sex for each five-year period from 1926 to 1955 and for each of the years 1952 to 1956.

POPULATION : NATURAL INCREASE (EXCESS OF BIRTHS OVER DEATHS).
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
MALES.									
1926-30 ..	72,430	43,756	25,645	14,583	11,245	7,001	-131	175	174,704
1931-35 ..	51,566	25,286	20,627	8,686	8,576	5,810	-93	270	120,728
1936-40(a)	49,092	26,141	23,145	9,187	9,409	6,040	39	397	123,450
1941-45(a)	68,071	42,650	31,871	15,563	12,391	7,234	15	740	178,535
1946-50(a)	93,564	63,984	41,580	24,206	19,367	11,356	412	1,583	256,052
1951-55 ..	97,898	76,291	46,700	26,672	24,658	12,767	767	1,932	287,685
1952 ..	19,939	14,882	9,327	5,333	4,749	2,699	149	452	57,530
1953 ..	20,444	15,200	9,428	5,576	5,048	2,479	165	337	58,677
1954 ..	19,197	15,950	9,259	5,455	4,933	2,426	178	370	57,768
1955 ..	19,411	16,902	10,020	5,313	5,330	2,771	158	357	60,262
1956 ..	20,043	17,253	9,623	5,465	5,605	2,750	201	457	61,397
FEMALES.									
1926-30 ..	80,733	44,417	31,128	15,407	14,406	6,893	126	203	193,313
1931-35 ..	60,300	28,216	26,036	9,228	12,352	5,953	156	280	142,521
1936-40(a)	60,628	28,464	28,991	10,057	13,626	6,574	220	437	148,997
1941-45(a)	75,809	42,538	36,709	15,654	16,029	7,420	232	826	195,217
1946-50(a)	102,959	63,744	46,650	24,605	22,273	11,667	652	1,574	274,124
1951-55 ..	110,115	78,058	52,282	27,641	27,650	13,219	1,029	2,023	312,017
1952 ..	22,219	15,534	10,455	5,501	5,455	2,638	210	511	62,523
1953 ..	22,739	15,711	10,348	5,618	5,742	2,706	179	327	63,370
1954 ..	21,484	16,156	10,573	5,593	5,631	2,648	229	369	62,683
1955 ..	22,443	16,907	11,025	5,645	5,914	2,829	238	378	65,379
1956 ..	21,607	17,254	10,600	5,906	5,739	2,841	248	453	64,648
PERSONS.									
1926-30 ..	153,163	88,173	56,773	29,990	25,651	13,894	-5	378	368,017
1931-35 ..	111,866	53,502	46,663	17,914	20,928	11,763	63	550	263,249
1936-40(a)	109,720	54,605	52,136	19,244	23,035	12,614	259	834	272,447
1941-45(a)	143,880	85,188	68,580	31,217	28,420	14,654	247	1,566	373,752
1946-50(a)	196,523	127,728	88,230	48,811	41,640	23,023	1,064	3,157	530,176
1951-55 ..	208,013	154,349	98,982	54,313	52,308	25,986	1,796	3,955	599,702
1952 ..	42,158	30,416	19,782	10,834	10,204	5,337	359	963	120,053
1953 ..	43,183	30,911	19,776	11,194	10,790	5,185	344	664	122,047
1954 ..	40,681	32,106	19,832	11,048	10,564	5,074	407	739	120,451
1955 ..	41,854	33,809	21,045	10,958	11,244	5,600	396	735	125,641
1956 ..	41,650	34,507	20,223	11,371	11,344	5,591	449	910	126,045

(a) Excess of births over civilian deaths from September, 1939 to June, 1947.

NOTE.—Minus sign (-) denotes excess of deaths over births.

POPULATION : NATURAL INCREASE (EXCESS OF BIRTHS OVER DEATHS)—
continued.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
RATE OF NATURAL INCREASE(b)—PERSONS.									
1926-30 ..	12.51	10.10	12.84	10.58	12.63	12.85	-0.22	9.60	11.72
1931-35 ..	8.61	5.89	9.88	6.17	9.54	10.33	2.54	11.96	7.95
1936-40(c)	8.06	5.84	10.40	6.48	9.94	10.66	8.27	14.14	7.89
1941-45(c)	10.05	8.64	13.04	10.17	11.86	12.02	4.97	21.85	10.32
1946-50(c)	12.90	12.14	15.56	14.64	16.01	17.41	17.50	32.61	13.65
1951-55 ..	12.29	12.87	15.42	14.00	16.87	17.09	22.72	27.71	13.61
1952 ..	12.61	12.98	15.75	14.35	16.99	17.89	23.80	36.24	13.90
1953 ..	12.75	12.90	15.36	14.42	17.37	16.93	22.14	23.12	13.84
1954 ..	11.87	13.09	15.10	13.87	16.50	16.31	25.10	24.32	13.40
1955 ..	11.98	13.38	15.72	13.36	17.07	17.71	23.24	22.68	13.65
1956 ..	11.71	13.25	14.80	13.40	16.75	17.35	25.09	26.23	13.37

(a) Excess of births over civilian deaths from September, 1939 to June, 1947. (b) Excess of births over deaths per 1,000 of mean population. (c) Excess of births over civilian deaths per 1,000 of mean population from September, 1939 to June, 1947.

NOTE.—Minus sign (-) denotes excess of deaths over births.

During the first five years of the present century, the average increment to the population of Australia by natural increase was 56,886 persons per annum. The increment rose to 81,695 persons per annum in 1921-25, but thereafter fell to 52,650 persons per annum in the five years 1931-35. During 1941-45, the average annual excess of births over civilian deaths was 74,750, while during 1951-55 the annual excess of births over deaths was a record high average of 119,940. In the year 1956 the excess was 126,045.

A graph showing the rate of natural increase for each year from 1860 to 1956 will be found on page 598.

(ii) *Comparison with other Countries.* Notwithstanding its low birth rate, Australia has a higher rate of natural increase than most European countries, owing to the fact that its death rate is very low. The following table gives a comparison between the rate of natural increase in Australia and that in some of the principal countries for which such information is available.

NATURAL INCREASE OF POPULATION : VARIOUS COUNTRIES.

INCREASE PER ANNUM PER 1,000 OF MEAN POPULATION.

Country.	1936-40.	1941-45.	1946-50.	1951-55.	Country.	1936-40.	1941-45.	1946-50.	1951-55.
Mexico ..	20.5	23.2	27.7	30.4	Portugal ..	10.7	9.0	11.8	12.2
Ceylon ..	14.5	17.1	25.1	27.3	Spain ..	3.8	7.3	10.0	10.5
Egypt ..	16.1	12.7	21.4	24.8	Norway ..	5.1	8.0	11.4	10.2
Israel ..	17.9	19.0	23.1	24.2	Ireland, Republic of	6.3	10.0	8.9	8.8
Canada ..	10.7	13.7	18.1	19.6	Denmark ..	7.5	11.2	11.4	8.7
Union of S. Africa(b)	15.3	16.2	17.6	16.9	Italy ..	9.4	5.2	10.6	8.2
Argentina ..	(d)	13.8	15.6	15.8	Switzerland ..	3.6	7.5	8.1	7.0
U.S.A. ..	6.3	9.6	14.2	15.1	France ..	-1.5	-1.9	7.9	6.4
New Zealand(e)	9.1	11.7	16.1	15.0	Sweden ..	3.1	8.1	8.0	5.5
Netherlands ..	11.5	10.9	18.0	14.4	Germany ..	7.6	(d)	g 5.6	g 5.0
Australia(f)	7.9	10.3	13.7	13.6	Belgium ..	1.3	-0.5	4.6	4.4
Japan ..	11.5	9.9	17.6	13.2	United Kingdom ..	2.5	3.3	6.5	4.0
Finland ..	5.3	5.7	15.2	12.6	Austria ..	2.4	1.2	4.0	2.8

(a) 1951-53. (b) Europeans only. (c) 1951-54. (d) Not available. (e) Excludes Maoris. (f) Excludes full-blood aboriginals. (g) Federal Republic.

NOTE.—Minus sign (-) denotes decrease.

2. **Net Migration.***—The other factor of increase in the population, namely, the excess of arrivals over departures, known as "net migration," is, from its nature, much more subject to variation than is "natural increase".

Particulars of the increase by net migration are given below for five-year periods from 1926 to 1955 and for each of the years 1952 to 1956.

POPULATION: INCREASE BY NET MIGRATION.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
MALES.									
1926-30 ..	37,524	7,849	11,584	- 2,230	19,069	- 3,668	870	2,259	73,257
1931-35 ..	- 1,646	- 5,951	6,195	- 3,654	- 4,215	- 1,384	24	3	- 10,676
1936-40(a)	7,847	12,096	5,249	- 4,988	- 2,501	- 793	2,787	1,176	20,873
1941-45(a)(b)	6,614	17,502	- 6,487	2,202	- 9,261	- 4,312	889	- 1,822	5,325
1946-50(a)(b)	84,834	58,331	15,038	18,531	23,299	13,178	1,852	2,665	217,728
1951-55 ..	58,092	99,072	18,990	22,681	26,320	9,500	267	5,559	240,481
1952 ..	11,812	24,990	4,749	5,254	7,593	2,250	- 14	1,945	58,579
1953 ..	604	7,920	1,968	924	4,679	2,088	241	1,677	20,101
1954 ..	7,208	18,793	2,411	5,452	3,611	- 450	- 42	545	37,528
1955 ..	13,170	24,565	3,888	8,242	5,271	422	213	887	56,658
1956 ..	11,133	23,046	5,703	8,548	1,990	2,407	- 1	1,569	54,395

FEMALES.									
1926-30 ..	33,326	12,532	3,537	- 341	9,363	- 4,293	278	2,048	56,450
1931-35 ..	1,093	2,943	1,125	- 2,284	- 578	- 2,644	88	47	- 210
1936-40(a)	14,414	9,409	1,509	- 2,608	32	- 1,872	715	656	22,255
1941-45(a)(b)	3,648	10,745	- 4,759	786	- 3,654	- 3,701	357	- 938	2,484
1946-50(a)(b)	53,087	30,124	10,233	13,464	17,552	7,708	1,643	1,545	135,356
1951-55 ..	43,272	57,924	20,649	23,924	20,359	4,061	1,226	1,928	173,343
1952 ..	6,231	10,063	6,561	5,611	5,084	1,354	12	537	35,453
1953 ..	3,974	8,426	3,512	1,867	3,579	800	477	161	22,796
1954 ..	8,769	12,971	1,133	4,516	3,617	- 998	243	428	30,679
1955 ..	8,586	15,770	2,999	7,192	4,820	268	258	704	40,597
1956 ..	9,638	20,049	2,337	7,358	751	- 989	398	61	39,603

PERSONS.									
1926-30 ..	70,850	20,381	15,121	- 2,571	28,432	- 7,961	1,148	4,307	129,707
1931-35 ..	- 553	- 3,008	7,320	- 5,938	- 4,793	- 4,028	64	50	- 10,886
1936-40(a)	22,261	21,505	6,758	- 7,596	- 2,469	- 2,665	3,502	1,832	43,128
1941-45(a)(b)	10,262	28,247	- 11,246	2,988	- 12,915	- 8,013	1,246	- 2,760	7,809
1946-50(a)(b)	137,921	88,455	25,271	31,995	40,851	20,886	3,495	4,210	353,084
1951-55 ..	101,364	156,996	39,639	46,605	46,679	13,561	1,493	7,487	413,824
1952 ..	18,043	35,053	11,310	10,865	12,677	3,604	- 2	2,482	94,032
1953 ..	4,578	16,346	5,480	2,791	8,258	2,888	718	1,838	42,897
1954 ..	15,977	31,764	3,544	9,968	7,228	- 1,448	201	973	68,207
1955 ..	21,756	40,335	6,887	15,434	10,091	690	471	1,591	97,255
1956 ..	20,771	43,095	8,040	15,906	2,741	1,418	397	1,630	93,998

(a) Excludes troop movements from September, 1939 to June, 1947. (b) Excludes interstate migration from July, 1943 to June, 1947.

NOTE.—Minus sign (—) indicates excess of departures over arrivals.

* Oversea and interstate. The subject of overseas migration is dealt with at some length later in this chapter (see page 571.)

In the five years ended 1935 there was a net emigration of 10,886 and in the five years ended 1940 a net immigration of 43,128. During the war period 1941-45 net immigration fell to 7,809 persons. In 1946 there was a net loss by migration of 15,148 persons, due mainly to the departure of refugees and evacuees, and also fiancées, wives and children of British and Allied servicemen but, with increasing transport facilities and the resumption of assisted migration, there was a net gain of 10,611 in 1947, increasing rapidly to 55,115 in 1948, 150,001 in 1949 and 152,505 in 1950. This large net gain was due in great measure to the arrival of successive contingents from Australia's quota of 176,000 former European displaced persons, of whom 156,491 had arrived by the end of 1950. As this flow diminished, it was partly offset by new schemes for assisted migrants, but by 1953 the total net gain from all sources during the year had fallen to 42,897. Since then it has risen, being 93,998 in 1956. The net gains in each of the years 1949 to 1952 were the highest recorded for individual years with the exception of 1919, for which year troops returning from the 1914-18 War were included.

3. Total Increase.—The total increase of the population is obtained by combining the natural increase with the increase by net migration. For the period September, 1939 to June, 1947, deaths of defence personnel have been deducted from the total increase so derived. The results of the 1947 and 1954 Censuses disclosed some unrecorded movements of population during the intercensal periods, July, 1933 to June 1947 and July, 1947 to June, 1954, and particulars of total increase, after taking into account deaths of defence personnel in the earlier period, have been adjusted for these discrepancies. However, no separate adjustment has been applied to individual elements of increase during the periods, although intercensal discrepancies disclosed by previous censuses were adjusted on recorded overseas departures.

The annual increments to the population for the years 1952 to 1956 are shown below, together with the increases for each five years from 1926 to 1955. For the reasons stated in the previous paragraph, figures for the period 1933 to 1954 differ from the totals of figures for natural increase and net migration shown in preceding tables by an amount equal to the net total of deaths of defence personnel and unrecorded movements of population disclosed by the Censuses of 1947 and 1954.

POPULATION : TOTAL INCREASE.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
MALES.									
1926-30 ..	109,954	51,605	37,229	12,353	30,314	3,333	739	2,434	247,961
1931-35 ..	50,277	18,318	26,789	5,049	5,871	4,619	109	502	111,316
1936-40(a)	57,601	36,297	28,364	4,218	9,995	5,526	2,847	2,622	147,470
1941-45(a)(b)	62,389	47,747	20,117	14,703	2,856	2,204	915	427	151,358
1946-50(a)(b)	162,932	119,713	63,500	52,117	43,168	21,249	2,162	4,738	469,579
1951-55 ..	143,348	173,561	72,591	58,708	50,729	18,891	931	4,725	523,484
1952 ..	28,333	39,253	16,039	13,245	12,246	3,981	107	1,391	114,595
1953 ..	17,740	22,798	13,374	9,177	9,672	3,603	377	1,009	77,750
1954 ..	24,746	34,531	12,664	12,248	8,514	1,496	120	412	94,731
1955 ..	32,581	41,467	13,908	13,555	10,601	3,193	371	1,244	116,920
1956 ..	31,176	40,299	15,326	14,013	7,595	5,157	200	2,026	115,792
FEMALES.									
1926-30 ..	114,059	56,949	34,665	15,066	23,769	2,600	404	2,251	249,763
1931-35 ..	61,442	30,672	27,772	7,246	12,142	3,507	275	539	143,595
1936-40(a)	75,275	37,026	31,791	8,076	14,458	5,053	997	1,778	174,454
1941-45(a)(b)	79,661	52,442	33,295	17,123	13,156	4,074	657	845	201,253
1946-50(a)(b)	145,127	102,362	57,054	39,844	39,393	18,804	1,712	3,409	407,705
1951-55 ..	141,518	144,278	72,675	53,084	47,372	16,577	1,656	5,166	482,326
1952 ..	24,981	27,928	16,939	11,540	10,350	3,790	50	1,489	97,067
1953 ..	23,283	26,518	13,790	7,918	9,136	3,304	487	931	85,367
1954 ..	28,558	30,311	11,668	10,330	9,158	1,550	385	1,018	92,978
1955 ..	31,029	32,677	14,024	12,837	10,734	3,097	496	1,082	105,976
1956 ..	31,245	37,303	12,937	13,264	6,490	1,852	646	514	104,251

(a) Includes recorded deaths of defence personnel, whether inside or outside Australia, from September, 1939 to June, 1947.

(b) Excludes interstate migration from July, 1943 to June, 1947.

NOTE.—Minus sign (-) denotes decrease.

POPULATION : TOTAL INCREASE—*continued.*

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
PERSONS.									
1926-30 ..	224,013	108,554	71,894	27,419	54,083	5,933	1,143	4,685	497,724
1931-35 ..	111,719	48,990	54,561	12,295	18,013	8,126	166	1,041	254,911
1936-40(a)	132,876	73,323	60,155	12,294	24,453	10,579	3,844	4,400	321,924
1941-45(a)(b)	142,050	100,189	53,412	31,826	16,012	6,278	1,572	1,272	352,611
1946-50(a)(b)	308,059	222,075	120,554	91,961	82,561	40,053	3,874	8,147	877,284
1951-55 ..	284,866	317,839	145,266	111,792	98,101	35,468	2,587	9,891	1,005,810
1952 ..	53,314	67,181	32,978	24,785	22,596	7,771	157	2,880	211,662
1953 ..	41,023	49,316	27,164	17,095	18,808	6,907	864	1,940	163,117
1954 ..	53,304	64,842	24,332	22,578	17,672	3,046	505	1,430	187,709
1955 ..	63,610	74,144	27,932	26,392	21,335	6,290	867	2,326	222,896
1956 ..	62,421	77,602	28,263	27,277	14,085	7,009	846	2,540	220,043

(a) Includes recorded deaths of defence personnel, whether inside or outside Australia, from September, 1939 to June, 1947. (b) Excludes interstate migration from July, 1943 to June, 1947.

4. Rate of Population Growth.—(i) *Australia.* The annual percentage rate of population growth is computed by the compound interest formula. The formula is as follows :—

$$P_1 = P_0 (1+r)^t$$

where P_0 and P_1 are the populations at the beginning and end of the period respectively, t is the number of years intervening and r is the annual rate of growth.

The annual rates of growth per cent. of population in Australia during each of the years 1947 to 1956 were as follows :—1947, 1.60 ; 1948, 2.02 ; 1949, 3.25 ; 1950, 3.26 ; 1951, 2.65 ; 1952, 2.48 ; 1953, 1.87 ; 1954, 2.11 ; 1955, 2.45 ; and 1956, 2.36.

The annual rate of population growth during the present century has been 1.67 per cent., but the results from year to year have deviated widely from this figure. In the following table the period 31st December, 1900 to 31st December, 1956 has been arranged into certain defined groups of years according to the occurrence of influences markedly affecting the growth of population :—

POPULATION : PERIODICAL RATES OF GROWTH.

Period.	Interval. (Years.)	Total Increase. ('000.)	Average Annual Numerical Increase. ('000.)	Annual Rate of Population Growth. (Per cent.)		
				Natural Increase.	Net Migration.	Total.
1901 to 1913 ..	13	1,128	87	1.59	0.53	2.04
1914 to 1923 ..	10	862	86	1.50	0.15	1.64
1924 to 1929 ..	6	680	113	1.28	0.64	1.88
1930 to 1939(a)	10	569	57	0.82	0.03	0.85
1940 to 1946(a)	7	513	73	1.05	0.01	1.01
1947 to 1956(a)	10	2,015	202	1.44	1.11	2.40

(a) For the period September, 1939 to June, 1947, overseas movements of Australian defence forces have been excluded and deaths of members of these forces, whether occurring in Australia or overseas, have been included.

Up to 1913 the rate of natural increase was rising, and this factor, coupled with the impetus given to immigration from 1911 onwards by increased governmental assistance, was responsible for the comparatively high annual rate of 2.04 per cent. during this period. The 1914-18 War was a dominating influence in the decade 1914-23, and its effects can be

seen in the reduction of the rate from 2.04 to 1.64 per cent. From 1924 to 1929, more settled and prosperous conditions were experienced; encouraged migration was resumed on a large scale and, despite a further decline in the rate of natural increase owing to the persistent fall in the birth rate, the annual rate of growth rose to 1.88 per cent. After 1929 came the economic depression, and immigration ceased—in fact, Australia actually lost people through an excess of departures over arrivals in 1930, 1931, 1932 and 1935. The rate of natural increase also fell, and the rate of growth of the population receded to 0.85 per cent. per annum. With the outbreak of war in 1939, Australia entered a new phase in her demographic history, the full effects of which will not be seen for some time to come. The immediate effect of the war was to increase the number of marriages and to reverse the downward trend in fertility. The number of births increased each war year from 1940 to 1945, and these increases more than offset the rise in deaths due to war casualties and higher civilian death rates. As might be expected, migration over these years was negligible. The post-war period 1947 to 1956 was marked by a continued high natural increase and a resumption of immigration, the latter resulting in very high net gains in each of the four years 1949 to 1952. The annual rate of growth for the period was 2.40 per cent.

Rates of population growth from 1881 to 1954 may be found for each State and Territory of Australia in *Demography*, Bulletin No. 72, 1954.

(ii) *Various Countries.* Estimated rates of growth of the population of Australia in comparison with those for other countries are shown in the following table:—

POPULATION : RATES OF GROWTH IN VARIOUS COUNTRIES.

Country.	Annual Rate of Population Growth. (Per cent.)					Country.	Annual Rate of Population Growth. (Per cent.)				
	1926-31.	1931-36.	1936-41.	1941-46.	1946-51.		1926-31.	1931-36.	1936-41.	1941-46.	1946-51.
Ceylon ..	1.18	1.34	1.40	2.15	2.95	Denmark ..	0.67	0.84	0.74	1.20	0.97
Canada ..	1.97	1.23	0.85	1.35	2.62	Germany ..	0.55	0.58	(b)	(b)	0.92
Australia ..	1.50	0.76	0.96	0.98	2.55	Belgium ..	0.71	0.42	-0.10	0.22	0.73
Japan ..	1.48	0.77	1.06	0.92	2.05	Italy ..	0.31	0.63	c 0.55	d 0.49	0.70
New Zealand	1.38	0.79	a 0.58	1.81	2.04	Spain ..	0.89	1.46	0.91	0.94	0.61
U.S.A. ..	1.27	0.69	0.79	1.18	1.79	England and					
Netherlands ..	1.06	1.26	1.12	1.00	1.72	Wales ..	0.44	0.42	0.44	0.45	0.61
Norway ..	0.42	0.46	0.52	0.90	1.25	Ireland, Re-					
Switzerland..	0.62	0.44	0.43	0.98	1.24	public of					
France ..	0.53	0.02	-1.48	0.51	1.10	Scotland ..	-0.12	0.28	0.18	-0.20	-0.01
Sweden ..	0.29	0.34	0.45	1.01	1.03		-0.21	0.50	0.64	0.03	-0.08

(a) Excludes armed forces overseas at 31st December, 1941. (b) Not available. (c) Excludes war losses. (d) Territory defined by 1947 peace treaty.

NOTE.—Minus sign (—) denotes decrease.

§ 6. Density.

1. *General.*—From certain aspects population may be less significant in respect of its absolute amount than in its relation to the area of the country. Australia, with an area of 2,974,581 square miles, and an estimated population at 31st December, 1956 of 9,533,334, excluding about 47,000 full-blood aboriginals, has a density of only 3.2 persons to the square mile, and is, therefore, the most sparsely populated of the civilized countries of the world. For the other continents and sub-continent the densities are approximately as follows :—Europe (excluding U.S.S.R.), 212; Asia (excluding U.S.S.R.), 139; U.S.S.R., 23; Africa, 18; North and Central America, 25; and South America, 18. The population of Australia has thus about one-sixth of the density of that of South America and of Africa; about one-eighth of that of U.S.S.R. and of North and Central America; about one-forty-fifth of that of Asia (excluding U.S.S.R.); and about one-seventieth of that of Europe (excluding U.S.S.R.).

On account of the very large area of Australia and the unsuitability for settlement of much of the country, the density of population must necessarily increase slowly. In Australia as a whole the figure has increased from 1.29 per square mile in 1901 to 3.20 in 1956. Victoria's density, however, has grown from 13.77 to 29.96 and that of New South Wales from 4.43 to 11.60 in the same period. When comparing the density of population of the several States, consideration should be given to the average annual rainfall

distribution in each State as an indication of the climatic influence upon probable population numbers. The proportion of the area of Australia receiving less than 10 inches of rainfall is 38 per cent. ; that of the various States is :—New South Wales, 20 per cent. ; Victoria, nil ; Queensland, 13 per cent. ; South Australia, 83 per cent. ; Western Australia, 58 per cent. ; and Tasmania, nil.

2. *Main Countries of the World.*—Number and density of population of the most important countries of the world at 30th June, 1954, are shown in the following table. In some instances, more particularly in the cases of Asia and Africa, the numbers must be considered as rough approximations only.

POPULATION OF THE PRINCIPAL COUNTRIES OF THE WORLD : NUMBER AND DENSITY, 1954.

Country.	Population. (‘000.)	Density. (a)	Country.	Population. (‘000.)	Density. (a)
EUROPE.			AFRICA.		
Germany	70,001	512.3	Nigeria	30,300	89.3
United Kingdom	51,059	541.9	Egypt	22,651	58.7
Italy	47,665	409.9	French West Africa(e)	17,435	9.5
France	43,000	202.0	Ethiopia and Eritrea, Federation of	16,000	35.0
Spain	28,751	148.0	Union of South Africa	13,425	28.4
Poland	26,761	222.3	Belgian Congo	12,264	13.6
Romania	17,300	188.7	Algeria	9,369	11.1
Yugoslavia	17,267	175.1	Sudan	8,900	9.2
Czechoslovakia	12,952	262.4	Morocco	8,340	55.3
Netherlands	10,615	848.5	Tanganyika Territory	8,196	22.6
Hungary	9,691	269.9	Rhodesia and Nyasaland, Federation of	6,876	14.0
Belgium	8,819	748.7	Mozambique	5,975	19.8
Portugal	8,693	244.3	Other	50,269	..
Greece	7,901	154.4	<i>Total Africa</i>	<i>210,000</i>	<i>18.0</i>
Bulgaria	7,350	171.7	NORTH AND CENTRAL AMERICA.		
Sweden	7,214	41.6	United States of America	162,409	53.7
Austria	6,969	215.3	Mexico	28,849	37.9
Switzerland	4,923	308.8	Canada	15,195	3.9
Denmark	4,406	265.8	Cuba(b)	5,807	131.3
Finland	4,190	32.2	Other	22,740	..
Norway	3,392	27.1	<i>Total North and Central America</i>	<i>235,000</i>	<i>25.1</i>
Ireland, Republic of	2,933	108.1	SOUTH AMERICA.		
Other	2,148	..	Brazil	57,098	17.4
<i>Total Europe</i>	<i>404,000</i>	<i>212.3</i>	Argentina	18,742	17.3
ASIA.			Colombia	12,382	28.2
China(b)	582,603	155.6	Peru	9,213	18.2
India	377,000	296.9	Chile	6,447	22.5
Japan	88,000	616.3	Other	18,118	..
Indonesia	81,100	140.8	<i>Total South America</i>	<i>122,000</i>	<i>17.7</i>
Pakistan	80,167	220.0	OCEANIA.		
South Korea	21,687	254.4	Australia(f)	9,034	3.0
Vietnam	26,000	204.3	New Zealand and Dependencies	2,093	20.2
Turkey(c)	22,949	76.5	Territory of New Guinea	1,207	13.0
Philippines	21,440	185.5	Hawaii	522	81.3
Iran	20,721	32.9	Papua	495	5.5
Thailand	19,925	100.4	Fiji	328	46.6
Burma	19,242	73.5	Other	721	..
Afghanistan(d)	12,000	47.8	<i>Total Oceania</i>	<i>14,400</i>	<i>4.4</i>
Taiwan	8,617	620.8	SUMMARY.		
Nepal	8,432	156.0	Europe	404,000	212.3
Ceylon	8,385	331.0	Asia	1,451,000	138.9
Saudi Arabia(e)	7,000	11.3	U.S.S.R.	200,200	23.3
Malaya, Federation of	5,889	116.2	Africa	210,000	18.0
Other	39,843	..	America, North and Central	235,000	25.1
<i>Total Asia</i>	<i>1,451,000</i>	<i>138.9</i>	America, South	122,000	17.7
U.S.S.R. (Europe and Asia)			Oceania	14,400	4.4
	200,200	23.3	<i>Total</i>	<i>2,636,600</i>	<i>50.5</i>

(a) Number of persons per square mile. (b) Population 1953. (c) Includes European Territory. (d) Population 1951. (e) Population 1952. (f) Includes 47,000 full-blooded aboriginals.

The populations shown in the above table are, in the main, in accordance with figures published in the *Demographic Year Book*, 1955, published by the United Nations, and the countries have been arranged in accordance with the continental groups used therein. The totals for continents include adjustments for overestimation and underenumeration.

§ 7. General Characteristics.

1. Sex Distribution.—(i) States. The number of males to each hundred females has been adopted as a measure of the "masculinity" of the population. On pp. 163-5 in Official Year Book No. 2 a table was included showing the masculinity of the population of each of the States for each year from 1796 to 1907. In issue No. 5, on p. 123, the figures in this table for the years 1901 to 1907 were modified in accordance with the results of the 1911 Census.

With the exception of some dislocation arising from the two World Wars, there was a continuous diminution of the masculinity of the population until 1945. This resulted from the increasing proportion of the population in the higher age groups, in which females preponderate owing to their greater longevity, and the general long-term fall in the birth rate. At the 1947 Census the numbers of the sexes were practically equal, but there has since been an increase in masculinity owing to the higher birth rate and to the increase in the number of immigrants, the majority of whom are males.

The following table shows the masculinity of the population at five-year intervals from 1925 to 1950 and for each of the years 1952 to 1956 :—

POPULATION : MASCULINITY, 1925 TO 1956.
(NUMBER OF MALES PER 100 FEMALES.)

At 31st December—	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
1925	104.09	99.71	110.94	102.02	115.76	100.90	297.61	132.37	104.24
1930	103.39	99.14	110.66	100.97	117.17	101.53	263.66	118.69	103.85
1935	102.38	97.84	109.81	100.20	113.21	102.45	212.80	115.64	102.71
1940	100.98	97.85	108.48	98.91	110.38	102.74	240.31	124.62	101.81
1945	99.75	97.50	105.45	98.21	105.49	101.15	220.16	115.86	100.36
1950	100.88	99.27	106.02	101.83	106.07	102.70	188.05	123.33	101.83
1952	101.42	101.00	105.61	102.18	106.91	103.85	179.01	118.81	102.58
1953	101.08	100.67	105.42	102.46	106.88	103.96	170.45	118.10	102.36
1954	100.84	101.00	105.48	102.88	106.47	103.89	161.76	112.70	102.35
1955	100.91	101.67	105.34	102.96	106.22	103.87	155.28	112.86	102.53
1956	100.89	101.85	105.60	103.05	106.43	105.87	144.29	121.76	102.72

(ii) Various Countries. The masculinity of the population in various countries is shown in the following table.

POPULATION : MASCULINITY IN VARIOUS COUNTRIES.

Country.	Year.	Number of Males per 100 Females.	Country.	Year.	Number of Males per 100 Females.
Ireland, Republic of ..	1951	103.6	Northern Ireland ..	1955	95.0
Canada	1955	102.7	Italy	1951	95.0
Australia(a)	1956	102.7	Yugoslavia	1954	94.6
New Zealand(b)	1955	101.0	Switzerland	1953	94.2
Union of South Africa(c)	1951	100.3	Spain	1950	92.8
Netherlands	1953	99.3	England and Wales ..	1955	92.8
Sweden	1952	99.3	France	1954	92.2
United States of America	1954	98.7	Scotland	1955	91.7
Norway	1953	98.7	Germany, Federal Re-		
Denmark	1954	98.5	public	1954	88.8
Belgium	1953	96.9	Austria	1953	86.7
Japan	1954	96.6			

(a) Excludes full-blood aboriginals.

(b) Excludes Maoris.

(c) European population only.

2. Age Distribution.—The age distribution of the population is obtained only at a census, but estimates, based on the census distribution and on births, recorded ages at death and recorded ages of migrants, are made for intercensal years. The following table shows the variation which took place in the age constitution of the population during the 7 years following the 1947 Census.

Of the 8,986,530 persons enumerated at the 1954 Census, 10.8 per cent. were under 5 years of age ; 10.0 per cent. were from 5 to 9 years ; 7.7 per cent. from 10 to 14 years ; 6.6 per cent. from 15 to 19 years ; and 36.3 per cent. were under age 21. At the 1947 Census 10.0 per cent. were under 5 years ; 8.0 per cent. 5 to 9 years ; 7.1 per cent. 10 to 14 years ; 7.7 per cent. 15 to 19 years ; and 34.4 per cent. under 21 years of age.

Owing mainly to the fall in the birth rate during the years 1930 to 1939, the number of persons in Australia between the ages of 15 and 24 in 1954 showed a decline of 12,683 as compared with the number in this age group in 1947. This decline would have been more serious but for the migration of adolescents between 1947 and 1954. The number of children under 16 years of age among immigrants contributed substantially to the increases in the lower age groups. The proportion of persons under 21 years in Australia increased from 34.4 per cent. in 1947 to 36.3 per cent. in 1954, whilst the proportion of persons aged 21 years and over decreased from 65.6 per cent. to 63.7 per cent. during the same period.

POPULATION : ADJUSTED AGE DISTRIBUTION(a), AUSTRALIA, 1947 AND 1954.
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Age last Birthday. (Years.)	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
0-4	388,301	372,086	760,387	493,682	472,735	966,417	206,030
5-9	307,697	296,286	603,983	461,903	440,834	902,737	298,754
10-14	271,761	262,922	534,683	354,075	340,105	694,180	159,497
15-19	297,524	289,142	586,666	302,287	289,484	591,771	5,105
20-24	309,490	308,464	617,954	311,979	288,187	600,166	-17,788
25-29	297,497	300,889	598,386	368,639	336,178	704,817	106,431
30-34	297,531	300,567	598,098	364,238	343,605	707,843	109,745
35-39	285,309	275,637	560,946	325,768	317,355	643,123	82,177
40-44	258,008	238,284	496,292	323,418	305,010	628,428	132,136
45-49	236,381	229,347	465,728	286,705	260,224	546,929	81,201
50-54	207,515	217,473	424,988	246,061	233,140	479,201	54,213
55-59	198,928	198,521	397,449	193,148	204,122	397,270	-179
60-64	159,157	164,552	323,709	178,947	198,695	377,642	53,933
65-69	116,511	126,863	243,374	143,140	160,172	303,312	59,938
70-74	76,919	90,481	167,400	94,961	115,429	210,390	42,990
75-79	50,914	61,079	111,993	55,104	72,738	127,842	15,849
80-84	26,218	32,696	58,914	27,972	40,470	68,442	9,528
85-89	9,627	13,301	22,928	11,025	16,618	27,643	4,715
90-94	1,815	2,938	4,753	2,726	4,613	7,339	2,586
95-99	252	439	691	315	652	967	276
100 and over	15	21	36	25	46	71	35
Total	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172
Under 21 years	1,324,623	1,280,353	2,604,976	1,668,770	1,596,959	3,265,729	660,753
21 years and over	2,472,747	2,501,635	4,974,382	2,877,348	2,843,453	5,720,801	746,419
Total	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172

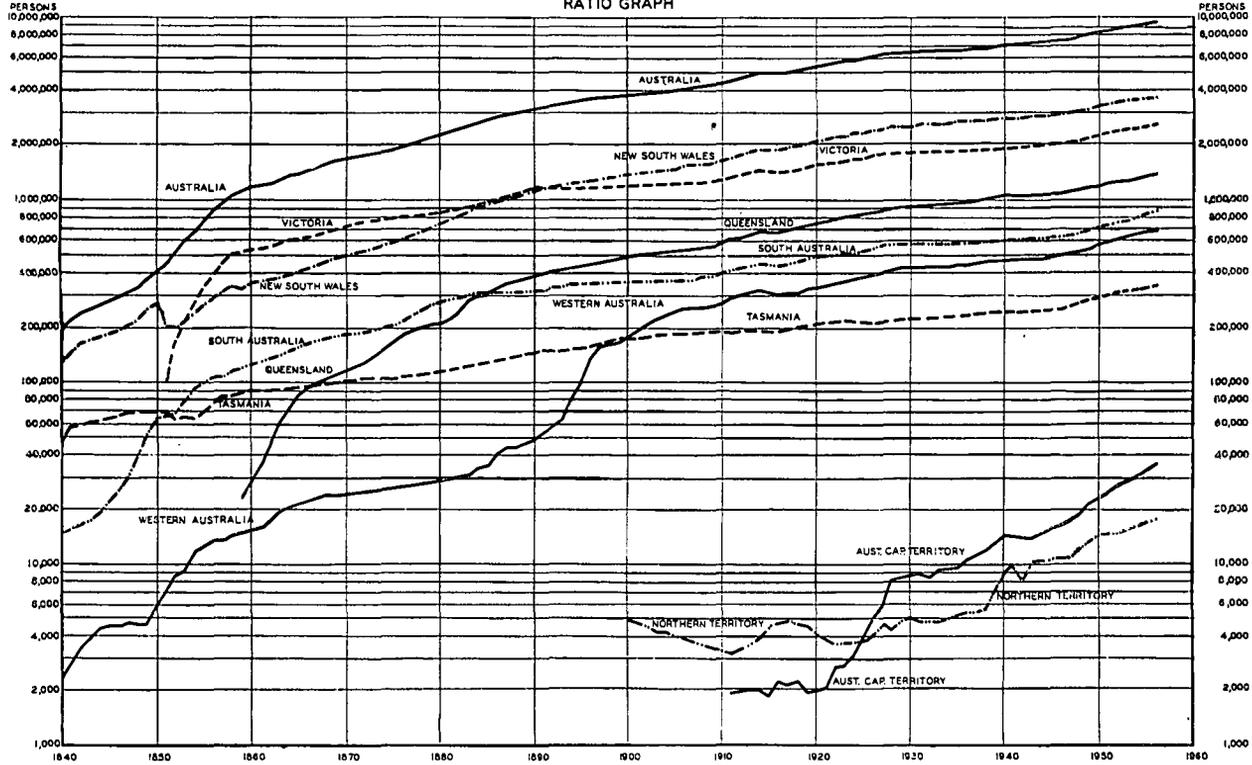
(a) At the 1947 Census unspecified ages were distributed proportionally over ages 15 years and upwards after completion of tabulation, but at the 1954 Census they were distributed over all ages prior to tabulation.

NOTE.—Minus sign (--) denotes decrease.

The next table shows the change which has been taking place in the age constitution of the population of Australia since 1871. Up to the 1954 Census, each successive census except that of 1921 had revealed a larger percentage of the population 15 years of age and over than was recorded at the previous census. However, in 1954, the proportion of this age group dropped sharply to a level (71.5 per cent.) slightly below that of 1933, the proportion of children under 15 years showing a corresponding increase to 28.5 per cent of the total population.

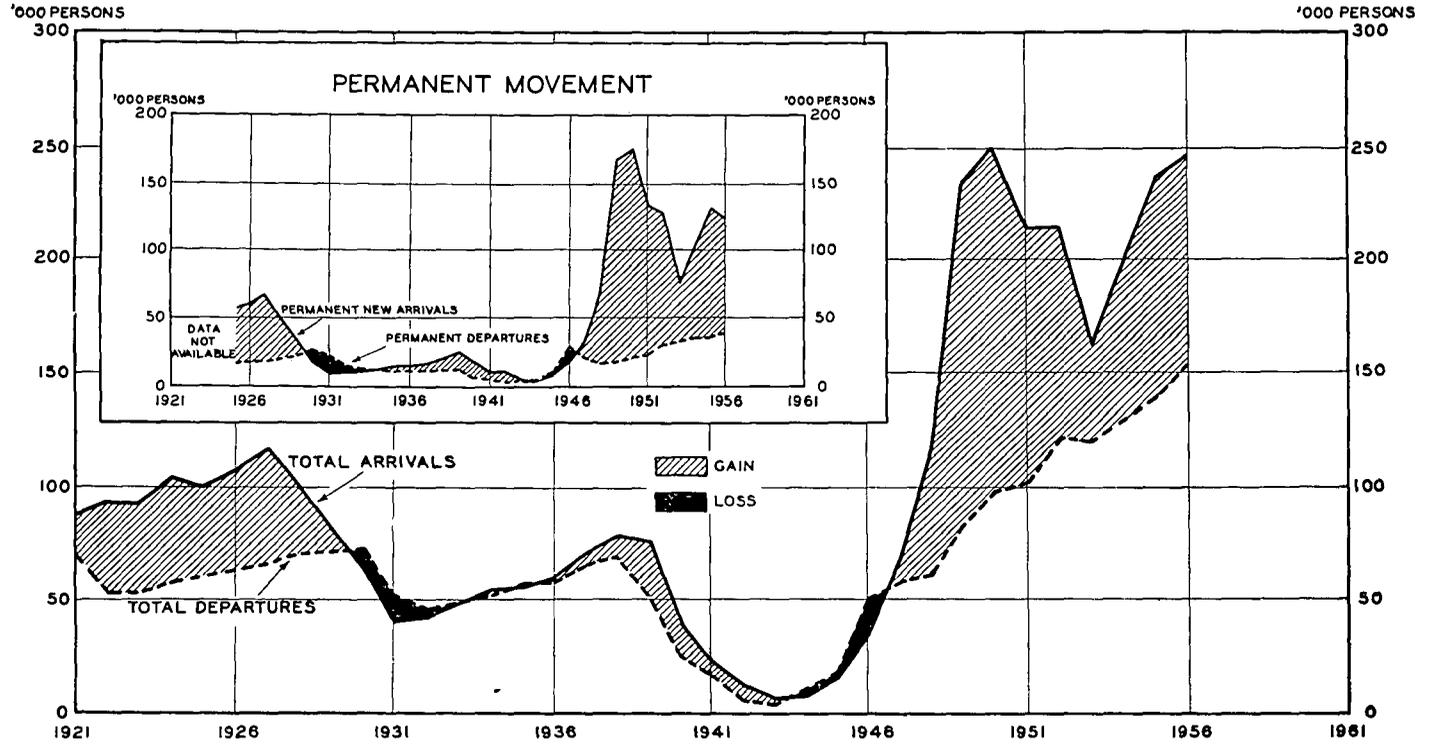
POPULATION OF AUSTRALIA, 1840 TO 1956

RATIO GRAPH



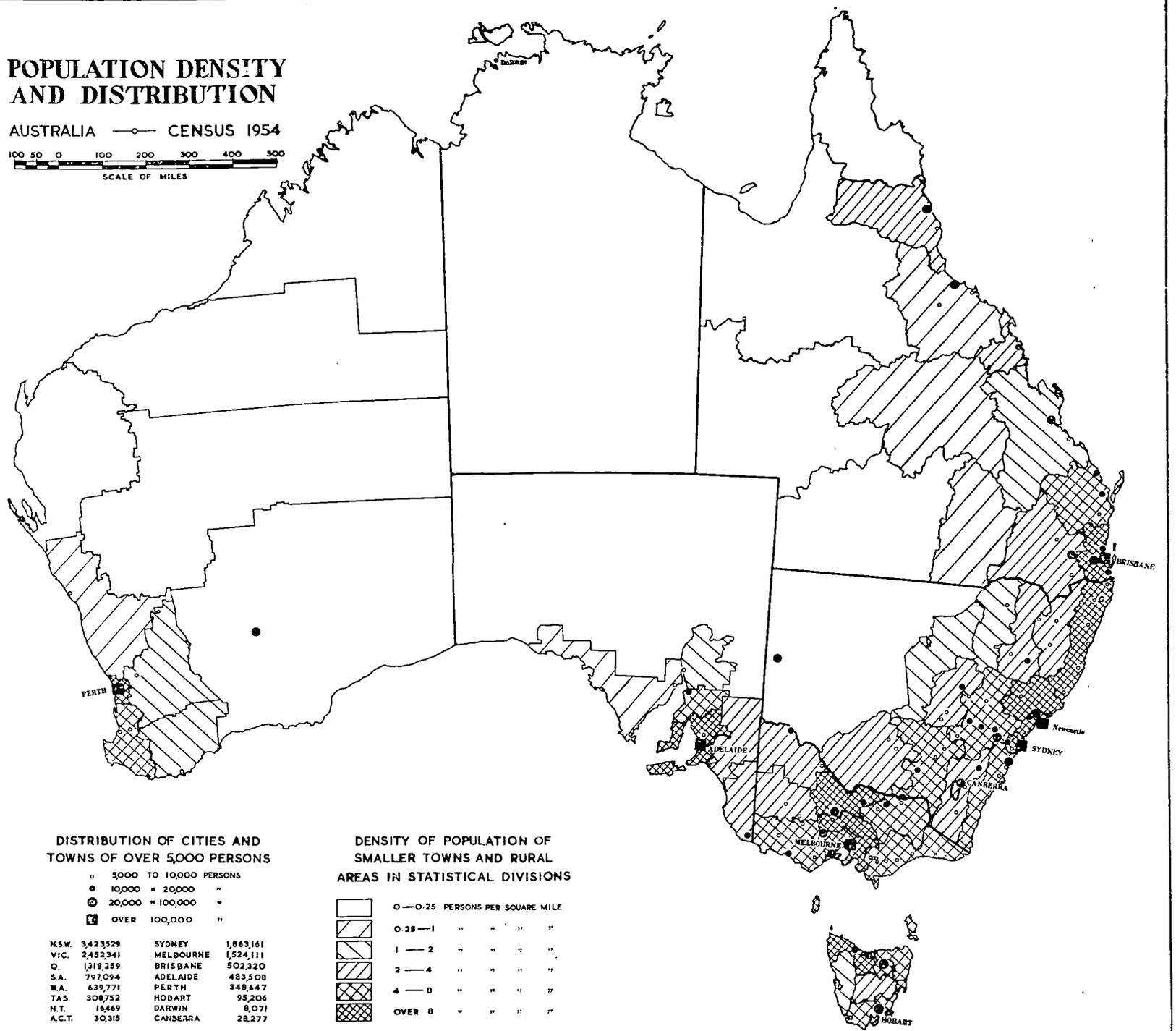
NOTE :- VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE; ACTUAL NUMBERS ARE INDICATED BY SCALE.

OVERSEA MIGRATION: AUSTRALIA, 1921 TO 1956



POPULATION DENSITY AND DISTRIBUTION

AUSTRALIA — CENSUS 1954



DISTRIBUTION OF CITIES AND TOWNS OF OVER 5,000 PERSONS

- 5,000 TO 10,000 PERSONS
- 10,000 " 20,000 "
- ⊙ 20,000 " 100,000 "
- ⊞ OVER 100,000 "

NSW. 3,423,529	SYDNEY 1,863,161
VIC. 2,452,341	MELBOURNE 1,524,111
Q. 1,319,259	BRISBANE 502,320
S.A. 797,094	ADELAIDE 483,508
W.A. 639,771	PERTH 348,647
TAS. 308,752	HOBART 95,206
N.T. 16,469	DARWIN 8,071
A.C.T. 30,315	CANBERRA 28,277

DENSITY OF POPULATION OF SMALLER TOWNS AND RURAL AREAS IN STATISTICAL DIVISIONS

□	0 — 0.25 PERSONS PER SQUARE MILE
▨	0.25 — 1 " " " "
▧	1 — 2 " " " "
▩	2 — 4 " " " "
▪	4 — 8 " " " "
⊞	OVER 8 " " " "

100
100
100

100

POPULATION : PROPORTIONAL AGE DISTRIBUTION, AUSTRALIA, 1871 TO 1954.

(Per cent.)

Census.	Males.				Females.				Persons.			
	Under 15 years.	15 and under 65.	65 and over.	Total.	Under 15 years.	15 and under 65.	65 and over.	Total.	Under 15 years.	15 and under 65.	65 and over.	Total.
1871..	38.84	59.11	2.05	100	46.02	52.60	1.38	100	42.09	56.17	1.74	100
1881..	36.36	60.81	2.83	100	41.86	56.03	2.11	100	38.89	58.61	2.50	100
1891..	34.80	62.01	3.19	100	39.38	58.09	2.53	100	36.92	60.19	2.89	100
1901..	33.89	61.80	4.31	100	36.51	59.88	3.61	100	35.14	60.88	3.98	100
1911..	30.84	64.82	4.34	100	32.52	63.28	4.20	100	31.65	64.08	4.27	100
1921..	31.64	63.88	4.48	100	31.79	63.83	4.38	100	31.71	63.86	4.43	100
1933..	27.53	66.09	6.38	100	27.42	65.99	6.59	100	27.48	66.04	6.48	100
1947..	25.49	67.08	7.43	100	24.62	66.71	8.67	100	25.06	66.89	8.05	100
1954..	28.81	63.82	7.37	100	28.23	62.52	9.25	100	28.52	63.18	8.30	100

3. **Conjugal Condition.**—Of the total population of Australia at the 1954 Census, 46.8 per cent. had never married ; 47.1 per cent. were married (including 1.4 per cent. married but permanently separated) ; 5.2 per cent. were widowed ; and 0.8 per cent. were divorced. Between 1947 and 1954 the number never married increased by 17.7 per cent. ; those married (including permanently separated) by 20.6 per cent. ; the widowed by 10.2 per cent. ; and the divorced by 31.8 per cent.

From the demographic point of view the most important change in the conjugal condition of the population of Australia between 1947 and 1954 was the increase of 35.0 per cent. in never married persons under 15 years of age, which offset by many times the continued decrease in never married persons 15 years and over. The latter decrease was, however, confined to females, as the number of unmarried males 15 years and over increased by 3.6 per cent. between 1947 and 1954. The proportion of married persons continued to increase, and in 1954 comprised 66 per cent. of the population 15 years of age and over who stated their conjugal condition, compared with 62 per cent. in 1947 and 54 per cent. in 1933.

The number of widowed females recorded in Australia in 1954 was 351,102, or more than three times as many as the number of widowed males. This disparity is the result of two influences. The first is the greater longevity of females coupled with the usually younger age at marriage ; and the second is that a larger proportion of widowed males cancel their widowhood by remarriage.

POPULATION : CONJUGAL CONDITION, AUSTRALIA, 1947 AND 1954.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Conjugal Condition.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Never Married—							
Under 15 years of age ..	967,759	931,294	1,899,053	1,309,660	1,253,674	2,563,334	664,281
15 years of age and over	929,212	748,414	1,677,626	962,491	684,154	1,646,645	-30,981
Total	1,896,971	1,679,708	3,576,679	2,272,151	1,937,828	4,209,979	633,300
Married	1,692,913	1,686,885	3,379,798	2,062,122	2,043,651	4,105,773	725,975
Married but Permanently Separated	58,722	67,890	126,612	57,371	66,228	123,599	-3,013
Widowed	111,680	309,383	421,063	113,064	351,102	464,166	43,103
Divorced	24,952	27,441	52,393	32,389	36,650	69,039	16,646
Not Stated	12,132	10,681	22,813	9,021	4,953	13,974	-8,839
Total	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172

NOTE.—Minus sign (-) denotes decrease.

4. Birthplace.—At 30th June, 1954, the Australian-born element of the population of Australia represented 85.7 per cent. as compared with 90.2 per cent. at the 1947 Census. The number of Australian-born increased by 864,893 or by 12.7 per cent. between 1947 and 1954, while the oversea-born population increased by 542,279 or 72.9 per cent. The latter resulted mainly from the increase of 503,458 in the number of persons of European birthplace since 1947—principally persons born in England (an increase of 96,819); Italy (86,265); Germany (50,855); Poland (50,021); and the Netherlands (49,861).

Although numerically less significant, the number of persons of Asian and African birthplace more than doubled during the intercensal period, but there was little change in the number of persons born elsewhere.

Of persons born outside Australia, 57 per cent. were males and 43 per cent. females.

POPULATION : BIRTHPLACES, AUSTRALIA, 1947 AND 1954.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Birthplace.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
<i>Australia</i>	3,380,324	3,454,847	6,835,171	3,812,435	3,887,629	7,700,064	864,893
<i>New Zealand</i>	21,890	21,720	43,610	21,723	21,627	43,350	- 260
<i>Other Australasian</i>	776	810	1,586	1,065	1,058	2,123	537
Total, Australasia	3,402,990	3,477,377	6,880,367	3,835,223	3,910,314	7,745,537	865,170
<i>England</i>	205,330	176,262	381,592	256,699	221,712	478,411	96,819
<i>Wales</i>	6,859	5,005	11,864	8,343	6,144	14,487	2,623
<i>Scotland</i>	55,734	47,264	102,998	66,792	56,842	123,634	20,636
<i>Northern Ireland</i>	3,214	2,325	5,539	5,527	3,976	9,503	3,964
<i>Ireland, Republic of</i>	2,420	2,244	4,664	3,595	2,397	5,992	1,328
<i>Ireland (undefined)</i>	18,309	16,301	34,610	18,054	14,124	32,178	-2,432
<i>Austria</i>	2,368	1,851	4,219	5,582	5,286	10,868	6,649
<i>Czechoslovakia</i>	926	558	1,484	8,515	4,165	12,680	11,196
<i>Estonia</i>	656	446	1,102	3,393	3,156	6,549	5,447
<i>France</i>	1,077	1,138	2,215	2,417	2,282	4,699	2,484
<i>Germany</i>	8,955	5,612	14,567	33,663	31,759	65,422	50,855
<i>Greece</i>	9,115	3,176	12,291	16,794	9,068	25,862	13,571
<i>Hungary</i>	702	525	1,227	9,054	5,548	14,602	13,375
<i>Italy</i>	22,506	11,126	33,632	80,279	39,618	119,897	86,265
<i>Latvia</i>	296	151	447	9,524	7,734	17,258	16,811
<i>Lithuania</i>	169	104	273	5,272	3,152	8,424	8,151
<i>Malta</i>	2,472	766	3,238	12,411	7,577	19,988	16,750
<i>Netherlands</i>	1,577	597	2,174	30,046	21,989	52,035	49,861
<i>Poland</i>	3,672	2,901	6,573	35,652	20,942	56,594	50,021
<i>Ukraine</i>	2,817	2,159	4,976	8,728	6,029	14,757	22,872
<i>U.S.S.R.</i>				6,419	6,672	13,091	
<i>Yugoslavia</i>	4,281	1,585	5,866	15,473	7,383	22,856	16,990
<i>Other European</i>	11,990	4,065	16,055	17,471	7,806	25,277	9,222
Total, Europe	365,445	286,161	651,606	659,703	495,361	1,155,064	503,458
<i>Ceylon, India and Pakistan</i>	5,247	2,913	8,160	8,487	6,373	14,860	6,700
<i>China</i>	5,135	1,269	6,404	7,199	3,078	10,277	3,873
<i>Cyprus</i>	544	137	681	4,254	1,519	5,773	5,092
<i>Syria and Lebanon</i>	1,035	851	1,886	2,614	1,552	4,166	2,280
<i>Other Asian</i>	4,129	2,836	6,965	9,717	6,788	16,505	9,540
Total, Asia	16,090	8,006	24,096	32,271	19,310	51,581	27,485
<i>Egypt</i>	412	391	803	4,392	3,758	8,150	7,347
<i>Union of South Africa</i>	3,071	2,795	5,866	3,113	2,858	5,971	105
<i>Other African</i>	494	374	868	930	775	1,705	837
Total, Africa	3,977	3,560	7,537	8,435	7,391	15,826	8,289
<i>Canada</i>	2,300	1,709	4,009	2,571	1,917	4,488	479
<i>United States of America</i>	3,794	2,438	6,232	5,039	3,250	8,289	2,057
<i>Other American</i>	783	606	1,389	938	781	1,719	330
Total, America	6,877	4,753	11,630	8,548	5,948	14,496	2,866
<i>Polynesia</i>	1,526	1,619	3,145	1,628	1,730	3,358	213
<i>At Sea</i>	465	512	977	310	358	668	-309
Total Born Outside Australia	417,046	327,141	744,187	733,683	552,783	1,286,466	542,279
Total	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172

NOTE.—Minus sign (—) denotes decrease.

5. *Period of Residence in Australia.*—This table classifies the immigrant population of Australia according to period of residence in Australia, and reflects the greatly increased rate of immigration since 1947. It shows that in 1954, of persons born outside Australia who stated their period of residence, 40.9 per cent. had resided in Australia for a period of less than 5 years, 53.9 per cent. for less than 8 years, and 56.2 per cent. for less than 15 years, compared with 5.7, 7.7 and 14.8 per cent. respectively at the previous Census in 1947.

**IMMIGRANT POPULATION : PERIOD OF RESIDENCE, AUSTRALIA, 1947
AND 1954.**

PERSONS BORN OUTSIDE AUSTRALIA.

Period of Residence.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Under 1 year	16,660	9,953	26,613	47,430	34,841	82,271	55,658
1 year and under 2 years . .	4,116	4,953	9,069	32,228	27,096	59,324	50,255
2 years and under 3 years	2,124	1,322	3,446	65,374	39,354	104,728	101,282
3 years and under 4 years	822	462	1,284	71,183	50,367	121,550	120,266
4 years and under 5 years	671	319	990	87,636	62,200	149,836	148,846
Total under 5 years	24,393	17,009	41,402	303,851	213,858	517,709	476,307
5 years and under 6 years	2,217	1,238	3,455	64,618	45,416	110,034	106,579
6 years and under 7 years	2,374	1,827	4,201	21,522	15,424	36,946	32,745
7 years and under 8 years	3,608	3,032	6,640	9,452	7,883	17,335	10,695
8 years and under 9 years	7,966	6,803	14,769	15,677	12,526	28,203	- 23,278
9 years and under 10 years	6,270	4,166	10,436				
10 years and under 15 years	13,507	12,769	26,276				
Total 5 years and under 15 years . .	35,942	29,835	65,777	111,269	81,249	192,518	126,741
15 years and over	345,039	270,399	615,438	306,288	247,819	554,107	- 61,331
Not Stated	11,672	9,898	21,570	12,275	9,857	22,132	562
Born outside Australia . .	417,046	327,141	744,187	733,683	552,783	1,286,466	542,279
Born in Australia (a) . .	3,380,324	3,454,847	6,835,171	3,812,435	3,887,629	7,700,064	864,893
Total	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172

NOTE.—Minus sign (—) denotes decrease.

(a) Excluding full-blood Aborigines.

6. *Nationality.*—At 30th June, 1954, 8,582,251 persons, or 95.5 per cent. of the Australian population, were of British nationality (consisting of 85.7 per cent. born in Australia and 9.8 per cent. born outside), compared with 99.5 per cent. in 1947 (90.2 per cent. Australian-born and 9.3 per cent. born outside Australia). Of the oversea-born population in 1954, 68.6 per cent. were British subjects, compared with 94.8 per cent. in 1947. The most numerous foreign nationals in Australia at 30th June, 1954, were:—Italian, 90,018 persons; Dutch, 53,458; Polish, 49,746; German, 31,448; Yugoslav, 18,124; Greek, 17,843; Ukrainian, 17,239; and Latvian, 17,225.

POPULATION: NATIONALITY (i.e., ALLEGIANCE), AUSTRALIA, 1947 AND 1954.
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Nationality.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54
	Males.	Females.	Persons.	Males.	Females.	Persons.	
British(a)—							
Born in Australia ..	3,380,324	3,454,847	6,835,171	3,812,435	3,887,629	7,700,064	864,893
Born outside Australia	387,767	317,767	705,534	484,798	397,389	882,187	176,653
<i>Total, British</i> ..	<i>3,768,091</i>	<i>3,772,614</i>	<i>7,540,705</i>	<i>4,297,233</i>	<i>4,285,018</i>	<i>8,582,251</i>	<i>1,041,546</i>
Foreign—							
American (U.S.) ..	2,474	877	3,351	3,761	1,958	5,719	2,368
Austrian ..	376	280	656	1,859	1,696	3,555	2,899
Chinese ..	4,329	529	4,858	5,010	931	5,941	1,083
Czechoslovak ..	239	135	374	4,958	2,280	7,238	6,864
Dutch ..	1,408	593	2,001	30,518	22,940	53,458	51,457
Estonian ..	159	96	255	2,720	2,581	5,301	5,046
French ..	770	551	1,321	1,908	1,624	3,532	2,211
German ..	1,669	692	2,361	17,262	14,186	31,448	29,087
Greek ..	3,720	784	4,504	11,415	6,428	17,843	13,339
Hungarian ..	154	173	327	5,910	3,746	9,656	9,329
Italian ..	5,473	1,699	7,172	61,673	28,345	90,018	82,846
Latvian ..	36	25	61	9,161	8,064	17,225	17,164
Lithuanian ..	23	15	38	4,854	3,248	8,102	8,064
Norwegian ..	685	60	745	1,414	284	1,698	953
Polish ..	839	721	1,560	29,524	20,222	49,746	48,186
Romanian ..	39	31	70	871	519	1,390	1,370
Russian ..	333	210	543	2,174	2,077	4,251	3,708
Swiss ..	321	127	448	927	696	1,623	1,175
Ukrainian ..	..	..	..	9,871	7,368	17,239	17,239
Yugoslav ..	1,753	343	2,096	11,633	6,491	18,124	16,028
Other Foreign	3,292	672	3,964	8,880	3,343	12,223	8,259
Stateless ..	1,187	761	1,948	22,582	16,367	38,949	37,001
<i>Total, Foreign</i> ..	<i>29,279</i>	<i>9,374</i>	<i>38,653</i>	<i>248,885</i>	<i>155,394</i>	<i>404,279</i>	<i>365,626</i>
Total ..	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172

(a) "Irish" nationality is included with "British" nationality for the purpose of this table.

7. **Religion.**—At the 1921 Census, 92,258 persons in Australia, or 1.7 per cent., gave no reply to this question, but at the Censuses of 1933, 1947 and 1954, when the public was informed that there was no legal obligation to answer this question, 848,948 persons (12.8 per cent.), 824,824 (10.9 per cent.) and 855,819 (9.5 per cent.), respectively, gave no reply. Of males 10.3 per cent., and of females 8.7 per cent., did not state their religion in 1954.

Of those who stated their religion, the greatest numerical increase during the inter-censal period between 1947 and 1954 was recorded by the Roman Catholic and Catholic combined. This group was followed closely by Church of England, and then Presbyterian, Methodist and Lutheran in that order. Amongst the denominations with the largest numbers of adherents, the greatest proportional increases were recorded by Roman Catholic and Catholic combined, 29.9 per cent.; Presbyterian, 17.0 per cent.; Church of England, 15.3 per cent.; and Methodist, 12.2 per cent. The largest proportional increase was that of the Lutheran denomination, 73.7 per cent.

At the 1954 Census, as at earlier censuses, 99 per cent. of those who stated their religion professed the Christian faith. Between 1947 and 1954 the number who stated they were of non-Christian religion increased by 50 per cent., while those specifically stating they had no religion decreased by 10 per cent.

POPULATION: RELIGION, AUSTRALIA, 1947 AND 1954.
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Religion.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Christian—							
Baptist	53,197	60,330	113,527	60,048	67,396	127,444	13,917
Brethren	5,807	7,195	13,002	7,511	8,893	16,404	3,402
Catholic, Roman(a) ..	335,241	294,957	630,198	413,719	347,383	761,102	130,904
Catholic(a)	448,959	507,581	956,540	635,398	664,486	1,299,884	343,344
Church of Christ .. .	33,276	38,495	71,771	37,880	42,484	80,364	8,593
Church of England ..	1,480,527	1,476,505	2,957,032	1,709,197	1,699,653	3,408,850	451,818
Congregational .. .	29,364	33,879	63,243	32,508	36,944	69,452	6,209
Greek Orthodox .. .	(b)	(b)	(b)	44,382	30,363	74,745	(b)
Lutheran	34,854	32,037	66,891	60,306	55,872	116,178	49,287
Methodist	425,745	445,680	871,425	478,605	499,328	977,933	106,508
Presbyterian .. .	365,892	376,648	743,540	430,798	439,444	870,242	126,702
Protestant(undefined)..	36,708	36,562	73,270	48,539	46,877	95,416	22,146
Salvation Army .. .	17,542	20,030	37,572	20,304	22,534	42,838	5,266
Seventh Day Adventist	7,453	10,097	17,550	11,166	14,163	25,329	7,779
Other (including Chris- tian undefined) .. .	27,492	29,883	57,375	31,957	35,616	67,573	10,198
Total, Christian ..	3,303,057	3,369,879	6,672,936	4,022,318	4,011,436	8,033,754	1,360,818
Non-Christian—							
Hebrew	16,426	15,593	32,019	24,548	23,888	48,436	16,417
Other	3,736	807	4,543	4,910	1,471	6,381	1,838
Total, Non-Christian	20,162	16,400	36,562	29,458	25,359	54,817	18,255
Indefinite	9,838	8,870	18,708	10,038	8,418	18,456	-252
No Religion	18,888	7,440	26,328	16,652	7,032	23,684	-2,644
No Reply	445,425	379,399	824,824	467,652	388,167	855,819	30,995
Total	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172

(a) So described in individual Census Schedules. (b) Not available.

NOTE.—Minus sign (-) denotes decrease.

8. Industry.—In the following table, the male and female populations of Australia are classified according to the industry in which they were usually engaged at the 1954 Census. Persons usually engaged in industry are regarded as being "in the work force," while the remainder of the population, which at the 1954 Census comprised 5,284,508 persons, is classified as not being in the work force. The term "in the work force" includes persons of all ages who are employers, self-employed or working on their own account, wage and salary earners and unpaid helpers engaged in industry. It also includes persons "not at work," i.e., those who stated that they were usually engaged in work, but were not actively seeking a job at the time of the Census by reason of sickness, accident, etc., or because they were on strike, changing jobs or temporarily laid off, etc.; also persons able and willing to work but unable to secure employment, as well as casual and seasonal workers not actually in a job at the time of the Census.

Persons who do not earn their living by doing work for monetary reward, such as children, housewives, full-time students, retired persons, pensioners and permanent inmates of institutions, are regarded as not being in the work force.

About 63 in every 100 of the male population and 19 in every 100 of the female population were in the work force, or in other words there were, in 1954, 3.4 males to every female in the work force.

Of the total males in the work force, those engaged in Manufacturing represented the largest proportion, namely 28.0 per cent., followed in order by those in Primary Production, 16.1 per cent.; Commerce, 13.6 per cent.; Building and Construction, 11.3 per cent.; Public Authority (n.e.i.) and Professional Activities, 9.1 per cent.; and Transport and Storage, 8.4 per cent.

As with males, females in the work force were engaged mainly in Manufacturing, 26.9 per cent., followed in order by those in Commerce, 22.5 per cent.; Public Authority (n.e.i.) and Professional Activities, 22.1 per cent.; and Amusement, Hotels, Cafés, Personal Service, etc., 14.8 per cent.

**POPULATION CLASSIFIED ACCORDING TO INDUSTRY: AUSTRALIA,
CENSUS, 30th JUNE, 1954.**

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Industry Group and Sub-group.	Males.	Females.	Persons.	
			Number.	Proportion of Total. (Per cent.)
Primary Production—				
Fishing, Hunting and Trapping ..	10,003	126	10,129	0.11
Agriculture, Mixed Farming	220,218	12,172	232,390	2.59
Grazing	115,162	8,714	123,876	1.38
Dairying	100,553	11,004	111,557	1.24
Forestry	15,279	67	15,346	0.17
Total	461,215	32,083	493,298	5.49
Mining and Quarrying	60,310	1,061	61,371	0.68
Manufacturing—				
Founding, Engineering and Metalworking	229,431	32,305	261,736	2.91
Manufacture, Assembly and Repair of Ships, Vehicles, Parts and Accessories	132,653	6,463	139,116	1.55
Textile and Fibrous Materials (not Dress)	27,601	26,182	53,783	0.60
Clothing and Knitted Goods (including Needleworking)	23,144	73,367	96,511	1.07
Food, Drink and Tobacco	117,088	27,927	145,015	1.61
Sawmilling and Manufacture of Wood Products	53,252	2,136	55,388	0.62
Paper and Paper Products, Printing, Bookbinding and Photography	53,953	18,770	72,723	0.81
Other and Undefined	163,146	39,913	203,059	2.26
Total	800,268	227,063	1,027,331	11.43
Electricity, Gas, Water and Sanitary Services (Production, Supply and Maintenance) ..	69,554	4,096	73,650	0.82
Building and Construction—				
Construction and Repair of Buildings ..	196,205	2,452	198,657	2.21
Construction Works (other than Build- ings)	125,624	1,341	126,965	1.41
Total	321,829	3,793	325,622	3.62
Transport and Storage—				
Road Transport and Storage	92,990	4,488	97,478	1.08
Shipping and Loading and Discharging Vessels	55,905	2,180	58,085	0.65
Rail and Air Transport	91,691	8,031	99,722	1.11
Total	240,586	14,699	255,285	2.84
Communication	63,802	16,748	80,550	0.90
Finance and Property; Business Services (n.e.i.)	64,366	34,278	98,644	1.10
Commerce	387,468	189,913	577,381	6.43
Public Authority (n.e.i.) and Professional Activities	260,474	186,443	446,917	4.97
Amusement, Hotels, Cafés, Personal Ser- vice, etc.	99,003	125,486	224,489	2.50
Other, Inadequately Described or Not Stated	27,745	9,739	37,484	0.42
Persons in the Work Force	2,856,620	845,402	3,702,022	41.20
Persons not in the Work Force	1,689,498	3,595,010	5,284,508	58.80
Total Population	4,546,118	4,440,412	8,986,530	100.00

9. **Occupational Status.**—The term "occupational status" relates to the capacity in which persons are engaged in the various branches of industry.

While the numbers of employers and of persons self-employed at the 1954 Census showed increases of approximately 13 per cent. and 6 per cent., respectively, as compared with 1947, the number of employees increased by slightly more than 20 per cent., and in 1954 constituted nearly 80 per cent. of the total work force, as compared with 77 per cent. in 1947. Employers and self-employed combined constituted 17.8 per cent. of the work force in 1954 as compared with 19.0 per cent. in 1947.

POPULATION : OCCUPATIONAL STATUS, AUSTRALIA, 1947 AND 1954.

(EXCLUDING FULL-BLOOD ABORIGINALS.)

Occupational Status.	Census, 30th June, 1947.			Census, 30th June, 1954.			Increase, 1947-54.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
In Work Force—							
At Work—							
Employer	196,932	24,357	221,289	220,408	30,028	250,436	29,147
Self-employed ..	342,650	44,487	387,137	358,746	51,436	410,182	23,045
Employee (on wage or salary) ..	1,827,072	620,421	2,447,493	2,211,915	737,488	2,949,403	501,910
Helper (not on wage or salary) ..	24,227	4,498	28,725	18,342	9,866	28,208	-517
Total at Work ..	2,390,881	693,763	3,084,644	2,809,411	828,818	3,638,229	553,585
Not at Work(a) ..	66,009	16,765	82,774	40,913	13,953	54,866	-27,908
Not Stated	22,379	6,634	29,013	6,296	2,631	8,927	-20,086
Total in Work Force	2,479,269	717,162	3,196,431	2,856,620	845,402	3,702,022	505,591
Not in Work Force ..	1,318,101	3,064,826	4,382,927	1,689,498	3,595,010	5,284,508	901,581
Grand Total ..	3,797,370	3,781,988	7,579,358	4,546,118	4,440,412	8,986,530	1,407,172

(a) Includes persons who were (1) unable to secure employment; (2) temporarily laid off from their jobs; or (3) not actively seeking work at the time of the Census on account of sickness or accident, industrial dispute, resting between jobs or for any other reason.

NOTE.—Minus sign (—) denotes decrease.

10. **Other General Characteristics.**—Questions asked at the 1933 Census regarding orphanhood, and the ability to read and write a foreign language (of persons who could not read and write English), were not asked on the schedules of the 1947 and 1954 Censuses. The question on dependent children asked at the 1947 Census was not asked in 1954, and information supplied in 1954 in reply to the question on race has not yet been tabulated.

The latest data published in respect of the first two questions appear on pp. 482 and 487 of Official Year Book No. 36, and of the last two on pp. 326 and 327 of Official Year Book No. 41.

§ 8. Oversea Migration.

1. **Oversea Migration during the Present Century.**—Earlier issues of the Official Year Book contain in summary form tables showing the increase of population by net migration from 1861 to the latest date, while information for individual years is published in the annual bulletin, *Demography*. The following table shows, for Australia, arrivals and departures and net migration since 1901. A graph showing arrivals and departures from 1921 to 1956 appears on p. 562.

OVERSEA MIGRATION : AUSTRALIA.

Period.	Arrivals.			Departures.			Net Migration.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
1901-05 ..	196,993	84,167	281,160	204,170	93,783	297,953	- 7,177	- 9,616	- 16,793
1906-10 ..	251,482	119,552	371,034	213,483	100,273	313,756	37,999	19,279	57,278
1911-15 ..	422,927	209,893	632,820	382,552	113,406	495,958	40,375	96,487	136,862
1916-20 ..	438,721	100,764	539,485	390,202	78,574	468,776	48,519	22,190	70,709
1921-25 ..	289,695	188,357	478,052	172,236	122,550	294,786	117,459	65,807	183,266
1926-30 ..	266,593	203,887	470,480	193,336	147,437	340,773	73,257	56,450	129,707
1931-35 ..	124,207	115,116	239,323	134,883	115,326	250,209	- 10,676	- 210	- 10,886
1936-40(a)	161,774	159,538	321,312	140,901	137,283	278,184	20,873	22,255	43,128
1941-45(a)	35,422	28,503	63,925	30,097	26,019	56,116	5,325	2,484	7,809
1946-50(a)	398,507	303,413	701,920	180,779	168,057	348,836	217,728	135,356	353,084
1951-55 ..	581,300	446,566	1,027,866	340,819	273,223	614,042	240,881	173,343	413,824
1952 ..	127,516	88,323	215,839	68,937	52,870	121,807	58,579	35,453	94,032
1953 ..	88,584	74,541	163,125	68,483	51,745	120,228	20,101	22,796	42,897
1954 ..	109,601	88,424	198,025	72,073	57,745	129,818	37,528	30,679	68,207
1955 ..	133,463	103,774	237,237	76,805	63,177	139,982	56,658	40,597	97,255
1956 ..	141,408	106,040	247,448	87,013	66,437	153,450	54,395	39,603	93,998

(a) Excludes movements of defence personnel from September, 1939 to June, 1947.

NOTE.—Minus sign (-) indicates excess of departures over arrivals.

As the encouragement of immigration by governmental assistance has been a feature of Australian immigration policy, a clear indication of the significance of migration movements is obtained when "assisted" and "unassisted" movements are distinguished. This was shown broadly, for the period 1901-1952, in Official Year Book No. 40, p. 361, and has been continued in the following table for the period 1926 to 1956.

"ASSISTED" AND "UNASSISTED" MIGRATION : AUSTRALIA.

Period.	Arrivals.			Departures.	Excess of "Un-assisted" Arrivals over All Departures.
	Nominated and Selected ("Assisted").	Other ("Un-assisted").	Total.		
1926-30	99,403	371,077	340,773	30,304
1931-35	781	238,542	239,323	- 11,667
1936-40(a)	..	3,828	317,484	321,312	39,300
1941-45(a)	63,925	63,925	7,809
1946-50(a)	..	273,195	428,725	701,920	79,889
1951-55	275,241	752,625	1,027,866	138,583
1952	60,531	155,308	121,807	33,501
1953	27,310	135,815	163,125	15,587
1954	54,038	143,987	129,818	14,169
1955	66,688	170,549	237,237	30,567
1956	54,957	192,491	247,448	39,041

(a) Excludes movements of defence personnel from September, 1939 to June, 1947.

NOTE.—Minus sign (-) indicates excess of departures over "unassisted" arrivals.

It is not possible in the statistics of departures to distinguish the return movement of persons who came to Australia as "assisted" migrants from that of "unassisted" migrants. Consequently, the separate net migration of "assisted" and "non-assisted" persons cannot be ascertained. Nevertheless, the basis on which the above table has been compiled is sufficient to throw into relief the major trends in Australian migration statistics in the period reviewed.

Although separate net migration figures are not available, it is generally agreed that Australia has gained considerably more population through its encouraged migration programme than it has from non-assisted migration.

A detailed review of assisted migration into Australia in recent years is given in § 9.

2. Classes of Arrivals and Departures.—(i) *General*. Since 1st July, 1924, all oversea travellers have been classified as "permanent" or "temporary" migrants according to their declared intention in regard to residence made at the time of arrival or departure. The

basis of this classification is that "permanent" residence is regarded as residence for one year or longer, in Australia in the case of arrivals, or abroad in the case of departures. These definitions were adopted in accordance with international usage and do not purport to represent permanent migration as such. For various reasons the intentions of travellers are subject to subsequent modification and the classification headings used must therefore be accepted as indicating intention only. The numbers so classified since 1st January, 1926, are as follows:—

ARRIVALS AND DEPARTURES CLASSIFIED ACCORDING TO INTENDED RESIDENCE : AUSTRALIA.

Period.	Arrivals.			Total	Departures.			Total.
	Perman-ent Move-ment.	Temporary Move-ment.			Perman-ent Move-ment.	Temporary Move-ment.		
	New Arrivals.	Aus-tralian Residents Return-ing.	Visitors Arriving.		Aus-tralian Residents Departing Per-manently.	Aus-tralian Residents Departing Tem-porarily.	Visitors Depart-ing.	
1926-30 ..	224,010	121,395	125,029	^a 470,480	103,209	111,714	125,772	^b 340,773
1931-35 ..	54,444	84,554	100,325	239,323	71,670	79,426	99,108	^c 250,209
1936-40 ..	(d) 88,712	104,870	127,730	321,312	51,006	94,650	132,528	278,184
1941-45 ..	(d) 32,624	11,150	20,151	63,925	22,399	9,163	24,554	56,116
1946-50 ..	457,988	108,736	135,196	701,920	105,968	101,787	141,081	348,836
1951-55 ..	570,090	216,949	240,827	1,027,866	155,509	212,978	245,555	614,042
1952 ..	127,824	40,317	47,698	215,839	30,370	40,619	50,818	121,807
1953 ..	74,915	42,695	45,515	163,125	32,032	39,946	48,250	120,228
1954 ..	104,014	44,944	49,067	198,025	35,449	45,701	48,668	129,818
1955 ..	130,795	52,877	53,565	237,237	35,478	52,180	52,324	139,982
1956 ..	123,822	57,608	66,018	247,448	37,717	51,400	64,333	153,450

(a) Includes 46 arrivals whose intended period of residence was not stated. (b) Includes 78 departures whose intended length of stay abroad was not stated. (c) Includes 5 departures whose intended length of stay abroad was not stated. (d) Includes evacuees arriving in Australia during the war years as follows:—1936-40, 4,543; 1941-45, 12,586.

(ii) *Permanent Movement.* In the table above, as explained in para. 2 (i), "permanent" means residence for a year or longer, in Australia in the case of arrivals, or overseas in the case of departures.

The 1939-45 War caused a large drop, from 1940, in the number of permanent new arrivals but after the war the number rose progressively, reaching 174,540 in 1950, the highest on record. As in the case of arrivals, although not to the same extent, the number of Australian residents departing permanently rose rapidly in the period of immediate post-war re-adjustment of population, but the high figure of 29,806 in 1946 was surpassed in each of the years 1952 to 1956, for which the figures were higher than any recorded since this method of classification was introduced.

Up to and including 1929, there was a considerable net gain of permanent residents, but during 1930 and 1931 there was a heavy net loss. The loss was very much reduced in 1932, 1933 and 1934, whilst during the five years up to and including 1939 there was a net gain in permanent residents of more than 28,000. Except for the arrival of evacuees, little movement took place during the war period, but in 1946 a net permanent loss of 11,589 persons occurred, owing in large measure to the departure for the United States of America of Australian wives and children of American servicemen, and, when conditions permitted after the war, the departure of Australians to Papua and New Guinea and of large numbers of war evacuees who were returned to their home countries. Subsequently, the largest net gain recorded was 153,685 in 1950. A net gain of 86,105 was recorded in 1956.

(iii) *Temporary Movement.* Temporary movement refers to persons intending residence for periods shorter than one year and includes Australian residents and visitors from overseas. Since 1st July, 1947, it also includes Australian defence personnel irrespective of intended length of residence. Although considerable in number, the temporary movement is of little significance from the point of view of population growth, as it represents principally the movement of business people and tourists.

3. *Extent of Journey.*—Since 1st January, 1945, the journeys undertaken by passengers have been recorded for Australian oversea migration statistics in two ways: (a) according

to country of embarkation or disembarkation and (b) according to country of last or intended future permanent residence.

Detailed statistics of overseas journeys are published in the annual bulletin, *Demography*.

4. **Racial Origin.**—Up to 30th June, 1948, the system of classifying racial origin was a compromise based partly on nationality and partly on racial origin (see para. 5). From 1st July, 1948, this system was superseded by one in which the passenger's statement as to race is restricted to either "European", "Asian", "African", or "Polynesian" only. Statistics based on this system are shown for the years 1954 to 1956 in the following table. Under this system nationality is recorded independently, as indicated in the next paragraph.

RACIAL ORIGIN OF ARRIVALS AND DEPARTURES: AUSTRALIA.

Racial Origin.	Arrivals.			Departures.			Net Migration.		
	1954.	1955.	1956.	1954.	1955.	1956.	1954.	1955.	1956.
European ..	192,334	230,699	237,782	124,636	134,970	145,930	67,698	95,729	91,852
Asian ..	4,890	5,943	8,687	4,237	4,594	6,677	653	1,349	2,010
African ..	98	84	193	39	55	130	59	29	63
Polynesian ..	703	511	786	906	363	713	-203	148	73
Total ..	198,025	237,237	247,448	129,818	139,982	153,450	68,207	97,255	93,998

NOTE.—Minus sign (—) indicates excess of departures over arrivals.

5. **Nationality.**—From 1st July, 1924, to 30th June, 1948, nationality of overseas passengers was recorded as "British" or "Alien" only. Racial origin was also recorded and as the particulars of racial origin stated by passengers closely reflected their nationalities and made it possible to present much more detail of "nationality" than was possible on the total "Alien" basis, published statistics were mostly confined to those compiled on the detailed basis according to a composite classification of "nationality or race".

This method was superseded on 1st July, 1948 by one in which each passenger's race was recorded as indicated in paragraph 4 above, and nationality, as shown on each passenger's passport or other document of identification, was recorded independently of race. The principal nationalities recorded on this basis for the years 1954 to 1956 are as follows:—

NATIONALITY OF ARRIVALS AND DEPARTURES: AUSTRALIA.

Nationality.	Arrivals.			Departures.			Net Migration.		
	1954.	1955.	1956.	1954.	1955.	1956.	1954.	1955.	1956.
British(a) ..	128,532	151,172	155,136	112,848	120,262	124,793	15,684	30,910	30,343
American(U.S.) ..	5,379	6,176	8,075	4,739	6,041	7,870	640	135	205
Austrian ..	1,556	4,573	3,553	177	216	317	1,379	4,357	3,236
Chinese ..	839	1,026	1,464	704	843	1,100	135	183	364
Czechoslovak ..	107	184	267	127	243	301	-20	-59	-34
Dutch ..	12,632	15,011	13,900	2,604	3,133	4,173	10,028	11,878	9,727
Estonian ..	9	21	18	67	22	31	-58	-1	-13
French ..	1,598	1,914	2,492	1,560	1,674	2,300	38	240	192
German ..	13,359	10,342	6,978	1,009	1,363	2,040	12,350	8,979	4,938
Greek ..	10,074	11,087	12,183	306	264	503	9,768	10,823	11,680
Hungarian ..	113	263	718	95	67	232	18	196	486
Italian ..	16,268	27,494	28,521	2,102	2,344	3,376	14,166	25,150	25,145
Latvian ..	43	54	55	76	51	62	-33	3	-7
Lithuanian ..	25	22	23	86	67	66	-61	-45	-43
Polish(b) ..	161	212	382	187	145	271	-26	67	111
Russian(c) ..	283	105	934	127	59	638	156	46	296
Ukrainian ..	18	44	45	74	57	55	-56	-13	-10
Yugoslav ..	749	999	1,237	170	143	217	579	856	1,020
Stateless (so described) ..	2,291	1,633	1,974	312	282	255	1,979	1,351	1,719
Stateless (other)(d) ..	384	79	16	15	9	3	369	70	13
Other ..	3,605	4,826	9,477	2,433	2,697	4,847	1,172	2,129	4,630
Total ..	198,025	237,237	247,448	129,818	139,982	153,450	68,207	97,255	93,998

(a) Irish nationality is included with British for the purpose of this table. (b) Includes "Stateless" who were formerly Polish. (c) Includes "Stateless" who were formerly Russian. (d) Stateless, with former nationality stated but other than Polish or Russian.

NOTE.—Minus sign (—) indicates excess of departures over arrivals.

6. Age Distribution.—A summary of the age distribution of permanent arrivals and departures during the years 1955 and 1956 is as follows:—

**AGE DISTRIBUTION OF PERMANENT ARRIVALS AND DEPARTURES,
AUSTRALIA.**

Age Group (Years).	Permanent New Arrivals.			Permanent Departures.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
1955.						
0-14	17,748	16,301	34,049	2,895	2,710	5,605
15-44	51,093	33,318	84,411	12,459	10,317	22,776
45-64	4,795	5,470	10,265	2,505	2,977	5,482
65 and over	776	1,294	2,070	689	926	1,615
Total	74,412	56,383	130,795	18,548	16,930	35,478
1956.						
0-14	15,165	13,977	29,142	3,273	3,351	6,624
15-44	49,292	32,740	82,032	13,288	10,572	23,860
45-64	4,922	5,556	10,478	2,674	2,874	5,548
65 and over	864	1,306	2,170	708	977	1,685
Total	70,243	53,579	123,822	19,943	17,774	37,717

7. Conjugal Condition.—A summary of the conjugal condition of permanent arrivals and departures during the years 1955 and 1956 is as follows:—

**CONJUGAL CONDITION OF PERMANENT ARRIVALS AND DEPARTURES,
AUSTRALIA.**

Conjugal Condition.	Permanent New Arrivals.			Permanent Departures.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
1955.						
Never Married ..	48,956	28,354	77,310	10,946	8,452	19,398
Married	24,781	25,471	50,252	7,132	6,804	13,936
Widowed	417	2,071	2,488	305	1,428	1,733
Divorced	258	487	745	165	246	411
Total	74,412	56,383	130,795	18,548	16,930	35,478
1956.						
Never Married ..	45,224	27,730	72,954	11,731	8,827	20,558
Married	24,351	23,336	47,687	7,723	7,320	15,043
Widowed	414	2,070	2,484	327	1,348	1,675
Divorced	254	443	697	162	279	441
Total	70,243	53,579	123,822	19,943	17,774	37,717

8. *Occupation.*—The following is a summary of the main occupational groups of males who arrived or departed permanently during the years 1955 and 1956 (1955 figures in parentheses):—Permanent new arrivals—Rural, fishing and hunting, 10,574 (10,389); professional and semi-professional, 2,310 (2,073); administrative, 1,002 (986); commercial and clerical, 4,491 (3,936); domestic and protective service, 2,084 (1,465); craftsmen, 13,450 (14,805); operatives, 7,285 (7,789), labourers, 6,835 (8,776); indefinite or not stated, 3,858 (3,396); not gainfully occupied (mainly children), 18,354 (20,797); total, 70,243 (74,412). Permanent departures—Rural, fishing and hunting, 647 (731); professional and semi-professional, 2,046 (2,012); administrative, 897 (906); commercial and clerical, 2,727 (2,604); domestic and protective service, 643 (554); craftsmen, 4,159 (4,148); operatives, 1,553 (1,548); labourers, 2,419 (1,622); indefinite or not stated, 384 (407); not gainfully occupied (mainly children), 4,468 (4,016); total, 19,943 (18,548).

§ 9. Assisted Migration into Australia.

1. *Joint Commonwealth and States Scheme.*—Details of the joint scheme of assisted immigration arrived at by agreement between the Commonwealth and State Governments, which operated from 1920 to 1939, may be found in earlier issues of the Official Year Book (*see* No. 38, p. 576). After the outbreak of hostilities in 1939, it was decided to discontinue the grant of assisted passages for the duration of the war.

2. *United Kingdom Free and Assisted Passage Agreements, March, 1946.*—(i) *General.* Resumption of migration was the subject of negotiations between the Commonwealth and United Kingdom Governments towards the end of 1945 and two agreements were signed in March, 1946. These agreements, which came into operation on 31st March, 1947, provided for free and assisted passages to be granted to British residents desirous of settling in Australia. The Free Passage Agreement was terminated on 28th February, 1955. From 1st April, 1949, the Assisted Passage Agreement has continued in operation under renewal from time to time and has again been renewed as from 1st April, 1957.

(ii) *Assisted Passages.* Under the existing financial arrangements the United Kingdom Government's contribution towards the Assisted Passage Scheme is agreed upon when the Agreement is extended, and for the five years from 1st April, 1957, is fixed at a maximum amount of £150,000 sterling per annum.

The Assisted Passage Agreement covers three main groups of migrants (and their families), namely, *Personal nominees*, who are migrants sponsored by residents of Australia able to provide suitable accommodation for them (any adult resident of Australia may nominate friends or relatives in the United Kingdom who are eligible to be considered for assisted passages under this agreement); *Group nominees*, who are recruited on a trade-qualification basis to meet applications lodged by employers and State Governments who guarantee to provide employment and accommodation for those selected; *Commonwealth nominees*, who comprise workers selected against known and assessed employment demands in Australia. Migrants in the last group live in hostels established by the Commonwealth Government for up to two years whilst they are seeking to obtain private accommodation. The Commonwealth nominee scheme was introduced in 1950 in order to reinforce the personal and group nomination schemes, but towards the end of 1952 it was greatly curtailed and selection was confined to workers in a limited group of essential skilled trades. During the latter part of 1953, the list of categories of workers who could be selected was broadened and the scheme resumed its former impetus.

Although the Commonwealth is not generally prepared to accept single persons or married persons without children if they have reached their forty-sixth birthday before the date of sailing, the parents or close relatives of intending migrants or of persons established in Australia may, if otherwise acceptable under the scheme, be granted passages irrespective of age. Each migrant of 19 years of age and over is required to contribute £10 sterling towards the cost of his or her passage, while juveniles aged 14 years and under 19 years have to pay £5 sterling. Children under 14 years travel free. Apart from these contributions and that made annually by the United Kingdom Government, the cost of the passages is borne by the Commonwealth Government.

(iii) *Numbers Arrived.* The numbers of British migrants who came to Australia under the Free and Assisted Passage Agreement during the years 1947 to 1956 are given in the following table:—

UNITED KINGDOM FREE AND ASSISTED PASSAGE AGREEMENT: NUMBER OF MIGRANTS.

Period.	N.S.W.	Vic.	Q'ld.	S. Aust.	W Aust.	Tas.	A.C.T.	Commonwealth Nominations.	Total.
1947-51 ..	34,370	38,389	17,072	10,081	13,797	5,007	1,976	21,120	141,812
1952 ...	7,386	10,596	4,104	2,326	2,804	1,235	382	6,247	35,080
1953 ...	3,890	3,962	1,835	1,072	1,969	485	110	372	13,695
1954 ...	3,046	3,199	1,872	1,406	2,067	425	97	6,605	18,717
1955 ...	4,743	6,068	2,731	1,756	2,219	672	119	7,389	25,697
1956 ..	4,231	5,516	2,471	1,814	2,231	602	189	7,082	24,136
Total, 1947-56	57,666	67,730	30,085	18,455	25,087	8,426	2,873	48,815	259,137

3. *Child Migration from the United Kingdom.*—(i) *General.* Since the commencement of the assisted passage schemes in 1947, the immigration of unaccompanied children and youths from the United Kingdom has been encouraged under the auspices of approved voluntary organizations. The organizations at present introducing child migrants include the Fairbridge Farm Schools of New South Wales and Western Australia, Dr. Barnardo's Homes, the Big Brother Movements of New South Wales and Tasmania, and the Northcote Children's Emigration Fund. All the principal religious denominations are also participating in the scheme. At the present time 40 institutions are caring for child migrants.

(ii) *Financial Assistance.* The United Kingdom Government contributes 12s. 6d. and the Commonwealth Government 10s. per week to approved organizations in respect of each child under 16 years of age, while the respective State Governments contribute amounts varying from 4s. 8d. per week in New South Wales to £1 10s. 9d. in Western Australia. In addition, the Commonwealth Government and the State Government concerned may contribute, where necessary, towards the approved capital expenditure on accommodation for child migrants brought in by these organizations.

(iii) *Numbers Arrived.* From the beginning of 1947 to the end of 1956, a total of 4,391 British children and youths arrived under the sponsorship of voluntary organizations. New South Wales took 2,404, Western Australia 1,155, Victoria 463 and the other three States 369. These children were brought to Australia under the United Kingdom Free and Assisted Passage Scheme and are included in the figures shown in the table above.

4. *Assisted Passage Scheme, Eire.*—In November, 1948, the Commonwealth Government decided to grant limited financial assistance to natural-born citizens of Eire normally residing in the British Isles, and to natural-born British citizens residing in Eire, who wish to emigrate to Australia and who are duly selected. This scheme applies only to prospective settlers and their dependants who are not eligible for assisted passages under the agreement with the United Kingdom Government (see para. 2 above). The maximum amount granted towards an adult passage is £30 sterling, with varying amounts for children according to age.

It is not essential for an applicant for a passage to be nominated by a friend or relative in Australia before the question of granting financial assistance is considered. Single men or women who are eligible under the scheme are readily accepted. Families, on the other hand, are accepted only if they can produce evidence of having secured accommodation in Australia, or, in the case of nominated migrants, a guarantee of accommodation by their sponsors. Up to the end of 1956, 2,782 migrants had arrived under this scheme (see table on p. 580).

5. *Maltese Migration.*—On 31st May, 1948, the Commonwealth Government and the Government of Malta entered into an agreement under which both Governments grant financial assistance towards the passage costs of selected Maltese migrants. The Commonwealth contribution is £30 sterling per adult with proportionate amounts for children, and the Government of Malta contributes an amount at least equal to this sum. This agreement has been extended from time to time, and as at 31st March, 1957, its future was subject to further negotiations between the two Governments.

At 31st December, 1956, a total of 22,464 Maltese had arrived under this scheme since its inception (*see* table on p. 580). Until the end of 1956, 213 Maltese children had been brought out to approved institutions in Western Australia. These are included in the number shown above.

6. Empire and Allied Ex-Servicemen's Scheme.—On 26th May, 1947, the Commonwealth Government implemented a scheme under which assistance was given to the passage costs of Empire ex-servicemen and their dependants not covered by the Free and Assisted Passage Scheme (*see* para. 2 above) and of ex-servicemen of the U.S.A. Later, eligibility was extended to ex-servicemen and resistance workers of the Netherlands, Norway, France, Belgium and Denmark. The amount of assistance for an adult was £30 sterling and amounts for children varied according to age. The scheme was discontinued as from 30th June, 1955.

During its currency a total of 21,994 migrants came to Australia under the scheme. The majority of these (16,830) were Dutch.

7. Displaced Persons Scheme.—On 21st July, 1947, the Commonwealth Government entered into an agreement with the International Refugee Organization to settle displaced persons in Australia. Although the International Refugee Organization wound up its activities in 1951, the Commonwealth agreed to receive those displaced persons already accepted for migration, but whose passages had still to be arranged. A total of 170,700 persons settled in Australia under this scheme.

8. Netherlands Migration.—A migration agreement concluded between the Commonwealth and Netherlands Governments in February, 1951, came into operation on 1st April of that year. On 1st August, 1956, the agreement was extended for a period of 5 years with retroactive effect as from 1st April, 1956. This superseded an earlier arrangement in 1946 between the Commonwealth and the Netherlands Emigration Foundation (*see* Official Year Book No. 39, p. 567).

The migrant is required to contribute towards his passage costs in accordance with a formula devised by the Netherlands Government. The balance is met by the Commonwealth and Netherlands Governments and the Intergovernmental Committee for European Migration. The Commonwealth Government's contribution is now equivalent to \$110 per head.

The provision of shipping is the responsibility of the Netherlands Government. The Commonwealth arranges for the reception of migrants and their after-care and assists in the securing of employment. Families who have not obtained private accommodation prior to arrival may be temporarily accommodated in an Immigration Centre when the breadwinner is placed in employment and proceeds either to employer-found accommodation or a Commonwealth Hostel. These arrangements continue until the family can secure its own accommodation, or vacancies enable a family to be united in a hostel.

Up to the end of December, 1956, 30,955 Dutch migrants had settled here under the Netherlands-Australia Migration Agreement.

9. Italian Migration.—On 29th March, 1951, the Commonwealth and Italian Governments entered into a migration agreement effective for a period of 5 years, under which certain selected Italian migrants were assisted to Australia. The agreement came into force on 1st August, 1951, and at that time the Commonwealth contributed an amount of £25 sterling for each adult migrant and proportionate amounts for children according to fares charged. From 1st March, 1955, this sum was increased to the equivalent of \$85 per head. The balance of passage costs is contributed by the migrants themselves, the Italian Government and the Intergovernmental Committee for European Migration.

The agreement was temporarily suspended at the end of 1952, but in March, 1954, provision was made for assisted passages to be granted to certain relatives and fiancées of migrants who had previously settled in Australia under the agreement. On 1st December, 1954, the agreement proper was re-opened and it was subsequently extended to 31st July, 1957. Up to 31st December, 1956, arrivals under this agreement totalled 24,401 persons.

10. German Migration.—On 29th August, 1952, a migration agreement was signed between the Commonwealth Government and the Government of the Federal Republic of Germany. This is somewhat similar to the agreements concluded with the Netherlands and Italy and is effective for a period of 5 years. The Commonwealth's contribution towards passage costs is the equivalent of \$85 per head. The migrant may be required to pay a small contribution and the balance of passage costs is paid by the Government of the Federal Republic and the Intergovernmental Committee for European Migration. Total arrivals of German assisted migrants were 32,594 to the end of December, 1956.

11. **Austrian Migration.**—Late in 1952, arrangements were made with the Intergovernmental Committee for European Migration for the migration to Australia of a small number of selected rural and other workers and their families from Austria. Later these arrangements were extended to cover greater numbers and wider categories of migrants. The Commonwealth contributes an amount equivalent to \$85 per head towards the passage costs of Austrian migrants. The Austrian Government, the Intergovernmental Committee for European Migration and the migrants themselves also contribute towards passage costs. Reception arrangements, temporary accommodation, after-care and placement in employment are undertaken by the Commonwealth. Under these arrangements, 10,353 Austrians arrived in Australia up to 31st December, 1956.

12. **Greek Migration.**—An arrangement similar to the Austrian one was made with the Intergovernmental Committee for European Migration late in 1952. The Commonwealth's contribution and the arrangements for reception, accommodation, employment and after-care are the same as for Austrian migrants.

Under this arrangement 18,271 Greek assisted migrants had settled in Australia up to 31st December, 1956.

13. **Migration from Trieste.**—In 1953, arrangements were made for the migration of refugees from Trieste. These arrangements continued until what was formerly the Free Territory of Trieste became part of the Italian Republic. Latterly, migrants from Trieste have proceeded under the Italian Agreement, and altogether 5,138 Triestians had arrived in Australia as assisted migrants up to 31st December, 1956. The Commonwealth made a contribution to passage costs at the same rate as for other European migrants and the balance was made up by contributions from the Intergovernmental Committee for European Migration and the Italian Government.

14. **Hungarian Migration.**—On 5th November, 1956, the Intergovernmental Committee for European Migration and the United Nations High Commissioner for Refugees, in accordance with a request received from the Austrian Government, appealed to Member Governments to give asylum to the greatest possible number of Hungarian refugees who were fleeing in thousands across the border into Austria, following Russian military action in Hungary.

On 8th November, 1956, the Minister for Immigration announced that Australia would provide permanent asylum for up to 3,000 Hungarian refugees during the year 1956–57. At the same time, the Australian Government agreed also to grant \$67,200 (£A.30,000) for the immediate relief needs of the Hungarian refugees in Austria. The Australian migration representative in Austria was instructed to begin selection of the refugees immediately, and was advised that normal standards should be applied with understanding and flexibility; in addition, he was authorized to select a number of compassionate cases such as children and persons over the normal age limits.

Early in December, 1956, the Government decided that the number of Hungarian refugees to be received during the year 1956–57 should be increased from 3,000 to 5,000. This number was subsequently increased to 10,000.

On 14th December, 1956, Cabinet decided that an additional contribution of £A.100,000 should be made available for the relief of Hungarian refugees. This amount was to be divided between the Austrian Government Refugee Fund, the United Nations Secretary-General's Fund for Relief within Hungary, and the Intergovernmental Committee for European Migration, and was to be additional to the grant of \$85 per person contributed by Australia to passage costs of the refugees.

To the end of December, 1956, 331 Hungarian refugees had arrived in Australia.

15. **General Assisted Passage Scheme.**—To encourage the migration of persons from the United States of America, Switzerland, Denmark, Norway, Sweden and Finland, the Commonwealth, on 10th September, 1954, introduced an assisted passage scheme for nationals of those countries. The Commonwealth makes a contribution of £37 10s. sterling per adult migrant and *pro rata* amounts for children according to the fare paid. No other Government or organization contributes to the passage costs of these migrants. To the end of December, 1956, 2,232 migrants had arrived in Australia under this scheme.

16. **Summary of Arrivals of Assisted Migrants.**—The following table shows, for each of the years 1950 to 1956, the number of assisted migrants who arrived in Australia under the various schemes. The total for the years 1947 to 1956 is also given.

ASSISTED MIGRATION SCHEMES : NUMBER OF MIGRANTS.

Assisted Migration Scheme.	1950.	1951.	1952.	1953.	1954.	1955.	1956.	Total, 1947-56.
United Kingdom Free and Assisted Passage Agreement (including Royal Navy Personnel)	38,329	44,007	35,080	13,695	18,717	25,697	24,136	259,137
Empire and Allied Ex-Servicemen's Scheme, 1947	6,444	5,557	3,025	1,227	1,920	965	5	21,994
Displaced Persons Scheme, 1947	70,212	11,708	2,055	441	5	..	..	170,700
Polish Migrants from United Kingdom	..	..	..	..	..	..	..	1,457
Maltese Assisted Migration Agreement, 1948	3,226	3,313	1,903	1,145	4,515	3,495	1,080	22,464
Eire Assisted Migration Agreement, 1948	457	426	573	240	218	438	321	2,782
Netherlands Foundation Agreement, 1946	441	16	..	..	..	..	..	584
Netherlands Agreement, 1951	..	1,588	6,964	2,397	2,861	7,341	9,804	30,955
Italian Assisted Migration Agreement, 1951	..	59	9,911	..	409	8,237	5,785	24,401
German Assisted Migration Agreement, 1952	..	..	1,007	6,576	12,149	8,326	4,536	32,594
General Assisted Passage Scheme	..	..	..	..	19	399	1,814	2,232
L.C.E.M. Agreement, 1952—	..	..	..	..	..	..	..	..
Triestians	..	..	..	..	4,273	744	121	5,138
Austrians	..	..	13	103	1,674	4,627	3,936	10,353
Greeks	..	..	..	1,486	7,278	6,419	3,088	18,271
Hungarians	..	..	..	..	..	..	331	331
Total Assisted Migrants	119,109	66,674	60,531	27,310	54,038	66,688	54,957	603,393

From the earliest years of assisted migration to the end of 1956 a total of 1,671,704 assisted migrants arrived in Australia.

§ 10. The Regulation of Immigration into Australia.

1. Powers and Legislation of the Commonwealth.—(i) *Constitutional.* Under section 51, xxvii. and xxviii. of the Commonwealth Constitution, the Parliament of the Commonwealth is empowered to make laws with respect to immigration and emigration and the influx of criminals.

(ii) *Legislation.* Immigration into the Commonwealth is regulated by the Immigration Act 1901-1949, which specifies the persons whose immigration is prohibited and provides for their deportation if they enter contrary to the Act. Provision is also made for the deportation of persons who have entered lawfully but who contravene the provisions of the Act after they have entered. Power is given to the Minister for Immigration to admit prohibited immigrants for a specified period under Certificate of Exemption from the provisions of the Act relating to entry or stay in the Commonwealth.

The Aliens Deportation Act 1948 empowers the Minister for Immigration to order the deportation of an alien who after investigation by a Commissioner is reported as not being a fit and proper person to be allowed to remain in Australia.

The Immigration (Guardianship of Children) Act 1946-1952 provides that the Minister for Immigration becomes the legal guardian of every person under the age of 21 years who enters Australia other than in the charge of, or for the purpose of living in the care of, a parent or adult relative. It is primarily administered through the child welfare authorities in each State who, as the Minister's delegates under the Act, supervise the welfare of each "immigrant child".

The Aliens Act 1947-1952 provides that a register of aliens shall be maintained for every State and Territory of the Commonwealth. Unless exempted, aliens 16 years of age and over are required to register with the Department of Immigration, and to notify the Department of any change of address, occupation or employment, and of their marriage. The Act also provides that consent must be obtained before an alien may change his surname.

2. **Conditions of Immigration into Australia.**—(i) *Persons of Non-European Race.* In pursuance of established policy, the general practice is not to permit Asians or other coloured persons to enter Australia for the purpose of settling permanently. Special provision exists for the temporary admission of non-Europeans who are bona fide merchants, students or tourists. They are permitted to enter and remain in Australia under exemption while they retain their status. Permission may also be given for the entry of non-Europeans as assistants or substitutes for local traders domiciled in Australia. Such persons are allowed to remain so long as they retain their status.

(ii) *Persons of European Race.* Persons of European race desiring to settle permanently in Australia are required to obtain authority for admission from the Department of Immigration. Their admission under the present policy is subject to their compliance with the Commonwealth's requirements in regard to health, character, freedom from security risk and general suitability as settlers.

(iii) *General Information.* General information as to conditions of entry into Australia may be obtained from the following officers:—

- (a) In Australia—The Secretary, Department of Immigration, Canberra, Australian Capital Territory, and Commonwealth Migration Officers in the capital cities of the various States;
- (b) In Great Britain—the Chief Migration Officer, High Commissioner's Office, Australia House, Strand, London;
- (c) In other British Dominions—The High Commissioner for Australia;
- (d) In Holland, Italy, Germany, Greece, Austria—the Chief Migration Officer in the capital city of each of those countries;
- (e) In other countries where Australia is represented—the Secretary, Australian Embassy, Legation or Consulate.

For details of the Australian representatives in the British Dominions and other countries see the section entitled "Diplomatic and other Representatives Overseas and in Australia" in Chapter XXX.

3. **Racial Origin and Nationality of Persons Arriving.**—For details of the racial origin and nationality of persons who arrived in Australia during the years 1954 to 1956, see p. 574.

§ 11. Passports.

Provision is made in the Immigration Act 1901–1949 for the production of a passport by each immigrant over 16 years of age who desires to enter Australia. Under the Passports Act 1920, it was compulsory also for each person over 16 years of age to be in possession of a passport or other document authorizing his departure. This Act has now been superseded by the Passports Act 1938–1948, which repealed the compulsory provisions. The Act also applies to the Territories of Australia, including Papua, Norfolk Island and the Trust Territory of New Guinea.

Although it is not compulsory for Australians to obtain a passport when leaving Australia, it is desirable in their own interests that they should have one in order to establish their identity and nationality overseas. A passport is necessary for admission into most countries, and the holder of an Australian passport also has no difficulty in landing on return to Australia. The charge for an Australian passport is £1.

As a result of the Nationality and Citizenship Act 1948–1955 (see § 12 below) and the enactment of similar citizenship legislation in other British Commonwealth countries, it is now the general rule that Australian passports are issued only to Australian citizens. Citizens of other British Commonwealth countries secure passports from their own High Commissioners in Australia. Australian citizens abroad may secure passports only from Australian representatives.

Diplomatic and official passports are issued to members of the Australian diplomatic service and other Government officials proceeding abroad on official business.

Applicants for passports are required to produce evidence of their identity and nationality (e.g., birth certificates).

§ 12. Citizenship and Naturalization.

1. **Commonwealth Legislation.**—The Nationality and Citizenship Act 1948 commenced on Australia Day (26th January), 1949 and repealed all previous Commonwealth legislation on this subject. The most significant effect of the Act was the creation for the first time of the status of "Australian Citizen". In this respect, the Act was complementary to citizenship legislation passed or about to be passed by other countries of the British Commonwealth. All Australian citizens, and the citizens of other countries of the British Commonwealth, are declared to be British subjects. For details of the Act, see previous issues of the Official Year Book.

2. **Certificates Granted.**—(i) *Australia.* The following figures relate to certificates issued under the Nationality and Citizenship Act 1948–1955 during the year 1955:—

NATURALIZATION : CERTIFICATES GRANTED, AUSTRALIA, 1955.

PREVIOUS NATIONALITIES OF RECIPIENTS.

Nationality.	Certificates Granted.	Nationality.	Certificates Granted.	Nationality.	Certificates Granted.	Nationality.	Certificates Granted.
Albanian ..	48	Czechoslovak ..	1,583	Israeli ..	19	Spanish ..	24
American (U.S.) ..	36	Danish ..	48	Italian ..	1,749	Swedish ..	22
Argentinian ..	2	Dutch ..	844	Japanese ..	1	Swiss ..	58
Austrian ..	391	Ecuadorian ..	1	Latvian ..	1,288	Syrian ..	7
Belgian ..	20	Egyptian ..	21	Lebanese ..	83	Turkish ..	6
Bulgarian ..	79	Estonian ..	471	Lithuanian ..	519	Ukrainian ..	624
Burmese ..	2	Finnish ..	24	Norwegian ..	39	Yugoslav ..	1,172
Byelorussian ..	11	French ..	75	Panamanian ..	2	Stateless ..	737
Chinese ..	4	German ..	489	Portuguese ..	3,229		
Colombian ..	1	Greek ..	578	Romanian ..	6		
Costa Rican ..	1	Hungarian ..	2,300	Russian ..	286		
Cuban ..	1	Iraqian ..	13			Total ..	17,160

COUNTRIES IN WHICH RECIPIENTS ORDINARILY RESIDED IMMEDIATELY BEFORE ENTERING AUSTRALIA OR EXTERNAL TERRITORIES.

Country.	Certificates Granted.	Country.	Certificates Granted.	Country.	Certificates Granted.	Country.	Certificates Granted.
Afghanistan ..	1	Denmark ..	63	Japan ..	4	Romania ..	54
Africa ..	35	Ecuador ..	1	Latvia ..	16	South Africa ..	10
Albania ..	26	Egypt ..	336	Lebanon ..	124	South America ..	34
Arabia ..	2	Eire ..	2	Libya ..	1	Spain ..	16
Argentina ..	7	Estonia ..	16	Lithuania ..	10	Sweden ..	89
Austria ..	1,408	Ethiopia ..	3	Luxembourg ..	8	Switzerland ..	317
Belgium ..	217	Fiji ..	2	Malaya ..	7	Syria ..	4
Brazil ..	1	Finland ..	20	Malta ..	1	Tahiti ..	1
British East Africa ..	12	France ..	804	Morocco ..	7	Thailand ..	4
Bulgaria ..	7	Germany ..	6,712	New Caledonia ..	12	Tonga ..	2
Burma ..	11	Greece ..	435	New Guinea ..	1	Transjordan ..	2
Canada ..	10	Holland ..	661	New Zealand ..	10	Trieste ..	1
Ceylon ..	7	Hungary ..	365	Norway ..	35	Turkey ..	13
China ..	501	India ..	37	Pakistan ..	1	United Kingdom ..	330
Colombia ..	2	Indo-China ..	2	Panama ..	2	Ukraine ..	8
Crete ..	3	Indonesia ..	165	Philippines ..	219	U.S. of America ..	99
Cuba ..	2	Iran ..	17	Poland ..	267	U.S.S.R. ..	16
Cyprus ..	21	Iraq ..	4	Portugal ..	3	Yugoslavia ..	159
Czechoslovakia ..	594	Israel ..	179	Portuguese East Africa ..	1	Total ..	17,160
		Italy ..	2,581				

(ii) *States.* The certificates of naturalization granted in 1956 were issued in respect of residents of the various States and Territories as follows:—New South Wales, 7,097; Victoria, 8,650; Queensland, 947; South Australia, 4,712; Western Australia, 3,105; Tasmania, 566; Northern Territory, 91; Australian Capital Territory, 332; External Territories, 85; Total, 25,585.

§ 13. Population of External Territories.

At the Census of 30th June, 1954, as at previous censuses, arrangements were made to obtain complete information concerning the external territories under the control of Australia, namely:—Norfolk Island, Papua, the Trust Territory of New Guinea, and the Trust Territory of Nauru. The following table shows the population of each of these Territories at 30th June, 1954 and the estimated population at 30th June, 1956.

On 23rd November, 1955, the Cocos (Keeling) Islands were placed under the authority of the Commonwealth. An estimate of the population at 30th June, 1956 is included in the table below.

POPULATION: EXTERNAL TERRITORIES.

(EXCLUDING INDIGENOUS POPULATION.)

Territory.	Census, 30th June, 1954.			Estimate, 30th June, 1956.
	Males.	Females.	Persons.	Persons.
Cocos (Keeling) Islands .. ..	..	..	..	649
Norfolk Island	478	464	942	1,039
Papua	3,867	2,446	6,313	7,711
Trust Territory of New Guinea ..	7,201	4,241	11,442	13,455
Trust Territory of Nauru	1,269	376	1,645	1,917

Particulars concerning the indigenous populations of the internal and external territories will be found in Chapter V.—*The Territories of Australia.*

§ 14. The Aboriginal Population of Australia.

In Official Year Book No. 17, pp. 951–61, a brief account was given of the Australian aboriginal population, its origin, its numbers as estimated from time to time, and the steps taken for its protection. On pp. 914–6 of Official Year Book No. 22, particulars were shown for each of the States and Territories of Australia at successive periods, while a special article dealing with the estimated number and distribution of the native population at the date of first settlement of the white race in the continent appeared on pp. 687–96 of Official Year Book No. 23.

The aborigines are scattered over the whole of the mainland but the majority are concentrated in Western Australia, Queensland and the Northern Territory. Details of the number in each State at the June, 1947, Census are shown in the following table. Full-blood aborigines in employment or living in proximity to settlements were enumerated at the census, while estimates of the total numbers, including those living in the wild state, were furnished by the Protectors of Aborigines. Half-caste aborigines are included in the numbers of the population and are of course enumerated at the census. The figures shown for Queensland are exclusive of Torres Strait Islanders.

ABORIGINAL POPULATION, 30th JUNE, 1947.

State or Territory.	Full-blood.				Half-caste. (Enumerated at the Census.)			Total, Full- blood and Half- caste.
	In Employment or Living in Proximity to Settlements.(a)			Esti- mate of Total Num- bers.(b)	Males.	Females.	Persons.	
	Males.	Females.	Persons.					
New South Wales ..	546	407	953	(c) 953	5,498	5,109	10,607	11,560
Victoria ..	100	108	208	(c) 208	537	532	1,069	1,277
Queensland ..	3,504	2,822	6,326	9,100	3,684	3,527	7,211	16,311
South Australia ..	259	205	464	2,139	1,103	1,054	(d)2,157	(d)4,296
Western Australia ..	2,664	2,269	4,933	20,338	2,359	2,215	(d)4,574	d 24,912
Tasmania ..	..	..	..	..	127	87	214	214
Northern Territory ..	5,615	5,370	10,985	13,900	660	587	1,247	15,147
Aust. Cap. Territory ..	..	..	..	..	58	42	100	100
Total ..	12,688	11,181	23,869	46,638	14,026	13,153	27,179	73,817

(a) Enumerated at the Census. (b) Furnished by the Protectors of Aborigines. (c) Census totals. (d) In addition to these totals, the Protectors of Aborigines estimated that there were 826 half-caste and mixed bloods in South Australia and 1,322 in Western Australia, presumably living in the nomadic state.

According to the annual Reports of the Protectors of Aborigines, there has been little change in the numbers of aborigines in most States since 1947. In Western Australia, however, the estimate for the total number of full-blood and half-caste aborigines at 30th June, 1952 was 21,051.

CHAPTER XVII.

VITAL STATISTICS.

NOTE.—1. Owing to considerations of space, the tables in this chapter contain only summaries of the principal vital statistics for Australia. They relate, in the main, to the year 1955, except for the totals of marriages, births, deaths and infant deaths, for which it has been possible to include figures for 1956. Comparisons have been restricted, in general, to the individual years 1952 to 1956 and the five-year periods 1931–35 to 1951–55, while age data have been shown in groups. Comparisons over longer periods, together with more detailed figures such as single age distributions and cross-classifications of various characteristics, will be found in the annual bulletin, *Demography*.

2. Figures for Australia throughout are exclusive of full-blood aboriginals.

§ 1. Provisions for Registration and Compilation of Statistics.

In Australia, vital statistics are compiled from information obtained from the registers of births, deaths and marriages. Each State and Territory has an independent system of registration. Provisions for the civil registration of births, deaths and marriages have been in force in Tasmania from 1839, in Western Australia from 1841, in South Australia from 1842, in Victoria from 1853 and in New South Wales and Queensland (then part of New South Wales) from 1856. Registration in the Territories is administered by the Commonwealth Government, registration in respect of the Northern Territory having been taken over from South Australia in 1911 and in respect of the Australian Capital Territory from New South Wales in 1930. The authority responsible for the registration of births, deaths and marriages occurring within his particular State or Territory is the Registrar-General or the Principal Registrar, or, as in the case of Victoria, the Government Statist.

In the Australian Capital Territory and the Northern Territory, information concerning a birth is required to be supplied within 21 days, in South Australia in 42 days, and in all other States 60 days is allowed. In all States, however, provision has been made for the late registration of births. For the registration of a death, the length of time varies more considerably, being 8 days in Tasmania, 10 days in South Australia, 14 days in Western Australia, the Northern Territory and the Australian Capital Territory, 21 days in Victoria and 30 days in New South Wales and Queensland. Provision is made in all States and Territories for the celebration of marriages by ministers of religion registered for that purpose with the Registrar-General or the Principal Registrar of Births, Deaths and Marriages of the State or Territory and also by certain civil officers. In all cases the celebrant, whether minister of religion or civil officer, is required to register particulars of the parties married with the Registrar of the district in which the marriage has taken place. The length of time allowed for registration of marriage also shows considerable variation as between States and Territories. In Victoria, Western Australia, the Northern Territory and the Australian Capital Territory, registration is required immediately following the ceremony, in Tasmania and South Australia within 7 days and in New South Wales and Queensland within 30 days.

For all States except Queensland and Tasmania, the registration of stillbirths is compulsory. Western Australia was the first State to introduce compulsory registration in 1908, followed by the Australian Capital Territory in 1930, New South Wales in 1935, South Australia in 1937 and Victoria in 1953. No statutory provision has been made in Queensland or Tasmania for the registration of stillbirths but provision is made in these States for voluntary registration and it appears likely that such births are notified to the Registrar-General. In this chapter, stillbirths have been excluded from all tables of births and deaths and shown only in those specially relating to stillbirths.

While there is every indication that the registration work of the several States and the Territories is very efficiently carried out, it is clear that in those States with a large area and scattered population, failure to register births and deaths may occur in some cases. It is believed, however, that consequent on the abolition, in 1943, of income limits previously restricting eligibility for maternity allowances (claims for which are checked against birth registers before payment), the proportion of births occurring now which is not registered is very small.

The data required for the compilation of vital statistics are copied from the registers of births, deaths and marriages in the Registrar General's Office and forwarded, through the Government Statistician in each State, and direct from the Principal Registrars in the two Territories, to the Commonwealth Statistician. The compilation and publication of vital statistics for Australia is a function of the Commonwealth Statistician. The Statisticians in the various States compile and publish statistics relating to their respective States.

§ 2. Marriages.

NOTE.—See NOTE at the beginning of this chapter.

1. **Number of Marriages.**—The number of marriages registered in Australia during the year ended 31st December, 1956 was 71,780, giving a rate of 7.61 per 1,000 of the mean population for the year. A summary of the number of marriages registered in each State and Territory from 1931 to 1956 is given in the following table. Annual averages for each five-year period from 1861 to 1950 were published in Official Year Book No. 39, p. 575. A graph showing the number of marriages in each year from 1860 to 1956 appears on p. 597 of this issue.

MARRIAGES.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
ANNUAL AVERAGES.									
1931-35 ..	18,742	12,773	6,950	3,967	3,328	1,638	29	53	47,480
1936-40 ..	25,295	17,784	8,982	5,726	4,399	2,187	83	85	64,541
1941-45 ..	28,506	19,450	10,563	6,517	4,668	2,097	71	109	71,981
1946-50 ..	30,162	20,453	10,666	6,581	5,205	2,529	114	181	75,891
1951-55 ..	28,483	20,007	10,171	6,290	5,232	2,539	146	234	73,102
ANNUAL TOTALS.									
1952 ..	29,351	20,220	10,056	6,241	5,389	2,553	137	225	74,172
1953 ..	27,573	19,238	9,859	6,149	5,032	2,424	154	211	70,640
1954 ..	27,503	19,404	10,027	6,190	5,204	2,512	143	246	71,229
1955 ..	27,645	20,056	10,098	6,226	5,145	2,600	151	251	72,172
1956 ..	27,313	20,137	9,934	6,277	5,080	2,601	160	278	71,780

2. **Crude Marriage Rates.**—The crude marriage rates for each State and Territory from 1931 to 1956 are given hereunder:—

CRUDE MARRIAGE RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1931-35 ..	7.20	7.02	7.35	6.83	7.58	7.19	5.92	5.74	7.16
1936-40 ..	9.29	9.52	8.80	9.65	9.49	9.25	13.28	7.22	9.35
1941-45 ..	9.97	9.86	10.04	10.61	9.74	8.61	7.18	7.57	9.94
1946-50 ..	9.90	9.72	9.41	9.87	10.01	9.56	9.39	9.36	9.77
1951-55 ..	8.41	8.34	7.92	8.11	8.44	8.35	9.21	8.22	8.29
ANNUAL RATES.									
1952 ..	8.78	8.63	8.01	8.27	8.97	8.56	9.08	8.47	8.59
1953 ..	8.14	8.03	7.66	7.92	8.10	7.91	9.91	7.35	8.01
1954 ..	8.02	7.91	7.64	7.77	8.13	8.07	8.82	8.10	7.92
1955 ..	7.92	7.94	7.54	7.59	7.81	8.22	8.86	7.74	7.84
1956 ..	7.68	7.73	7.27	7.40	7.50	8.07	8.94	8.01	7.61

(a) Number of marriages per 1,000 of mean population.

3. **Marriage Rates based on Marriageable Population.**—As the marriage rates in some international tabulations are based on the unmarried population aged 15 years and over, the corresponding rates have been calculated for Australia for the eight census periods to 1953–55. The period in each case comprises the census year with the year immediately preceding and the year immediately following, and the figures are as follows:—

PERSONS MARRYING PER 1,000 OF UNMARRIED POPULATION: AUSTRALIA.

Period.			Rate.(a)	Period.			Rate.(a)
1880–82	..	..	48.63	1920–22	..	..	55.97
1890–92	..	..	44.04	1932–34	..	..	42.88
1900–02	..	..	42.14	1946–48	..	..	71.24
1910–12	..	..	50.12	1953–55	..	..	65.32

(a) Average annual number of persons who married per 1,000 unmarried persons, including widowed and divorced, aged 15 years and over.

4. **Crude Marriage Rates of Various Countries.**—The following table gives the crude marriage rates for Australia in comparison with the rates for various other countries.

CRUDE MARRIAGE RATES(a) : VARIOUS COUNTRIES.

Country.	1921–25.	1926–30.	1931–35.	1955.	Country.	1921–25.	1926–30.	1931–35.	1955.
Union of South Africa(b)	8.0	9.3	9.4	(c)9.5	Switzerland	7.7	7.5	7.7	8.0
United States of America	10.6	9.9	9.2	9.3	Japan	8.0	8.8	7.6	8.0
Yugoslavia	10.6	9.5	7.8	9.3	Belgium	10.6	9.1	7.8	7.8
New Zealand(d)	8.0	7.6	7.3	8.3	Australia(e)	8.0	7.5	7.2	7.8
Netherlands	8.2	7.7	7.2	8.3	Finland	7.1	7.2	7.2	7.7
Austria	9.6	7.5	6.8	8.1	Denmark	7.9	7.8	8.7	7.6
Spain	7.3	7.3	6.5	8.1	Norway	6.3	6.1	6.5	7.5
Canada	7.3	7.3	6.4	8.1	Italy	9.0	7.3	6.8	7.4
United Kingdom	7.7	7.5	7.9	8.0	France	9.5	8.2	7.4	7.2
					Sweden	6.3	6.7	7.3	7.1
					Ireland, Republic of	4.9	4.6	4.6	5.5

(a) Number of marriages per 1,000 of mean population. (b) European population only.
(c) 1953. (d) Includes Maoris. (e) Excludes full-blood aborigines.

5. **Age and Conjugal Condition at Marriage.**—(i) *General.* Particulars of age at marriage in age groups and previous conjugal condition of bridegrooms and brides in 1955 are given hereunder. There were 5,613 males under 21 years of age married during 1955, while the corresponding number of females was 22,440. At the other extreme there were 96 bachelors and 73 spinsters in the age group 65 years and over.

AGE AND CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES : AUSTRALIA, 1955.

Age at Marriage (Years).	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
Under 20	2,643	..	..	2,643	16,689	4	10	16,703
20–24	29,779	6	43	29,828	31,663	66	304	32,033
25–29	20,135	85	543	20,763	9,150	223	1,025	10,398
30–34	6,541	168	990	7,699	3,183	350	1,227	4,760
35–39	2,443	219	866	3,528	1,272	412	956	2,640
40–44	1,331	320	834	2,485	778	493	759	2,030
45–49	769	392	556	1,717	450	496	387	1,333
50–54	357	418	368	1,143	240	408	230	878
55–59	220	423	185	828	122	366	88	576
60–64	93	450	92	635	93	298	43	434
65 and over	96	735	72	903	73	294	20	387
Total	64,407	3,216	4,549	72,172	63,713	3,410	5,049	72,172

(ii) *Proportional Distribution.* In the following table the proportional distribution of bridegrooms and brides according to previous conjugal condition is shown in five-year periods from 1931 to 1955 and for each of the years 1953 to 1955:—

CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES : PROPORTIONAL DISTRIBUTION, AUSTRALIA.

(Per Cent.)

Period.	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
1931-35 ..	92.63	5.39	1.98	100.00	94.37	3.53	2.10	100.00
1936-40 ..	92.59	4.82	2.59	100.00	93.94	3.38	2.68	100.00
1941-45 ..	91.44	4.77	3.79	100.00	92.11	3.93	3.96	100.00
1946-50 ..	88.82	4.74	6.44	100.00	88.71	4.74	6.55	100.00
1951-55 ..	88.77	4.63	6.60	100.00	88.04	4.81	7.15	100.00
1953 ..	88.27	4.68	7.05	100.00	87.65	4.75	7.60	100.00
1954 ..	88.95	4.69	6.36	100.00	88.17	4.85	6.98	100.00
1955 ..	89.24	4.46	6.30	100.00	88.28	4.72	7.00	100.00

(iii) *Relative Ages of Bridegrooms and Brides.* The relative ages of bridegrooms and brides in 1955 are shown below in age groups of five years.

RELATIVE AGES OF BRIDEGROOMS AND BRIDES : AUSTRALIA, 1955.

Age of Bridegroom (Years).	Total Bridegrooms.	Age of Bride (Years).							
		Under 15.	15-19.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.
Under 20 ..	2,643	7	2,123	486	25	1	..	..	1
20-24 ..	29,828	9	10,687	17,144	1,732	204	32	16	4
25-29 ..	20,763	8	3,245	11,219	4,877	1,089	236	64	25
30-34 ..	7,699	1	483	2,438	2,416	1,623	515	180	43
35-39 ..	3,528	..	103	511	890	878	676	328	142
40-44 ..	2,485	..	25	156	305	556	584	523	336
45-49 ..	1,717	..	5	52	107	272	329	427	525
50-54 ..	1,143	..	5	17	29	87	179	266	560
55-59 ..	828	..	2	7	9	40	56	130	584
60-64 ..	635	..	..	3	4	6	25	55	542
65 and over	903	..	..	..	4	4	8	41	846
Total Brides	72,172	25	16,678	32,033	10,398	4,760	2,640	2,030	3,608

(iv) *Average Ages of Bridegrooms and Brides.* The age at marriage of brides has remained fairly constant during recent years at an average of about 25½ years, although in the period 1937-39 the average rose to almost 26 years. The average ages, in years, of brides for each of the five years to 1955 were:—1951, 25.71; 1952, 25.61; 1953, 25.73; 1954, 25.59; and 1955, 25.42. For the following five-year periods the average ages in years were:—1931-35, 25.50; 1936-40, 25.72; 1941-45, 25.68; 1946-50, 25.61; and 1951-55, 25.61. The average ages, in years, of bridegrooms were 28.92 in 1951, 28.79 in 1952, 28.96 in 1953, 28.82 in 1954, and 28.68 in 1955. It follows, therefore, that brides are, generally speaking, a little more than three years younger than bridegrooms. The difference in age was 3.21 years in 1951, 3.18 in 1952, 3.23 in 1953 and 1954, and 3.26 in 1955.

6. *Previous Conjugal Condition.*—The following table shows the relative conjugal condition of the contracting parties to marriages in 1955.

CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES : AUSTRALIA, 1955.

Conjugal Condition of Bridegrooms.	Total Bridegrooms.	Conjugal Condition of Brides.		
		Spinsters.	Widows.	Divorced.
Bachelors	64,407	59,907	1,466	3,034
Widowers	3,216	1,240	1,350	626
Divorced	4,549	2,566	594	1,389
Total Brides	72,172	63,713	3,410	5,049

7. **Birthplaces of Persons Marrying.**—A table showing the relative birthplaces of bridegrooms and brides married in each year will be found in the annual bulletin, *Demography*.

8. **Occupation of Bridegrooms.**—The distribution of the 72,172 bridegrooms for 1955 amongst classes of occupations was as follows:—Craftsmen, 19,364; commercial and clerical, 12,397; operatives, 11,948; rural, fishing and hunting, 8,366; labourers, 6,803; domestic and protective service, 4,594; professional and semi-professional, 3,916; administrative, 2,808; and not gainfully occupied and not stated, 1,976.

9. **Celebration of Marriages.**—In all the States, marriages may be celebrated either by ministers of religion who are registered for that purpose with the Registrar-General, or by certain civil officers—in most cases district registrars—but most of the marriages are celebrated by ministers of religion. The registered ministers in 1955 belonged to more than forty different denominations, some of which, however, have only very few adherents. A number of these have been bracketed under the heading "Other Christian". The figures for 1955 are shown in the following table.—

MARRIAGES IN EACH DENOMINATION, 1955.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia.	
									No.	Proportion of Total.
										%
Church of England ..	9,622	5,269	2,728	1,273	1,523	929	26	89	21,459	29.73
Roman Catholic ..	6,812	4,843	2,571	1,051	1,142	492	33	84	17,028	23.59
Presbyterian ..	3,095	3,645	1,924	297	375	143	8	16	9,503	13.17
Methodist ..	2,723	2,494	1,492	1,615	599	429	26	9	9,387	13.01
Baptist ..	366	324	204	173	48	69	..	1	1,185	1.64
Congregational ..	277	286	121	261	122	58	..	2	1,127	1.56
Lutheran ..	123	244	263	407	32	11	11	5	1,096	1.52
Church of Christ ..	88	382	63	173	75	17	..	2	800	1.11
Greek Orthodox ..	240	278	66	60	51	..	1	3	699	0.97
Salvation Army ..	96	84	91	35	29	25	9	..	369	0.51
Seventh-Day Adventist ..	89	43	34	9	20	13	..	..	208	0.29
Other Christian ..	182	227	140	47	119	29	3	..	747	1.04
Hebrew ..	137	183	11	4	15	1	..	..	351	0.48
Total ..	23,850	18,302	9,708	5,405	4,150	2,216	117	211	63,959	88.62
Civil Officers ..	3,795	1,754	390	821	995	384	34	40	8,213	11.38
Grand Total	27,645	20,056	10,098	6,226	5,145	2,600	151	251	72,172	100.00

PROPORTION OF TOTAL.
(Per cent.)

Denominational ..	86.27	91.25	96.14	86.81	80.66	85.23	77.48	84.06	88.62
Civil ..	13.73	8.75	3.86	13.19	19.34	14.77	22.52	15.94	11.38

§ 3. Divorces.

Chapter XIII.—Public Justice shows details of the number of marriages dissolved annually by divorce, nullity of marriage and judicial separation. The number dissolved by decrees for divorce and nullity of marriage made absolute and by judicial separation in 1955 was 6,782. Detailed tables relating to divorce statistics for 1955 and summary tables for earlier years are shown also in *Demography*, Bulletin No. 73.

§ 4. Fertility and Reproduction.

NOTE.—See NOTE at the beginning of this chapter.

1. **Introductory.**—Of the two elements of increase in the population, namely, natural increase and net migration, the former has been by far the more important over the past few decades. The level of natural increase depends on the excess of births over deaths and the relation between fertility and mortality determines the rate of reproduction or replacement of the population.

2. **Number of Live Births and Confinements.**—(i) *Year 1955.* There are various methods of measuring the fertility of the population by relating the number of births to the numbers in the population. In each the basic data are, of course, the numbers of live births.

The number of live births registered in Australia during 1955 is shown in the following table. The table shows also the number of confinements resulting in one or more live births. The figures exclude cases where the births were of still-born children only.

LIVE BIRTHS AND CONFINEMENTS, 1955.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	N.T.	A.C.T.	Australia.
LIVE BIRTHS.									
Single births ..	72,770	54,994	31,682	18,069	16,207	7,911	501	835	202,969
Twins ..	1,616	1,321	649	419	410	173	14	26	4,628
Triplets ..	21	21	17	6	6	5	..	..	76
Quadruplets ..	..	..	4	..	..	..	..	..	4
Males ..	38,081	28,888	16,701	9,524	8,436	4,122	257	441	106,450
Females ..	36,326	27,448	15,651	8,970	8,187	3,967	258	420	101,227
Total ..	74,407	56,336	32,352	18,494	16,623	8,089	515	861	207,677

STILLBIRTHS ASSOCIATED WITH MULTIPLE BIRTHS INCLUDED ABOVE.

Twins ..	58	11	15	5	14	5	..	2	110
Triplets ..	..	..	1	..	..	1	..	..	2

CONFINEMENTS RESULTING IN ABOVE BIRTHS.

Nuptial ..	70,619	53,778	30,188	17,675	15,646	7,728	450	833	196,917
Ex-nuptial ..	2,995	1,889	1,833	608	775	274	58	16	8,448
Total ..	73,614	55,667	32,021	18,283	16,421	8,002	508	849	205,365

NOTE.—Owing to the registration procedure adopted in some States, it is possible that in some cases where one child only of a multiple pregnancy is live-born the confinement has been treated as a single birth. However, the numbers of multiple births are not significantly affected. See also para. 13.

(ii) *Live Births, Years 1931 to 1956.* The average annual number of live births in each State and Territory for each five-year period from 1931 to 1955 and the total number of live births in each State and Territory for each year from 1952 to 1956 are given in the following table. Corresponding figures for each five-year period from 1861 to 1950 were published in Official Year Book No. 39, p. 583.

LIVE BIRTHS.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
ANNUAL AVERAGES.									
1931-35 ..	44,964	28,380	17,480	8,646	8,061	4,547	79	145	112,302
1936-40 ..	47,679	30,282	19,534	9,388	8,877	4,866	125	221	120,972
1941-45 ..	56,583	38,002	23,431	12,546	10,409	5,418	113	384	146,886
1946-50 ..	68,856	47,372	28,003	16,270	13,130	7,064	289	734	181,718
1951-55 ..	73,737	53,770	30,983	18,045	15,724	7,774	468	922	201,423
ANNUAL TOTALS.									
1952 ..	74,196	53,738	30,953	17,884	15,413	7,916	448	1,102	201,650
1953 ..	74,890	53,561	30,782	18,156	15,862	7,736	460	788	202,235
1954 ..	73,125	54,660	31,176	18,227	15,928	7,770	513	857	202,256
1955 ..	74,407	56,336	32,352	18,494	16,623	8,089	515	861	207,677
1956 ..	75,714	58,393	32,409	18,964	16,916	8,104	556	1,077	212,133

A graph showing the number of births in each year from 1860 to 1956 will be found on p. 597.

3. **Crude Birth Rates.**—The oldest and most popular method of measuring fertility is to relate the number of births to the total population, thus obtaining the crude birth rate. The crude birth rate measures the rate per thousand persons (irrespective of age or sex) at which the population has added to its numbers by way of births during a given period.

Crude birth rates for each five-year period from 1931 to 1955 and for each year from 1952 to 1956 for each State and Territory are set out below:—

CRUDE BIRTH RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1931-35 ..	17.28	15.60	18.48	14.89	18.36	19.95	15.99	15.77	16.94
1936-40 ..	17.51	16.20	19.48	15.82	19.16	20.58	19.96	18.68	17.52
1941-45 ..	19.79	19.27	22.28	20.43	21.72	22.23	11.40	26.82	20.28
1946-50 ..	22.60	22.51	24.69	24.41	25.24	26.71	23.77	37.92	23.39
1951-55 ..	21.78	22.41	24.13	23.25	25.35	25.57	29.64	32.30	22.85
ANNUAL RATES.									
1952 ..	22.20	22.93	24.65	23.69	25.66	26.53	29.69	41.48	23.35
1953 ..	22.11	22.36	23.91	23.39	25.54	25.25	29.61	27.43	22.94
1954 ..	21.33	22.28	23.74	22.89	24.88	24.97	31.64	28.21	22.50
1955 ..	21.31	22.30	24.16	22.55	25.23	25.59	30.22	26.56	22.57
1956 ..	21.29	22.42	23.72	22.35	24.98	25.15	31.07	31.04	22.50

(a) Number of births per 1,000 of mean population.

NOTE.—The birth rates in the table above are based on live births registered in the respective States and Territories. Prior to 1939, a large proportion of births in respect of which the mother's usual residence was the Australian Capital Territory took place in Queanbeyan, just over the New South Wales border. With improved hospital facilities in the Territory, the position was reversed until late in 1952, when maternity accommodation was provided at the Queanbeyan District Hospital. Since 1952, the movements in either direction have been only small. Particularly for years prior to 1953, the following rates, based on births in respect of which the mother's usual residence is the Australian Capital Territory, are a truer measure of birth rates in the Australian Capital Territory.

Annual Average.	Year.
1931-1935 ..	19.53
1936-1940 ..	19.29
1941-1945 ..	23.06
1946-1950 ..	27.13
1951-1955 ..	28.39
1951 ..	28.51
1952 ..	31.09
1953 ..	27.61
1954 ..	28.67
1955 ..	26.53

The variations similarly caused in the birth rates for the States and the Northern Territory by referring the birth registrations to the State or Territory in which the mother was usually resident are shown by the following corrected rates for 1955:—New South Wales, 21.29; Victoria, 22.28; Queensland, 24.24; South Australia, 22.46; Western Australia, 25.26; Tasmania, 25.66; and Northern Territory, 30.93.

A graph showing the birth rate for each year from 1860 to 1956 will be found on p. 598.

In the earlier years of the present century the crude birth rate fluctuated somewhat, but from 1912, when 28.60 was recorded, there was an almost continuous decline to the very low figure of 16.39 in 1934. The decline in the depression years was to some extent occasioned by the postponement of marriages, and with subsequent improvement in economic conditions the rate rose. From 1940 the rate increased quite appreciably, owing to a continued improvement in the economic welfare of the community and the war-time boom in marriages. The latter resulted in an abnormal number of first births but investigation indicates that rates for births other than first were generally slightly higher than might have been expected from pre-war experience. The improvement in the birth rate has been substantially maintained since the end of the war despite some falling off in marriage rates. The post-war peak of 24.07 was recorded in 1947.

4. **Crude Birth Rates of Various Countries.**—The following table gives crude birth rates for Australia in comparison with rates for various other countries.

CRUDE BIRTH RATES(a) : VARIOUS COUNTRIES.

Country.	1921- 25.	1926- 30.	1931- 35.	1955.	Country.	1921- 25.	1926- 30.	1931- 35.	1955.
Canada	27.4	24.1	21.4	28.3	Spain	29.8	28.5	27.1	20.6
Yugoslavia ..	35.0	34.2	31.8	26.9	Japan	34.6	33.5	31.6	19.4
Union of South Africa(b) ..	27.1	25.9	24.1	26.0	Norway	22.2	18.0	15.2	18.7
New Zealand(c) ..	22.2	19.7	17.0	24.9	France	19.3	18.2	16.5	18.4
United States of America	22.5	19.7	d16.9	24.6	Italy	29.8	26.8	23.8	17.7
Australia(e) ..	23.9	21.0	16.9	22.6	Denmark	22.3	19.4	17.7	17.5
Netherlands ..	25.7	23.2	21.2	21.4	Switzerland ..	19.5	17.6	16.4	17.1
Ireland, Republic of	20.3	20.1	19.4	21.2	Belgium	20.4	18.6	16.8	16.8
Finland	24.7	22.5	19.5	20.9	Austria	22.2	17.6	14.4	15.5
					United Kingdom ..	20.4	17.2	15.5	15.4
					Sweden	19.1	15.9	14.1	14.8

(a) Number of births per 1,000 of mean population. (b) European population only.
(c) Excludes Maoris. (d) 1933-35. (e) Excludes full-blood aboriginals.

5. **Fertility Rates.**—The principal demographic factors affecting the level of crude birth rates are the proportion of women of child-bearing age in the population and the proportion of such women who are married. These factors may vary considerably at different periods and for different countries, and a population with a higher proportion of married women of child-bearing age will have a much higher crude birth rate than one with a low proportion, although the fertilities of the two populations may be identical.

In order to compare fertilities, births are sometimes related to the number of women of child-bearing age or, alternatively, nuptial births are related to the number of married women of child-bearing age. Thus births are related to potential mothers, giving the fertility rate.

The following table sets out for certain periods, commencing with 1880-82, the number of births per thousand of mean population, the number of births per thousand women of child-bearing age and the number of nuptial births per thousand married women of child-bearing age. For purposes of this table the child-bearing age has been taken to be 15-44 years inclusive, but births to mothers who were stated to be under 15 or over 44 years have been included in the compilations.

CRUDE BIRTH RATES AND FERTILITY RATES: AUSTRALIA.

Period.	Average Annual Rates.			Index Nos. (Base: 1880-82 = 100).		
	Crude Birth Rate.(a)	Fertility Rates.		Crude Birth Rate.(a)	Fertility Rates.	
		Births per 1,000 Women aged 15-44 Years.	Nuptial Births per 1,000 Married Women aged 15-44 Years.		Births per 1,000 Women aged 15-44 Years.	Nuptial Births per 1,000 Married Women aged 15-44 Years.
1880-82 ..	35.3	170	321	100	100	100
1890-92 ..	34.5	159	332	98	94	103
1900-02 ..	27.2	117	235	77	69	73
1910-12 ..	27.2	117	236	77	69	74
1920-22 ..	25.0	107	197	71	63	61
1932-34 ..	16.7	71	131	47	42	41
1946-48 ..	23.6	104	160	67	61	50
1953-55 ..	22.7	109	149	64	64	46

(a) Number of births per 1,000 of mean population.

The table above shows how increasing proportions both of women of child-bearing age and of married women of child-bearing age inflate the crude birth rate. Thus, while the nuptial birth rate for married women increased by only 22 per cent. over the period 1932-34 to 1946-48 the crude birth rate rose by 41 per cent., owing principally to the greatly increased number of marriages during that period.

6. Age-specific Fertility Rates for Females.—So long as customary ages at marriage do not change drastically, the main demographic factor affecting the number of births is the age composition of the potential mothers in the population. Within the child-bearing group the fertility of women of different ages varies considerably and a clearer view of the fertility of the population can be obtained from an examination of what are known as its age-specific fertility rates, that is, the number of births to women of specified ages per thousand women of those particular ages.

Age-specific fertility rates are more commonly expressed in age groups than in single ages. In the following table, such rates, calculated in terms of female births for the purpose of obtaining the gross and net reproduction rates described in para. 7, are shown in five-year age groups for Australia for the period 1921 to 1955.

AGE-SPECIFIC FERTILITY RATES(a) : AUSTRALIA.

Age Group (Years).	1921.	1926.	1931.	1936.	1941.	1946.	1951.	1953.	1954.	1955.
15-19 ..	12.83	14.02	13.08	12.18	11.90	12.63	18.59	18.45	19.12	20.30
20-24 ..	65.45	60.23	53.08	50.33	59.42	73.52	85.84	94.53	96.24	99.48
25-29 ..	82.24	76.82	62.47	62.02	70.78	89.51	90.24	94.73	94.49	97.12
30-34 ..	68.50	61.90	51.25	46.33	49.72	65.03	55.16	61.17	59.91	60.14
35-39 ..	49.48	43.55	33.23	28.89	28.69	37.43	32.22	31.87	31.17	31.12
40-44 ..	21.66	17.63	13.61	10.19	9.52	11.87	9.97	9.77	9.85	9.92
45-49 ..	2.10	1.90	1.45	1.11	0.80	1.03	0.80	0.67	0.71	0.71

(a) Number of female births per 1,000 women in each age group.

The table shows that from 1954 the most fertile age group has been 20-24 years, whereas previously fertility had been highest between the ages of 25 and 29 years. The decline in fertility between 1921 and 1936 was general but was more pronounced in the higher age groups. During the period 1936 to 1955, a rise in fertility occurred in all age groups below 40. The most noticeable increase has been in the 20 to 24 age group, in which, as mentioned, fertility is now highest, as the result of a marked trend towards earlier marriage.

7. Gross and Net Reproduction Rates for Females.—A single measure of reproduction known as the gross reproduction rate is obtained by adding together the specific fertility rates for each age in the child-bearing group. This measure indicates the number of female children who would be born on the average to women living right through the child-bearing period, if the conditions on which the rate is based continue. The rate is unaffected by the age composition of the potential mothers, and consequently it shows more clearly than the crude birth rate the reproductive propensity of the population. It is, however, an

imperfect measure of reproduction because it does not take into account the females who fail to live from birth to the end of the reproductive period. A more accurate measure of this nature is obtained by multiplying the specific fertility rates by the number of females in the corresponding age group of the stationary or life table population and summing the products. Allowance is thus made for the effect of mortality and the result is known as the net reproduction rate. The net reproduction rate indicates the average number of female children who would be born to women during their lifetime if they were subject at each age to the fertility and mortality rates on which the calculation is based. A constant net reproduction rate of unity indicates that the population will ultimately become stationary. If it continues greater than unity, the population will ultimately increase; if less than unity, it will ultimately decrease. The following table should be read in the light of the comment which follows it and of the index of marriage fertility in paragraph 9 hereof.

GROSS AND NET REPRODUCTION RATES: AUSTRALIA.

Year.	Gross Reproduction Rate.	Net Reproduction Rate.	Year.	Gross Reproduction Rate.	Net Reproduction Rate.(g)
1881(a)	2.65	(b) 1.88	1949	1.457	1.382
1891(a)	2.30	(b) 1.73	1950	1.491	1.415
1901(a)	1.74	(c) 1.39	1951	1.485	1.409
1911	1.705	(d) 1.421	1952	1.547	1.468
1921	1.511	(e) 1.313	1953	1.556	1.477
1931	1.141	(f) 1.039	1954	1.558	1.478
1941	1.154	(f) 1.053	1955	1.594	1.513

(a) Approximate only. (b) 1881-1890 mortality experience used. (c) 1891-1900 mortality experience used. (d) 1901-1910 mortality experience used. (e) 1920-1922 mortality experience used. (f) 1932-1934 mortality experience used. (g) 1946-1948 mortality experience used.

NOTE.—It is not strictly correct to assume, as in the calculations of the rates above, that a particular age-specific fertility rate can be applied to a hypothetical group of women reaching that age, without taking account of previous fertility and marriage experiences. Reproduction rates are therefore unreliable when birth and marriage rates have been changing. The indexes of marriage fertility shown on the next page are also of doubtful reliability in similar circumstances.

Since 1881, there has been a substantial downward trend in both rates, but the gross rate has fallen considerably more than the net, showing that the decline in fertility has been offset to some extent by a decline in mortality. The net reproduction rate was below unity over the period 1932 to 1939. If such low levels were to be experienced indefinitely, ultimate population decline would be certain. The progressive rise in both gross and net reproduction rates from 1939 to 1947 was due largely to higher marriage rates during the war and early post-war years than had been experienced in the immediate pre-war years. Such fluctuations in marriage rates affect both gross and net reproduction rates substantially. When fluctuations in marriage rates are transient, reproduction rates calculated as above are not valid as indicators of relative fertility nor of the extent to which population will replace itself. Owing to various influences, the number of marriages in each year since 1948 has remained at a relatively high level and the net reproduction rates have been steady between 1.4 and 1.5. The fertility of marriages is measured in paragraph 9 below.

8. Gross and Net Reproduction Rates of Various Countries.—In the following table, a comparison is given of the gross and net reproduction rates recorded for various countries in the period 1950 to 1955. These represent the latest available international comparison.

GROSS AND NET REPRODUCTION RATES: VARIOUS COUNTRIES.

Country.	Period.	Reproduction Rate.		Country.	Period.	Reproduction Rate.	
		Gross.	Net.			Gross.	Net.
Canada	1954	1.87	(a)	France	1953	1.30	1.22
New Zealand(b) ..	1954	1.76	1.69	Norway	1953	1.28	1.21
United States of America(c)	1953	1.60	1.54	Switzerland	1953	1.25	1.15
Australia(d)	1955	1.59	1.51	Denmark	1954	1.23	1.12
Ireland, Republic of	1950-52	1.60	1.47	Scotland	1952	1.18	1.12
Netherlands	1953	1.47	1.40	England and Wales	1953	(a)	1.03
Finland	1953	1.44	1.34	Belgium	1953	1.13	1.03
Portugal	1953	1.50	1.27	Sweden	1952	1.08	1.03

(a) Not available. (b) Excludes Maoris. (c) White population only. (d) Excludes full-blood aboriginals.

In comparing the reproduction rates of the countries shown above, allowance should be made for any differences in years, as the rates for any one country from year to year are affected by variations in the incidence of marriage.

9. **Fertility of Marriages.**—Estimates of the fertility of marriages which were published in issues of the Official Year Book prior to No. 36 were calculated by relating the births of one five-year period to the marriages in the preceding five years (*see* Official Year Book No. 35, p. 329). Since the publication of that issue, an improved method has been formulated for measuring current marriage fertility by relating nuptial confinements in each year to the marriages from which they could have resulted. Confinements of women of a certain number of years duration of marriage are related to the number of marriages taking place that number of years previously. The table below sets out this index of current fertility per marriage in respect of confinements in the individual years shown.

FERTILITY OF MARRIAGES : AUSTRALIA.

Year.	Nuptial Confinements per Marriage.	Year.	Nuptial Confinements per Marriage.	Year.	Nuptial Confinements per Marriage.
1941..	2.19	1946..	2.55	1951..	2.55
1942..	2.12	1947..	2.55	1952..	2.63
1943..	2.21	1948..	2.44	1953..	2.66
1944..	2.28	1949..	2.45	1954..	2.66
1945..	2.36	1950..	2.56	1955..	2.71

NOTE.—*See* NOTE to table opposite.

The figure for a particular year gives the estimated number of children which a marriage would produce according to the fertility conditions of that year. There was an almost continuous decline for a number of years to 1942, but a pronounced increase has since occurred. Comparing this index with the net reproduction rate, it is evident that the rise in the latter since 1935 has been caused mainly by a rise in the marriage rate, due firstly to postponed depression marriages, and secondly to war-time and post-war marriages which have resulted in very high proportions of women married, particularly in the most fertile age groups. Only since 1944 has there been an increase in the fertility of marriages compared with pre-war levels.

The figures for 1949 and subsequent years present a somewhat inflated index, as many of the births which have been used to calculate the index relate to marriages of immigrants which took place overseas and are consequently not included in Australian marriage records. Partial investigation suggests that this factor probably overstated the index by very little in 1949, but that the overstatement at present is at least 6 per cent.

10. **Masculinity of Live Births.**—The masculinity of live births, i.e., the number of males born for every 100 female births, has remained fairly stable for Australia at about 105. But when the number of births for which masculinity is being calculated is small (for example, State totals), considerable variation is shown. For 1956, the figures ranged from 103.82 in Tasmania to 113.69 in the Australian Capital Territory. The averages for the ten years 1941–50 were as follows:—New South Wales, 105.49; Victoria, 105.47; Queensland, 105.49; South Australia, 105.78; Western Australia, 104.27; Tasmania, 104.45; Northern Territory, 100.20; Australian Capital Territory, 104.91; Australia, 105.38. The following table shows the figures for Australia for each ten-year period from 1901 to 1950 and for each of the years 1953 to 1956:—

MASCULINITY(a) OF LIVE BIRTHS REGISTERED : AUSTRALIA.

Particulars.	1901–10.	1911–20.	1921–30.	1931–40.	1941–50.	1953.	1954.	1955.	1956.
Total Births ..	105.22	105.27	105.55	105.12	105.38	104.82	104.92	105.16	106.87
Ex-nuptial Births	104.08	105.25	105.16	105.36	105.34	105.69	101.58	104.72	(b)

(a) Number of males born for every 100 female births.

(b) Not available.

11. **Ex-nuptial Live Births.**—(i) *General.* The highest proportion of ex-nuptial births in any one year since 1901 was recorded in 1905 when there were 6,545 ex-nuptial births, representing 6.24 per cent. of total births. Since then the proportion has declined steadily. The largest number of ex-nuptial births was recorded in 1955 when 8,537 were registered, but this number represented only 4.11 per cent. of total births. The lowest proportion was 3.78 per cent. in 1940.

The variations in the proportions of ex-nuptial births as between the individual States and Territories for 1955 are shown below.

EX-NUPTIAL LIVE BIRTHS : NUMBER AND PROPORTION, 1955.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Number ..	3,024	1,908	1,859	615	780	276	59	16	8,537
Proportion of Total Births %	4.06	3.39	5.75	3.33	4.69	3.41	11.46	1.86	4.11

The number and proportion of ex-nuptial births at intervals from 1901 to 1955 are as follows:—

EX-NUPTIAL LIVE BIRTHS : NUMBER AND PROPORTION, AUSTRALIA.

Particulars.	Annual Average.					1952.	1953.	1954.	1955.
	1901-10.	1911-20.	1921-30.	1931-40.	1941-50.				
Number ..	6,498	6,836	6,238	5,133	6,780	7,842	8,032	8,027	8,537
Proportion of Total Births %	6.05	5.22	4.66	4.40	4.13	3.89	3.97	3.97	4.11

It is of course possible that the number of ex-nuptial births is somewhat understated owing to diffidence in proclaiming the fact of ex-nuptiality.

(ii) *Rate of Ex-nuptiality.* A further comparison is obtained by calculating the number of ex-nuptial births per thousand of the single, widowed and divorced female population aged from 15 to 44 years. On this basis, the number of ex-nuptial births per 1,000 unmarried women of ages 15 to 44 has been found to be as follows:—1880-82, 14.49; 1890-92, 15.93; 1900-02, 13.30; 1910-12, 12.53; 1920-22, 10.50; 1932-34, 6.91; 1946-48, 11.45; and 1953-55, 14.45. Ex-nuptial births to married women, which are not recorded separately, are included in these figures and it is not possible to determine to what extent they influence the trend shown.

(iii) *Comparison of Rates.* The following table, showing the relative proportions of ex-nuptial and nuptial births to the total population, discloses a much greater proportional reduction in the ex-nuptial birth rate than in the nuptial rate:—

CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES(a) : AUSTRALIA.

Birth Rate.	Annual Average.					1952.	1953.	1954.	1955.
	1901-10.	1911-20.	1921-30.	1931-40.	1941-50.				
Ex-nuptial ..	1.60	1.39	1.04	0.76	0.90	0.91	0.91	0.89	0.93
Nuptial ..	24.91	25.18	21.40	16.47	20.99	22.44	22.03	21.61	21.64
Total ..	26.51	26.57	22.44	17.23	21.89	23.35	22.94	22.50	22.57

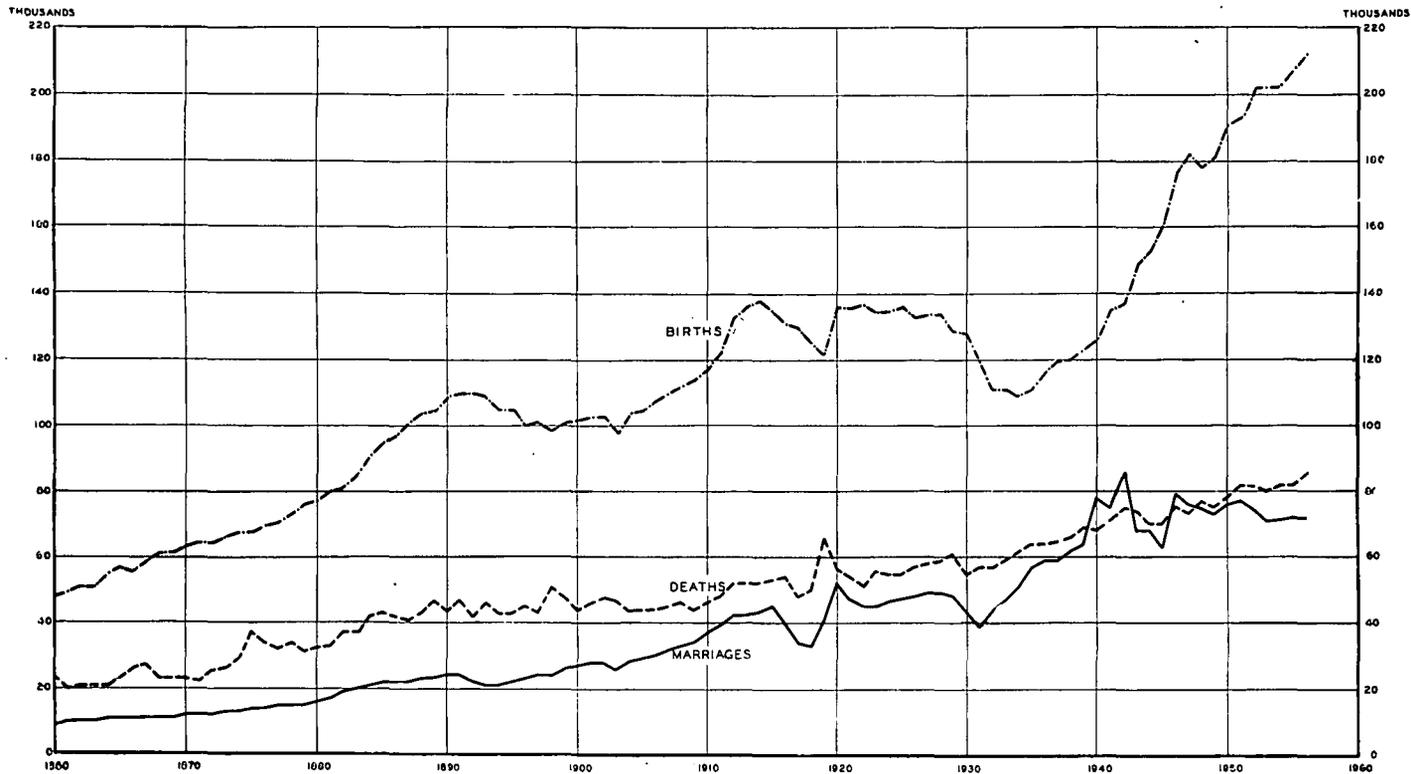
(a) Number of births per 1,000 of mean population.

12. *Legitimations.*—Acts have been passed in the several States to legitimize children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who comes within the scope of their purposes, born before or after the passing thereof, is deemed to be legitimate from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. During 1955, the number of children legitimized in Australia was 912.

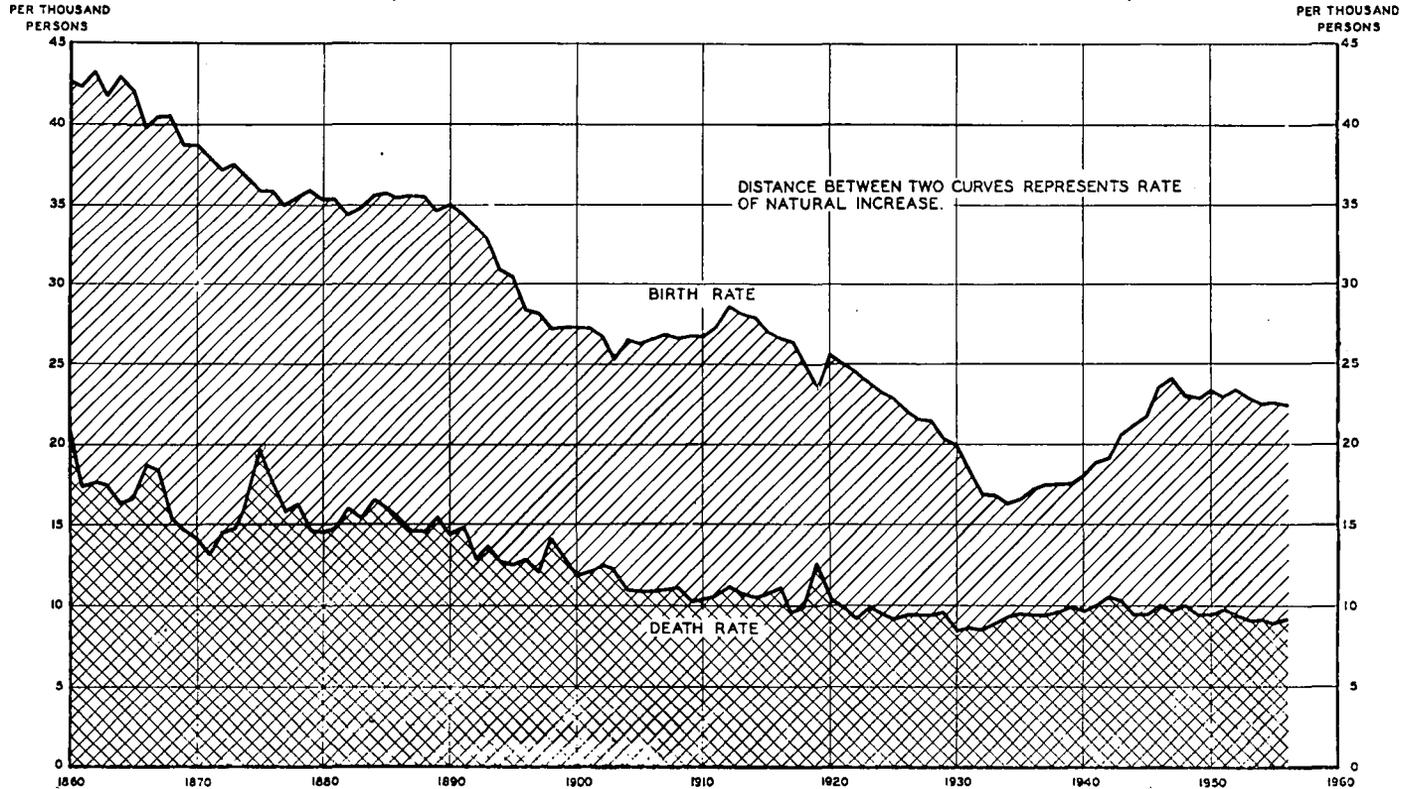
13. *Multiple Births.*—Because the current Australian birth statistics are based only on those confinements which resulted in a live-born child, the number of confinements for multiple births for Australia is understated—firstly, because in cases where all children of a multiple birth are still-born the confinement is excluded, and secondly, because some cases of multiple births in which only one child was live-born are registered as single births.

During 1955, multiple births recorded on the above basis comprised 2,369 cases of twins, 26 cases of triplets and 1 case of quadruplets, all live-born, the resultant numbers of live-born and still-born children being respectively 4,628 and 110 for twins, 76 and 2 for

BIRTHS, DEATHS, AND MARRIAGES: AUSTRALIA, 1860 to 1956

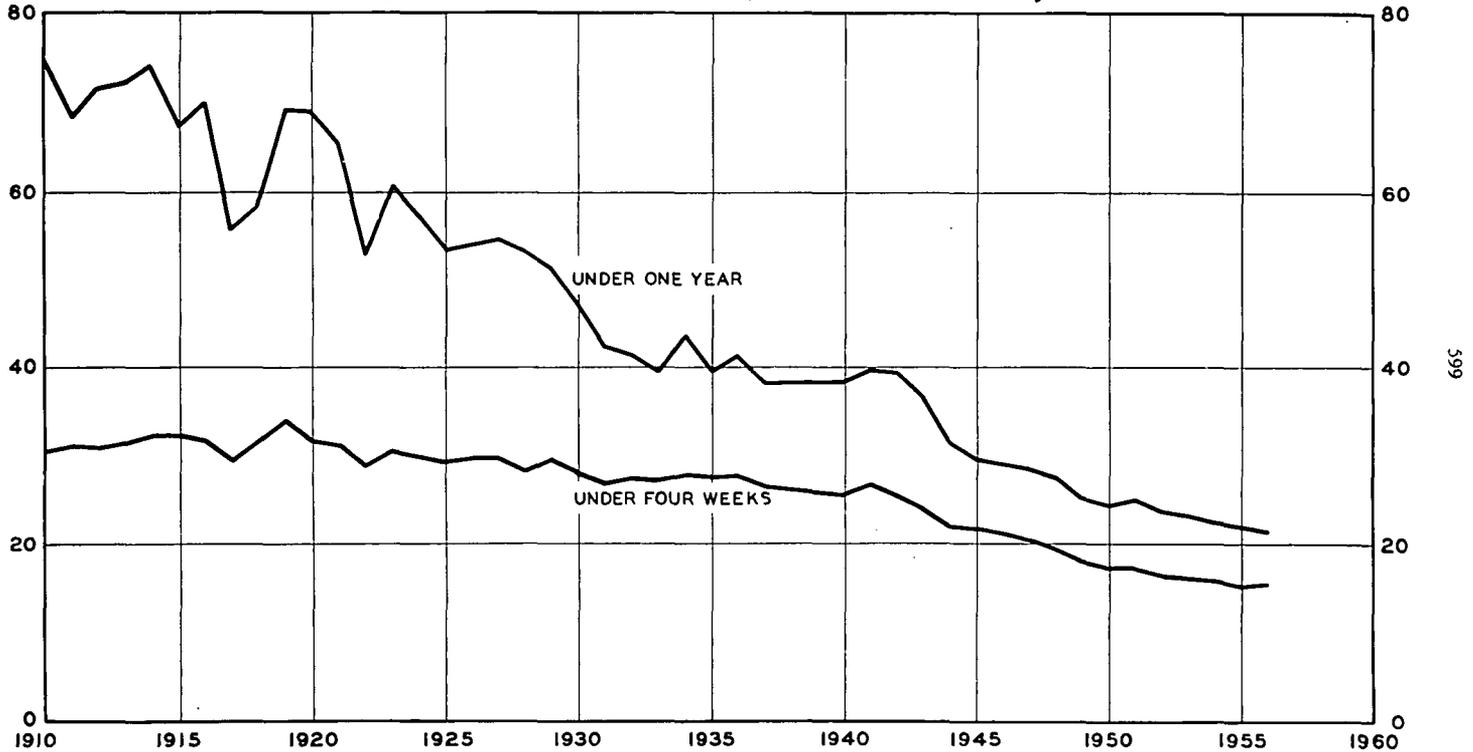


RATES OF BIRTHS, DEATHS, AND NATURAL INCREASE: AUSTRALIA, 1860 TO 1956



INFANT MORTALITY RATES: AUSTRALIA, 1910 TO 1956

(INFANT DEATHS PER 1,000 LIVE BIRTHS)





triplets and 4 live-born for quadruplets. This represents an average of 11.54 recorded cases of twins and 0.13 recorded cases of triplets per 1,000 confinements or, alternatively, mothers of twins represented 1 in every 87 mothers and mothers of triplets 1 in every 7,900. Total cases of multiple births represented 11.66 per 1,000 confinements or 1 in every 86 mothers.

The proportion of mothers of multiple births to total mothers does not vary greatly from year to year.

14. Ages of Parents.—The relative ages of the parents of children registered in 1955 have been tabulated separately for male and female births, multiple births being distinguished from single births. For total births and for multiple births the relative ages of parents are shown in *Demography*, Bulletin No. 73. In the present work the exigencies of space allow only the insertion of a table showing, in respect of confinements resulting in one or more live births, the relative ages of parents in groups of five years.

CONFINEMENTS: RELATIVE AGES OF PARENTS, AUSTRALIA, 1955.

Age of Father (Years) and Type of Birth.	Total.	Age of Mother (Years).								
		Under 15.	15-19.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.	
Under 20	1,291	3	1,055	222	11	..	..	..	..
20-24	28,862	..	6,532	19,273	2,811	220	22	4	..	
25-29	63,418	2	2,343	27,253	29,376	4,030	375	36	3	
30-34	51,865	1	406	6,781	23,369	18,744	2,374	186	4	
35-39	28,439	..	80	1,317	6,050	12,206	7,869	898	19	
40-44	15,106	..	23	389	1,641	4,580	5,840	2,569	64	
45-49	5,641	..	6	106	464	1,146	2,094	1,659	166	
50-54	1,667	..	7	27	119	329	275	528	82	
55-59	437	..	1	12	34	86	152	134	18	
60-64	121	..	..	2	10	28	30	41	10
65 and over	70	..	1	4	8	8	33	10	6	
Mothers of Nuptial Children	Single	194,613	6	10,400	54,873	63,157	40,791	19,049	5,967	370
	Twins	2,277	..	53	511	727	578	308	98	2
	Triplets	26	..	1	2	9	7
	Quadruplets	1
Total	196,917	6	10,454	55,386	63,893	41,377	19,364	6,065	372	
Mothers of Ex-nuptial Children	Single	8,356	33	1,965	2,438	1,755	1,196	689	272	8
	Twins	92	..	7	17	23	28	15	2	..
	Triplets
	Total	8,448	33	1,972	2,455	1,778	1,224	704	274	8
Total Mothers	Single	202,969	39	12,365	57,311	64,912	41,987	19,738	6,239	378
	Twins	2,369	..	60	528	750	606	323	100	2
	Triplets	26	..	1	2	9	7
	Quadruplets	1	1
Total	205,365	39	12,426	57,841	65,671	42,601	20,068	6,339	380	

15. Birthplaces of Parents.—A table showing birthplaces of parents of children whose births were registered during 1955 appears in *Demography*, Bulletin No. 73.

16. Occupation of Fathers.—A table showing occupations of the fathers of all nuptial children registered in 1955 appears in *Demography*, Bulletin No. 73.

17. Age, Duration of Marriage and Issue of Mothers.—(i) *General.* The total number of nuptial confinements resulting in live births in 1955 was 196,917, comprising 194,613 single births, 2,277 cases of twins, 26 cases of triplets and 1 case of quadruplets. The tables relating to previous issue exclude the issue of former marriages and still-born children. On the other hand, they include children by the same father who were born to the mother prior to the marriage. Children born at the present confinement are included in the total issue shown.

(ii) *Duration of Marriage and Issue of Mothers.* The following table shows that in 1955 the duration of marriage of mothers of nuptial children ranged from less than one year to over 25 years, and that the average family increased fairly regularly with the duration of marriage. The average issue of married mothers who bore children in 1955 was 2.50, compared with 2.48 in 1954, 2.45 in 1953, 2.42 in 1952, and 2.40 in 1951.

NUPTIAL CONFINEMENTS : DURATION OF MARRIAGE AND ISSUE OF MOTHERS, AUSTRALIA, 1955.

Duration of Marriage (Years).	Total Married Mothers.	Total Issue.	Average Issue.	Duration of Marriage (Years).	Total Married Mothers.	Total Issue.	Average Issue.
0-1 ..	24,873	25,303	1.02	14-15 ..	3,096	14,370	4.64
1-2 ..	22,178	27,293	1.23	15-16 ..	2,417	11,858	4.91
2-3 ..	21,630	36,934	1.71	16-17 ..	1,721	8,927	5.19
3-4 ..	20,651	41,723	2.02	17-18 ..	1,314	7,259	5.52
4-5 ..	18,388	42,525	2.31	18-19 ..	1,070	6,129	5.73
5-6 ..	15,732	41,026	2.61	19-20 ..	837	5,135	6.14
6-7 ..	13,371	38,249	2.86	20-21 ..	563	3,698	6.57
7-8 ..	11,616	36,374	3.13	21-22 ..	430	2,968	6.90
8-9 ..	10,004	33,923	3.39	22-23 ..	284	2,094	7.37
9-10 ..	7,486	27,011	3.61	23-24 ..	210	1,592	7.58
10-11 ..	5,684	21,611	3.80	24-25 ..	134	1,088	8.12
11-12 ..	4,554	18,252	4.01	25 and over ..	170	1,423	8.37
12-13 ..	4,384	18,199	4.15				
13-14 ..	4,120	17,960	4.36				
				Total ..	196,917	492,924	2.50

(iii) *Age and Average Issue of Mothers.* The following table shows the average number of children born to mothers of different ages. In the younger ages there is, naturally, little difference in the average number of children to each mother from year to year, but with the increase of the age of the mother the number of issue has until recently fallen in comparison with past years. In 1955, average issue was greater in all age groups under 40 years than in the decade 1941-50. The average issue of mothers of all ages recorded for 1955 (namely, 2.50) is 23.1 per cent. below the average of 3.25 for the years 1911-20.

AGE AND AVERAGE ISSUE OF MOTHERS : AUSTRALIA.

Period.	Age of Mother (Years).							All Ages.
	Under 20.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.	
1911-20 ..	1.21	1.75	2.61	3.74	5.11	6.69	8.16	3.25
1921-30 ..	1.20	1.71	2.46	3.48	4.80	6.27	7.74	3.04
1931-40 ..	1.20	1.68	2.30	3.19	4.41	5.89	7.40	2.71
1941-50 ..	1.17	1.56	2.15	2.85	3.67	4.79	6.19	2.37
1955 ..	1.22	1.72	2.41	3.09	3.79	4.61	5.44	2.50

(iv) *Previous Issue of Mothers, Various Ages.* A classification of mothers by age and previous issue is given for 1955 in the following table:—

NUPTIAL CONFINEMENTS : AGE OF MOTHER AND PREVIOUS ISSUE, AUSTRALIA, 1955.

Previous Issue.	Age of Mother (Years).							Total Married Mothers.
	Under 20.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.	
0 ..	8,438	28,031	16,420	6,385	2,279	651	34	62,238
1 ..	1,807	18,400	22,186	10,253	3,379	821	39	56,885
2 ..	201	6,578	14,819	11,074	4,245	952	43	37,912
3 ..	13	1,865	6,614	7,017	3,692	1,016	47	20,264
4 ..	1	409	2,485	3,479	2,445	801	52	9,672
5 ..	..	81	928	1,650	1,403	558	32	4,652
6 ..	..	16	305	808	772	402	36	2,339
7 ..	..	5	96	409	514	291	25	1,340
8 ..	..	1	31	181	288	188	18	707
9 ..	..	..	9	71	152	142	18	392
10 and over ..	..	..	..	50	195	243	28	516
Total Married Mothers ..	10,460	55,386	63,893	41,377	19,364	6,065	372	196,917

The masculinity of nuptial first births in 1955 was 105.16, the same as that for total births.

(ii) *Age of Mother and Duration of Marriage.* A summary showing grouped ages and grouped durations of marriage of mothers of nuptial first-born children is given in the following table:—

FIRST BIRTHS : AGE OF MOTHER AND DURATION OF MARRIAGE, AUSTRALIA, 1955.

Duration of Marriage.	Age of Mother (Years).							Total.
	Under 20.	20-24.	25-29.	30-34.	35-39.	40-44.	45 and over.	
Under 8 months ..	4,968	4,536	1,006	441	177	55	2	11,185
8 months ..	411	1,099	384	141	37	11	1	2,084
9 ..	601	2,631	925	283	85	18	..	4,543
10 ..	470	2,171	772	245	91	23	1	3,773
11 ..	372	1,806	631	223	63	19	..	3,114
Total under 1 year ..	6,822	12,243	3,718	1,333	453	126	4	24,699
1-2 years ..	1,426	9,716	4,254	1,402	500	131	10	17,439
2-3 ..	159	3,739	2,620	804	263	83	4	7,672
3-4 ..	26	1,556	2,017	554	188	48	4	4,393
4-5 ..	4	518	1,582	445	135	49	5	2,738
5-10 ..	1	256	2,177	1,509	430	99	5	4,477
10-15 ..	..	3	52	322	251	52	2	682
15 years and over ..	..	..	..	16	59	63	..	138
Total ..	8,438	28,031	16,420	6,385	2,279	651	34	62,238

(iii) *First Births and Subsequent Births.* The following table provides a comparison between the numbers of nuptial first births and subsequent births in periods since 1911 and shows also the proportion of first to total nuptial confinements.

NUPTIAL FIRST BIRTHS AND SUBSEQUENT BIRTHS : AUSTRALIA.

Period.	Nuptial Confinements.			Proportion of First to Total Nuptial Confinements (Per Cent.).
	First Births.	Other Births.	Total.	
ANNUAL AVERAGES.				
1911-20	33,595	88,997	122,592	27.40
1921-30	38,120	88,086	126,206	30.20
1931-40	39,243	71,136	110,379	35.55
1941-50	58,818	96,994	155,812	37.75
ANNUAL TOTALS.				
1951	62,078	121,594	183,672	33.80
1952	65,238	126,432	191,670	34.04
1953	63,726	128,187	191,913	33.21
1954	62,029	129,989	192,018	32.30
1955	62,238	134,679	196,917	31.61

19. *Stillbirths.*—Registration of stillbirths is not compulsory in all Australian States. It has been compulsory in Western Australia since 14th January, 1908; in the Australian Capital Territory since 1st January, 1930; in New South Wales since 1st April, 1935; in South Australia since 1st May, 1937; and in Victoria from 1st January, 1953. In Queensland and Tasmania where registration is not enforced, some information is obtained by notification of stillbirths for various purposes. Because registration is not compulsory in all States, detailed statistics of stillbirths for Australia as a whole have not been compiled.

The number of stillbirths in each State and Territory, as recorded since 1936 by the means outlined above, is shown in the following table:—

STILLBIRTHS.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
ANNUAL AVERAGES.									
1936-40 ..	1,409	854	(a)	(b) 274	234	144	(a)	5	(a)
1941-45 ..	1,478	966	(c) 657	324	248	143	(a)	9	de 3,825
1946-50 ..	1,405	949	626	368	274	161	(a)	12	e 3,795
1951-55 ..	1,238	849	576	290	271	139	8	15	3,386

ANNUAL TOTALS.

1951 ..	1,291	929	651	316	297	166	5	15	3,670
1952 ..	1,195	919	596	320	283	154	13	10	3,490
1953 ..	1,256	817	562	287	268	141	8	16	3,355
1954 ..	1,207	794	550	254	270	124	8	19	3,226
1955 ..	1,243	788	521	271	239	109	7	13	3,191

(a) Not available.
Queensland for 1941.

(b) Three years 1938-40.

(c) Four years 1942-45.

(d) Excludes

(e) Excludes Northern Territory.

The incidence of stillbirths in each State and Territory as measured by the rate per 1,000 of all births, both live and still, is as follows:—

PROPORTION OF STILLBIRTHS.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1936-40 ..	28.71	27.43	(b)	c27.49	25.70	28.75	(b)	22.18	(b)
1941-45 ..	25.46	24.79	d26.76	25.17	23.29	25.68	(b)	22.87	ef 25.25
1946-50 ..	19.99	19.64	21.87	22.12	20.46	22.26	(b)	16.35	f 20.46
1951-55 ..	16.52	15.55	18.25	15.80	16.97	17.54	17.20	15.58	16.53

ANNUAL RATES.

1951 ..	17.60	18.05	21.48	17.77	19.68	22.07	12.14	14.73	18.63
1952 ..	15.85	16.81	18.89	17.58	18.03	19.08	28.20	8.99	17.01
1953 ..	16.49	15.02	17.93	15.56	16.62	17.90	17.09	19.90	16.32
1954 ..	16.24	14.32	17.34	13.74	16.67	15.71	15.36	21.69	15.70
1955 ..	16.43	13.79	15.85	14.44	14.17	13.30	13.41	14.87	15.13

(a) Number of stillbirths per 1,000 of all births (live and still).

(b) Not available.

(c) Three

years 1938-40.

(d) Four years 1942-45.

(e) Excludes Queensland for 1941.

(f) Excludes

Northern Territory.

§ 5. Mortality.

NOTE.—See NOTE at the beginning of this chapter. A detailed analysis of causes of death and issue for 1955 will be found in *Demography*, Bulletin No. 73.

1. Number of Deaths.—(i) Year 1956. The following table shows the number of deaths, male and female, registered in each state and Territory during the year. Stillbirths, although registered as both births and deaths in some States, are excluded from the death statistics published herein.

DEATHS, 1956.

Sex.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Males ..	19,166	12,862	7,079	4,243	3,265	1,378	83	116	48,192
Females ..	14,898	11,024	5,107	3,350	2,307	1,135	24	51	37,896
Persons ..	34,064	23,886	12,186	7,593	5,572	2,513	107	167	86,088

(ii) *Years 1931 to 1956.* A summary of the number of deaths in each State and Territory from 1931 to 1956 is given in the following table. Annual averages for each five-year period from 1861 to 1950 were published in Official Year Book No. 39, p. 597.

DEATHS.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
ANNUAL AVERAGES.									
1931-35 ..	22,591	17,680	8,147	5,063	3,876	2,194	67	35	59,653
1936-40(a) ..	25,735	19,361	9,107	5,540	4,270	2,342	73	54	66,482
1941-45(a) ..	27,807	20,964	9,715	6,303	4,724	2,488	64	71	72,136
1946-50(a) ..	29,552	21,827	10,357	6,507	4,802	2,459	76	103	75,683
1951-55 ..	32,135	22,900	11,187	7,182	5,263	2,576	109	131	81,483
ANNUAL TOTALS.									
1952 ..	32,038	23,322	11,171	7,050	5,209	2,579	89	139	81,597
1953 ..	31,707	22,650	11,006	6,962	5,072	2,551	116	124	80,188
1954 ..	32,444	22,554	11,344	7,179	5,364	2,696	106	118	81,805
1955 ..	32,553	22,527	11,307	7,536	5,379	2,489	119	126	82,036
1956 ..	34,064	23,886	12,186	7,593	5,572	2,513	107	167	86,088

(a) Excludes deaths of defence personnel and of internees and prisoners of war from overseas for the period September, 1939 to June, 1947.

A graph showing the number of deaths in each year from 1860 to 1956 will be found on p. 597.

2. **Crude Death Rates.**—The commonest method of measuring the mortality rate is to relate the number of deaths for a given period to the mean population for that period, thus obtaining the crude death rate. This rate for a given period measures the numbers per thousand of population by which the population is depleted through deaths during that period. Crude death rates for each State and Territory from 1931 to 1956 are shown in the following table.

CRUDE DEATH RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1931-35 ..	8.68	9.72	8.62	8.72	8.83	9.62	13.46	3.81	9.00
1936-40(b) ..	9.45	10.36	9.08	9.33	9.22	9.91	11.69	4.54	9.63
1941-45(b) ..	9.73	10.63	9.24	10.26	9.86	10.21	6.43	4.98	9.96
1946-50(b) ..	9.70	10.37	9.13	9.76	9.23	9.30	6.27	5.31	9.74
1951-55 ..	9.49	9.55	8.71	9.25	8.49	8.47	6.92	4.60	9.25
ANNUAL RATES.									
1952 ..	9.59	9.95	8.89	9.34	8.67	8.64	5.90	5.23	9.45
1953 ..	9.36	9.45	8.55	8.97	8.17	8.33	7.47	4.32	9.09
1954 ..	9.46	9.19	8.64	9.01	8.38	8.67	6.54	3.88	9.10
1955 ..	9.32	8.92	8.44	9.19	8.17	7.87	6.98	3.89	8.91
1956—									
Males ..	10.73	9.79	10.09	9.84	9.36	8.35	7.74	6.19	10.09
Females ..	8.42	8.55	7.68	8.02	7.02	7.22	3.35	3.19	8.15
Persons ..	9.58	9.17	8.92	8.95	8.23	7.80	5.98	4.81	9.13

(a) Number of deaths per 1,000 of mean population.
from September, 1939 to June, 1947.

(b) Excludes deaths of defence personnel

A graph showing the crude death rate for each year from 1860 to 1956 will be found on p. 598.

3. **Standardized Death Rates.**—(i) *General.* The death rates quoted above are crude rates, i.e., they simply show the number of deaths per thousand of mean population without taking into consideration differences in the sex and age composition of the population. Other conditions being equal, however, the crude death rate of a community will be low if it contains a large proportion of young people (not infants), and conversely it will be relatively high if the population includes a large proportion of elderly people. The foregoing table of crude death rates, therefore, does not indicate comparative incidence of mortality either as between States in the same year or in any one State over a period of years. In order to obtain a comparison of mortality rates on a uniform basis as far as sex and age constitution are concerned, "standardized" death rates may be computed. These are computed by selecting a particular distribution of age and sex as a standard, and then calculating what would have been the general death rate if the death rates for each sex and in each age group were as recorded, but the age and sex distribution were the same as in the standard population. For the standardized rates which follow, the standard population compiled by the International Institute of Statistics has been used. This standard is based upon the age distribution according to sex of nineteen European countries at their censuses nearest to the year 1900. Full details of the "Standard Population" are given in Official Year Book No. 22, p. 962.

(ii) *Death Rates in Age Groups.* An examination of the age distribution of deaths and the resultant age-specific death rates is made in paragraph 9, p. 615.

(iii) *Comparison of Crude and Standardized Death Rates.* The relative incidence of mortality as between individual States and as between the years 1921, 1933, 1947 and 1954 is illustrated in the following statement of crude and "standardized" death rates. These years have been chosen for comparison because the census data give essential information as to sexes and ages of the State populations. Crude death rates are shown to indicate the degree to which they disguise the true position.

CRUDE AND STANDARDIZED DEATH RATES.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Crude Death Rate(a)—							
1921	9.50	10.52	9.37	10.02	10.42	10.30	9.91
1933	8.58	9.59	8.84	8.44	8.64	9.60	8.92
1947	9.53	10.44	9.15	9.61	9.39	9.17	9.69
1954	9.46	9.19	8.64	9.01	8.38	8.67	9.10
Standardized Death Rate(b)—							
1921	10.35	10.79	10.24	10.38	11.88	10.83	10.58
1933	8.52	8.74	9.10	7.66	8.74	8.86	8.62
1947	7.44	7.31	7.47	6.77	7.28	7.21	7.34
1954	7.24	6.63	6.80	6.52	6.71	7.02	6.90

(a) Total deaths per 1,000 of mean population.
in para. 3 (i) above.

(b) See explanation of standardized death rates

The comparisons above relate to individual years in which a census of population was taken and should not be used as the basis for general conclusions as to changes in incidence of mortality for other than those years.

4. **True Death Rates.**—The main objections to standardized death rates are that the choice of a standard population is arbitrary and that the standardized rates have little value except for comparative purposes, and even then variation of the standard population may make appreciable differences. A correct measurement of the mortality of the population can be obtained, however, from life tables. A life table represents the number of survivors at each age from a group of newly-born children who are subject to given mortality conditions, and from such a table the complete expectation of life at birth can be calculated. The reciprocal of this figure is known as the true death rate, since, if the complete expectation of life of a person at birth is 50 years, say, then each person will on the average die 50 years after birth so that in the standard population one person in 50 or 20 per thousand will die each year. The true death rate for a given period is unaffected by the particular age distribution of that period and is determined solely by the mortality experience of the period as manifested in the rate of survivorship from each year of age to the next. The table below sets out complete expectation of life at birth and true death rates for the periods covered by Australian life tables.

**COMPLETE EXPECTATION OF LIFE AT BIRTH AND TRUE DEATH RATES :
AUSTRALIA.**

Period.	Complete Expectation of Life at Birth (Years).		True Death Rate.	
	Males.	Females.	Males.(a)	Females.(b)
1881-1890	47.20	50.84	21.19	19.67
1891-1900	51.06	54.76	19.58	18.26
1901-1910	55.20	58.84	18.12	17.00
1920-1922	59.15	63.31	16.91	15.80
1932-1934	63.48	67.14	15.75	14.89
1946-1948	66.07	70.63	15.14	14.16

(a) Number of deaths per 1,000 males in life table or stationary population. (b) Number of deaths per 1,000 females in life table or stationary population.

5. **Crude Death Rates of Various Countries.**—The following table gives crude death rates for Australia in comparison with rates for various other countries.

CRUDE DEATH RATES(a) : VARIOUS COUNTRIES.

Country.	1921-25.	1926-30.	1931-35.	1955.	Country.	1921-25.	1926-30.	1931-35.	1955.
Netherlands ..	10.4	9.9	8.9	7.6	United States of America ..	11.8	11.8	e10.9	9.3
Japan ..	21.8	19.3	17.9	7.8	Spain ..	20.2	17.9	16.4	9.3
Canada ..	11.2	11.1	9.7	8.1	Sweden ..	12.1	12.1	11.6	9.4
Norway ..	11.5	11.0	10.4	8.3	Switzerland ..	12.5	12.1	11.8	10.1
Union of South Africa(b) ..	9.7	9.7	9.8	8.6	Yugoslavia ..	20.2	20.0	17.9	11.4
Denmark ..	11.3	11.1	10.9	8.8	United Kingdom ..	12.4	12.3	12.2	11.7
Australia(c) ..	9.5	9.3	9.0	8.9	France ..	17.2	16.8	15.7	12.0
New Zealand(d) ..	8.6	8.6	8.2	9.0	Austria ..	15.8	14.4	13.5	12.1
Italy ..	17.4	16.0	14.1	9.2	Ireland, Republic of ..	14.6	14.4	14.0	12.6
Finland ..	15.1	14.8	13.3	9.3	Belgium ..	13.4	13.7	12.9	12.7

(a) Number of deaths per 1,000 of mean population. (b) European population only. (c) Excludes full-blood aborigines. (d) Excludes Maoris. (e) 1933-35.

6. **True Death Rates of Various Countries.**—The following table gives true death rates for Australia in comparison with rates for various other countries:—

TRUE DEATH RATES : VARIOUS COUNTRIES.

Country.	Period.	True Death Rate.		Country.	Period.	True Death Rate.	
		Males. (a)	Females. (b)			Males. (a)	Females. (b)
Netherlands ..	1950-52	14.2	13.7	Scotland ..	1955	15.2	14.2
Norway ..	1946-50	14.4	13.8	Northern Ireland ..	1950-52	15.3	14.5
Sweden ..	1946-50	14.5	14.0	Germany, Federal Republic ..	1949-51	15.5	14.6
New Zealand(c) ..	1950-52	14.6	13.8	France ..	1950-51	15.7	14.4
Denmark ..	1946-50	14.7	14.3	Japan ..	1955	15.7	14.6
United States of America—				Union of South Africa(e) ..	1945-47	15.7	14.6
Whites ..	1954	14.8	13.6	Finland ..	1951-53	15.9	14.5
Others ..	1954	16.4	15.2	Belgium ..	1946-49	16.1	14.9
England and Wales ..	1954	14.8	13.7	Austria ..	1949-51	16.2	14.9
Canada ..	1950-52	15.1	14.1	Ireland, Republic of ..	1945-47	16.5	16.0
Switzerland ..	1948-53	15.1	14.1				
Australia(d) ..	1946-48	15.1	14.2				

(a) Number of deaths per 1,000 males in life table or stationary population (see explanation on p. 607). (b) Number of deaths per 1,000 females in life table or stationary population (see explanation on p. 607). (c) Excludes Maoris. (d) Excludes full-blood aborigines. (e) European population only.

7. **Australian Life Tables.**—(i) *Life Tables prior to 1947.* It has been the practice at each census from 1911 onwards to prepare Life Tables representative of the mortality experience of Australia. The mortality of the Australian population for the thirty years from 1881 to 1910 inclusive was investigated in 1911 by the Commonwealth Statistician. Tables were compiled for each State and for Australia as a whole in respect of each sex for each of the decennial periods 1881–1890, 1891–1900 and 1901–1910. These compilations furnished a comprehensive view of Australian mortality in respect of sex, of time, and of geographical distribution, and practically superseded all Life Tables prepared in Australia prior to 1911. In addition, monetary tables based on the experience for the whole of Australia for the ten years 1901–1910 were prepared and published.

At the Census of 1921, Life Tables were prepared by the Commonwealth Statistician from the population recorded and the deaths in the three years 1920–22. Similarly, in 1933, the Life Tables were based on the census population and the deaths in the calendar years 1932–34.

(ii) *Life Tables of Census of 1947.* On the occasion of the 1947 Census, Life Tables representing the sixth in the series were compiled by the Commonwealth Actuary. These were based on the population recorded, in conjunction with the deaths during 1946, 1947 and 1948, as it was considered undesirable to take into account deaths occurring prior to 1946 owing to the possible effects on the civilian population of conditions arising from the 1939–45 War. Full particulars of the data used, the methods of construction and tabulation of these Life Tables will be found in the report of the Commonwealth Actuary which was published by the Commonwealth Statistician in 1950. This report also appeared in Volume III. of the Census of the Commonwealth of Australia, 1947. Monetary tables for both single and joint lives have also been prepared by the Commonwealth Actuary.

Comparative tables showing the number of survivors (l_x) out of 100,000 births, rates of mortality (q_x) and probability of surviving ten years (${}_{10}p_x$), at selected ages, in respect of the Australian Life Tables of 1920–22, 1932–34 and 1946–48, together with a summary of the main characteristics of the tables, were published in Official Year Book No. 39, pp. 602–3. The expectation of life at selected ages taken from these three Life Tables is as follows:—

AUSTRALIAN LIFE TABLES : COMPLETE EXPECTATION OF LIFE (e_x^o) AT SELECTED AGES.

Age (x).	Males.			Females.		
	1920–22.	1932–34.	1946–48.	1920–22.	1932–34.	1946–48.
0	59.15	63.48	66.07	63.31	67.14	70.63
10	56.01	58.02	59.04	59.20	61.02	63.11
20	46.99	48.81	49.64	50.03	51.67	53.47
30	38.44	39.90	40.40	41.48	42.77	44.08
40	30.05	31.11	31.23	33.14	34.04	34.91
50	22.20	22.83	22.67	24.90	25.58	26.14
60	15.08	15.57	15.36	17.17	17.74	18.11
70	9.26	9.60	9.55	10.41	10.98	11.14

8. Infant Deaths and Death Rates.—(i) States. (a) Under One Year. For each State and Territory the number of deaths under one year of age and the rates of infant mortality during the period 1931 to 1956 were as follows:—

INFANT MORTALITY : UNDER ONE YEAR.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
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ANNUAL AVERAGES.

1931-35 ..	1,885	1,214	690	304	329	202	6	5	4,635
1936-40 ..	1,963	1,139	718	311	352	201	6	5	4,695
1941-45 ..	2,034	1,311	804	413	347	213	7	7	5,136
1946-50 ..	1,990	1,129	770	431	370	187	11	14	4,902
1951-55 ..	1,852	1,113	730	407	384	184	17	14	4,701

ANNUAL TOTALS.

1952 ..	1,818	1,198	772	413	384	172	14	26	4,797
1953 ..	1,846	1,133	769	375	378	177	18	17	4,713
1954 ..	1,850	1,055	695	388	359	186	9	4	4,546
1955 ..	1,850	1,035	656	431	373	189	26	12	4,572
1956 ..	1,777	1,128	737	377	384	171	24	11	4,609

AVERAGE ANNUAL RATES.(a)

1931-35 ..	41.92	42.76	39.46	35.12	40.81	44.47	80.60	34.48	41.27
1936-40 ..	41.18	37.63	36.75	33.08	39.70	41.23	44.80	21.78	38.81
1941-45 ..	36.29	34.73	34.55	33.20	33.37	39.54	55.97	18.75	35.24
1946-50 ..	28.91	23.82	27.49	26.50	28.15	26.53	37.37	19.89	26.98
1951-55 ..	25.11	20.70	23.58	22.55	24.41	23.67	36.28	15.40	23.34

ANNUAL RATES.(a)

1952 ..	24.50	22.29	24.94	23.09	24.91	21.73	31.25	23.59	23.79
1953 ..	24.65	21.15	24.98	20.65	23.83	22.88	39.13	21.57	23.30
1954 ..	25.30	19.30	22.29	21.29	22.54	23.94	17.54	4.67	22.48
1955 ..	24.86	18.37	20.28	23.30	22.44	23.37	50.49	13.94	22.01
1956 ..	23.47	19.32	22.74	19.88	22.70	21.10	43.17	10.21	21.73

(a) Number of deaths of children aged under one year per 1,000 live births registered.

(b) Under Four Weeks. The following table shows infant mortality rates under four weeks of age in each State and Territory during the period 1931 to 1956.

INFANT MORTALITY RATES (a): UNDER FOUR WEEKS.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
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AVERAGE ANNUAL RATES.

1931-35 ..	27.62	27.78	27.91	22.99	25.11	30.09	35.26	23.45	27.27
1936-40 ..	27.63	25.94	26.15	21.62	22.62	29.56	28.80	16.33	26.19
1941-45 ..	24.52	24.40	24.41	20.86	20.60	27.24	33.57	12.54	23.97
1946-50 ..	20.53	17.55	19.95	18.38	19.53	19.34	21.45	15.80	19.34
1951-55 ..	17.34	15.18	17.09	14.95	17.27	16.34	19.63	11.28	16.45

ANNUAL RATES.

1952 ..	16.56	16.39	17.96	15.04	18.04	14.65	17.86	17.24	16.64
1953 ..	17.17	15.70	17.80	13.99	16.45	15.51	23.91	13.96	16.48
1954 ..	17.70	14.42	16.81	15.25	16.07	16.47	7.80	3.50	16.19
1955 ..	17.31	13.49	14.84	14.11	16.00	16.81	33.01	11.61	15.50
1956 ..	(b)	(b)	16.35	13.55	15.90	14.56	30.58	7.43	(b)

(a) Number of deaths of children aged under four weeks per 1,000 live births registered. (b) Not yet available.

(c) *Four Weeks and under One Year.* Infant mortality rates for children aged four weeks and under one year are shown in the following table for the period 1931 to 1956.

INFANT MORTALITY RATES(a) : FOUR WEEKS AND UNDER ONE YEAR.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AVERAGE ANNUAL RATES.									
1931-35 ..	14.30	14.98	11.55	12.13	15.70	14.38	45.34	11.03	14.00
1936-40 ..	13.55	11.69	10.60	11.46	17.08	11.67	16.00	5.45	12.62
1941-45 ..	11.77	10.33	10.14	12.34	12.77	12.30	22.40	6.21	11.27
1946-50 ..	8.38	6.27	7.54	8.12	8.62	7.19	15.92	4.09	7.64
1951-55 ..	7.77	5.52	6.49	7.60	7.14	7.33	16.65	4.12	6.89

ANNUAL RATES.

1952 ..	7.94	5.90	6.98	8.05	6.87	7.08	13.39	6.35	7.15
1953 ..	7.48	5.45	7.18	6.66	7.38	7.37	15.22	7.61	6.82
1954 ..	7.60	4.88	5.48	6.04	6.47	7.47	9.74	1.17	6.29
1955 ..	7.55	4.88	5.44	9.19	6.44	6.56	17.48	2.33	6.51
1956 ..	(b)	(b)	6.39	6.33	6.80	6.54	12.59	2.78	(b)

(a) Number of deaths of children aged four weeks and under one year per 1,000 live births registered.

(b) Not yet available.

(ii) *Australia. (a) Under One Year.* The universal experience that during the first few years of life the higher death rate of male infants tends to counteract the excess of male births is confirmed by the fact that out of 526,474 male infants born from 1952 to 1956, 13,251 (25.17 per 1,000) died during the first year of life, while of 499,477 female infants only 9,986 (19.99 per 1,000) died during the first year. Stillbirths, for which masculinity is also higher, are not included in any of the tables relating to deaths.

As shown by the following table, the disparity is greater during the first four weeks of life, termed the neonatal period, than during the remainder of the first year of life or the post-neonatal period.

INFANT DEATHS AND MORTALITY RATES : AUSTRALIA.

Period.	Number of Deaths.						Rates.(a)					
	Neonatal— Under Four Weeks.		Post- Neonatal— Four Weeks and under One Year.		Total under One Year.		Neonatal— under Four Weeks.		Post- Neonatal— Four Weeks and under One Year.		Total under One Year.	
	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.
ANNUAL AVERAGES.												
1931-35 ..	1,763	1,299	886	687	2,649	1,986	30.62	23.73	15.38	12.55	46.00	36.28
1936-40 ..	1,816	1,353	863	663	2,679	2,016	29.30	22.93	13.93	11.23	43.23	34.16
1941-45 ..	2,007	1,495	914	720	2,921	2,215	26.66	20.88	12.14	10.05	38.80	30.93
1946-50 ..	2,024	1,490	784	604	2,808	2,094	21.68	16.86	8.40	6.84	30.08	23.70
1951-55 ..	1,907	1,406	776	612	2,683	2,018	18.47	14.32	7.52	6.24	25.99	20.56
ANNUAL TOTALS.												
1952 ..	1,948	1,408	826	615	2,774	2,023	18.84	14.33	7.99	6.26	26.83	20.59
1953 ..	1,889	1,443	772	609	2,661	2,052	18.25	14.61	7.46	6.17	25.71	20.78
1954 ..	1,914	1,361	694	577	2,608	1,938	18.48	13.79	6.70	5.85	25.18	19.64
1955 ..	1,863	1,355	762	592	2,625	1,947	17.50	13.39	7.16	5.84	24.66	19.23

(a) Number of deaths per 1,000 live births registered.

(b) *Under Four Weeks.* The following table shows particulars of infant deaths in the first four weeks of life, or the neonatal period, from 1931 to 1955. It will be seen that, for both males and females, the risk of death is very much greater during the first day of life than subsequently.

**INFANT DEATHS AND MORTALITY RATES—UNDER FOUR WEEKS :
AUSTRALIA.**

Period.	Number of Deaths.						Rates.(a)					
	Early Neonatal.				Late Neonatal— One Week and under Four Weeks.		Early Neonatal.				Late Neonatal— One Week and under Four Weeks.	
	Under One Day.		One Day and under One Week.		Males.	Fe- males.	Under One Day.		One Day and under One Week.		Males.	Fe- males.
	Males.	Fe- males.	Males.	Fe- males.			Males.	Fe- males.	Males.	Fe- males.		
	ANNUAL AVERAGES.						AVERAGE ANNUAL RATES.					
1931-35 ..	(b)	(b)	c 1,442	c 1,066	321	233	(b)	(b)	c25.04	c19.48	5.58	4.25
1936-40 ..	(b)	(b)	c 1,496	c 1,120	320	233	(b)	(b)	c24.13	c18.99	5.17	3.94
1941-45 ..	906	674	728	541	373	280	12.03	9.42	9.67	7.55	4.96	3.91
1946-50 ..	986	731	758	539	280	220	10.56	8.28	8.12	6.09	3.00	2.49
1951-55 ..	918	713	742	508	247	185	8.88	7.26	7.19	5.17	2.40	1.89
	ANNUAL TOTALS.						ANNUAL RATES.					
1952 ..	958	732	753	489	237	187	9.27	7.45	7.28	4.98	2.29	1.90
1953 ..	870	751	738	485	281	207	8.41	7.60	7.13	4.91	2.71	2.10
1954 ..	943	696	725	520	246	245	9.11	7.05	7.00	5.27	2.37	1.47
1955 ..	889	686	740	496	234	173	8.35	6.78	6.95	4.90	2.20	1.71

(a) Number of deaths per 1,000 live births registered. (b) Not available. (c) Includes under one day.

The foregoing tables indicate the decrease in infant mortality in Australia, the mortality rate of children aged under one year per 1,000 live births for 1955 being 53 per cent. of the average rate for 1931-35. The improvement was due largely to the decrease in deaths from preventable causes, the mortality rate for children aged one week but under one year of age declining by 53 per cent. while that for children aged under one week declined by only 43 per cent.

A graph showing infant mortality rates for each year from 1910 to 1956 will be found on page 599.

(iii) *Statistical Divisions.* The total numbers of births and of deaths of children under one year of age in each statistical division are shown in the annual bulletin, *Demography*.

(iv) *Various Countries.* Compared with other countries Australia occupies a favourable position in respect of infant mortality. In 1955, only New Zealand, Sweden the Netherlands and Norway recorded a lower rate than Australia.

INFANT MORTALITY RATES : VARIOUS COUNTRIES.

Country.	Infant Mortality Rate.(a)						Crude Birth Rate(b), 1955.
	1921-25.	1926-30.	1931-35.	1936-40.	1954.	1955.	
Sweden	60	58	50	42	19	17	14.8
New Zealand(c)	43	37	32	32	20	20	24.9
Netherlands	64	56	45	37	21	20	21.4
Norway	52	49	45	(d) 40	21	21	18.7
Australia(f)	58	52	41	39	22	22	22.6
Denmark	82	82	71	60	27	25	17.5
United Kingdom	78	70	65	59	26	26	15.4
United States of America	74	68	59	51	27	26	24.6
Switzerland	65	54	48	45	27	26	17.1
Finland	96	88	72	72	31	30	20.9
Canada	98	93	75	64	32	31	28.3
Union of South Africa(g)	73	67	63	53	34	31	26.0
Ireland, Republic of	69	70	68	69	38	37	21.2
France	95	89	73	70	36	38	18.4
Japan	159	137	120	(h) 112	45	40	19.4
Austria	136	117	99	81	48	45	15.5
Belgium	100	95	82	77	49	48	16.8
Italy	127	119	105	103	53	50	17.7
Spain	143	124	113	121	54	56	20.6
Yugoslavia	(e)	151	153	(h) 141	102	115	26.9

(a) Number of deaths under one year per 1,000 live births registered. (b) Number of live births per 1,000 of mean population. (c) Excludes Maoris. (d) 1935-39. (e) Not available. (f) Excludes full-blood aboriginals. (g) European population only. (h) 1935-38.

(v) *Causes of Death: Children under one Year.* Causes of death of children under one year of age should be considered in relation to age at death, because the emphasis on various causes changes rapidly as age at death varies. In 1955, 2,740 (97.5 per cent.) of the deaths occurring during the first week of life were caused by congenital malformations (12.2 per cent.) and certain diseases of early infancy (85.3 per cent.). Of the latter, 67.2 per cent. were associated with immaturity (*see table below*). At ages one week and under four weeks the proportions were 35.1 per cent. and 49.6 per cent. respectively. Of deaths of children over four weeks and under one year of age 24.4 per cent. were caused by congenital malformations and only 4.0 per cent. by diseases of early infancy, the emphasis having shifted to respiratory and digestive diseases (42.8 per cent.), accidents and violence (8.8 per cent.), infective and parasitic diseases (5.8 per cent.) and diseases of the nervous system (5.4 per cent.). A summary for 1955 of the deaths of children under one year of age, classified according to principal causes of death and age at death, is given in the following table.

CAUSES OF DEATH: CHILDREN UNDER ONE YEAR OF AGE, AUSTRALIA,
1955.

Cause of Death.	Age at Death.											Under One Year.				
	Weeks.			Months.												
	Under 1.	1.	2.	3.	1. (a)	2.	3.	4.	5.	6.	7.		8.	9.	10.	11.
Tuberculosis .. .. .	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	2
Septicæmia and pyæmia .. .. .	..	..	2	1	2	2	4	..	1	2	1	1	2	1	..	19
Diphtheria .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	3
Whooping cough .. .. .	..	..	..	..	3	1	..	1	1	..	..	1	1	..	1	9
Meningococcal infections	1	..	1	2	3	2	..	5	1	5	4	3	1	2	4	34
Measles .. .. .	..	..	..	..	..	..	..	1	..	1	..	1	1	3	..	7
Other infective and parasitic diseases	1	1	..	..	..	2	..	..	2	1	2	1	1	..	3	13
Neoplasms	5	1	2	1	2	..	3	1	..	1	2	1	..	..	2	21
Allergic, endocrine system, etc., diseases	7	2	..	..	..	2	2	3	1	..	2	4	..	2	1	26
Diseases of the blood	3	1	..	..	..	1	..	..	2	..	..	1	1	..	1	9
Mental, etc., disorders	5	3	1	1	3	1	6	1	4	3	2	2	3	2	2	39
Meningitis	4	3	4	2	5	4	2	4	7	2	6	2	3	1	4	53
Encephalitis	2	..	..	..	..	1	..	1	1	..	1	..	..	1	..	7
Erythroedema polyneuritica .. .. .	..	..	..	..	..	..	..	..	1	1	..	..	..	1	1	4
Otitis media and mastoiditis	1	..	..	..	2	..	..	..	1	1	..	..	1	..	..	6
Other diseases of the nervous system, etc.	..	..	1	..	3	3	2	2	2	2	1	..	2	1	1	20
Diseases of the circulatory system ..	..	1	..	..	1	..	..	3	..	1	1	..	3	..	..	10
Pneumonia, age four weeks and over	..	..	..	..	44	37	46	35	26	31	28	25	18	15	13	318
Bronchitis	1	4	1	..	2	3	5	6	1	7	5	4	4	1	2	46
Other diseases of the respiratory system	1	1	2	3	9	6	8	4	5	3	6	1	4	2	..	55
Hernia and intestinal obstruction ..	17	2	1	1	7	4	5	5	4	1	4	2	..	..	1	54
Gastro-enteritis and colitis, age four weeks and over	..	..	..	..	15	15	12	14	13	11	11	7	8	9	7	122
Other diseases of the digestive system	2	..	..	2	3	5	1	..	5	1	2	..	1	..	1	23
Diseases of the genito-urinary system	..	..	..	..	1	2	3	2	2	3	..	..	3	..	1	17
Diseases of the skin and cellular tissue	..	2	2	..	2	1	1	3	3	1	1	..	..	..	1	17
Diseases of the bones and organs of movement	..	..	..	2	2	..	4	1	..	2	2	..	..	1	..	16
Congenital malformations	342	63	48	32	76	57	39	32	25	25	16	17	14	18	11	815
Certain diseases of early infancy (b)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Without mention of immaturity (b)	786	69	22	23	10	4	5	7	3	6	1	2	..	2	1	941
With immaturity (b)	1,612	64	14	10	9	1	1	1	..	..	..	..	..	..	1	1,713
Symptoms and ill-defined conditions	3	..	1	1	2	..	1	1	..	..	..	..	..	..	..	9
Accidents, poisonings and violence	18	2	4	1	8	16	23	15	8	6	12	4	11	4	12	144
All Causes	2,811	219	106	82	214	169	175	148	114	120	111	80	83	69	71	4,572

(a) Age four weeks and under two months.

(b) For further detail of this group of causes *see* next table.

The individual categories representing the causes of death which come within Class XV.—Certain Diseases of Early Infancy are designed to show the effect of immaturity in such causes of infant death. In 1955, 67 per cent. of deaths in this class during the first week of life and 44 per cent. of those in the next three weeks of life were due, directly or indirectly, to immaturity. The relationship between immaturity and each of the individual categories of Class XV. is shown for the year 1955 in the following table.

**DEATHS OF CHILDREN UNDER ONE YEAR OF AGE FROM CERTAIN DISEASES
OF EARLY INFANCY : AUSTRALIA, 1955.**

Category No.	Cause of Death.	Without Mention of Immaturity.			With Immaturity:			Total.		
		Males.	Fe-males.	Per-sons.	Males.	Fe-males.	Per-sons.	Males.	Fe-males.	Per-sons.
760	Intracranial and spinal injury at birth ..	177	109	286	57	32	89	234	141	375
761	Other birth injury ..	58	41	99	81	44	125	139	85	224
762	Post-natal asphyxia and atelectasis ..	108	86	194	161	125	286	269	211	480
763	Pneumonia of the newborn ..	68	43	111	14	13	27	82	56	138
764	Diarrhoea of the newborn ..	1	2	3	1	..	1	2	2	4
765	Ophthalmia neonatorum ..	..	..	..	..	..	..	..	1	1
766	Pemphigus neonatorum ..	..	1	1	..	..	..	..	1	1
767	Umbilical sepsis ..	1	..	1	..	..	..	1	..	1
768	Other sepsis of newborn ..	9	2	11	..	2	2	9	4	13
769	Neonatal disorders arising from maternal toxæmia ..	16	8	24	30	37	67	46	45	91
770	Haemolytic disease of newborn (erythroblastosis) ..	72	38	110	23	11	34	95	49	144
771	Haemorrhagic disease of newborn ..	23	25	48	8	8	16	31	33	64
772	Nutritional maladjustment ..	11	6	17	1	..	1	12	6	18
773	Ill-defined diseases peculiar to early infancy ..	16	20	36	24	23	47	40	43	83
774	Immaturity with mention of any other subsidiary condition ..	..	..	..	14	9	23	14	9	23
775	Immaturity subsidiary to some other cause ..	..	..	..	..	..	..	..	..	..
776	Immaturity unqualified ..	..	..	..	576	419	995	576	419	995
	Total, Class XV. ..	560	381	941	990	723	1,713	1,550	1,104	2,654

(vi) *Deaths of Ex-nuptial Children under one Year of Age.* Distinction between nuptial and ex-nuptial children in death statistics for Australia as a whole has been made since 1925. Results show that death rates during infancy have generally been much higher for ex-nuptial children than for nuptial children, but the disparity has become smaller in recent years. The following table shows the number of deaths of children under one year of age and the infant mortality rates for nuptial, ex-nuptial and all children in five-year periods since 1931 and for each year from 1952 to 1955.

DEATHS UNDER ONE YEAR OF AGE : NUPTIAL AND EX-NUPTIAL, AUSTRALIA.

Period.	Nuptial Children.		Ex-Nuptial Children.			All Children.	
	Number of Deaths.	Infant Mortality Rate.(a)	Number of Deaths.	Infant Mortality Rate.(b)		Number of Deaths.	Infant Mortality Rate.(c)
				Actual.	Ratio to Nuptial Rate. (Per Cent.)		
1931-35 ..	21,460	40.09	1,713	65.37	163	23,173	41.27
1936-40 ..	21,792	37.59	1,680	66.87	178	23,472	38.81
1941-45 ..	24,053	34.20	1,627	52.39	153	25,680	34.97
1946-50 ..	23,139	26.54	1,373	37.37	141	24,512	26.98
1951-55 ..	22,529	23.29	977	24.43	105	23,506	23.34
1952 ..	4,609	23.78	188	23.97	101	4,797	23.79
1953 ..	4,515	23.25	198	24.65	106	4,713	23.30
1954 ..	4,353	22.41	193	24.04	107	4,546	22.48
1955 ..	4,365	21.92	207	24.25	111	4,572	22.01

(a) Number of deaths under one year of age per 1,000 nuptial live births registered. (b) Number of deaths under one year of age per 1,000 ex-nuptial live births registered. (c) Number of deaths under one year of age per 1,000 total live births registered.

For the five years 1951-55, the ratio of the ex-nuptial to the nuptial rate at various ages of infancy was as follows:—Under one month, 99 per cent.; one month, 144 per cent.; 2 months, 113 per cent.; 3 months, 154 per cent.; 4 months, 119 per cent.; 5 months, 158 per cent.; under one year, 105 per cent.

Detailed information for Australia as to the age at which ex-nuptial children died from each cause of death will be found in *Demography*, Bulletin No. 73. Because of the small number of ex-nuptial deaths involved in each case, it is difficult to assess the real significance of the differences between the numbers of nuptial and ex-nuptial deaths from each individual cause.

9. Age Distribution.—(i) *Number of Deaths.* Age at death is recorded for statistical purposes in days for the first week of life, in weeks for the first four weeks, in months for the first two years and in completed years of life thereafter. These ages are usually combined in groups for publication, the most common being weeks for the first four weeks, months or groups of months for the first year, single years of age for the first five years and thereafter the five-year groups 5-9 years, 10-14 years, etc. A summary in this form for Australia is given in the following table for the year 1955.

AGE AT DEATH : AUSTRALIA, 1955.

Age at Death.	Males.	Fe- males.	Per- sons.	Age at Death.	Males.	Fe- males.	Per- sons.
Under 1 week	1,629	1,182	2,811	Total 5-9 years	284	212	496
1 week and under 2 weeks ..	122	97	219	" 10-14 "	223	135	358
2 weeks and under 3 weeks ..	63	43	106	" 15-19 "	487	156	643
3 weeks and under 28 days ..	49	33	82	" 20-24 "	528	183	711
				" 25-29 "	612	221	833
Total under 28 days ..	1,863	1,355	3,218	" 30-34 "	683	378	1,061
				" 35-39 "	749	503	1,252
28 days and under 3 months	242	141	383	" 40-44 "	1,163	790	1,953
3 months and under 6 "	250	187	437	" 45-49 "	1,748	1,062	2,810
6 months and under 12 "	270	264	534	" 50-54 "	2,520	1,355	3,875
				" 55-59 "	3,438	1,898	5,336
Total under 1 year ..	2,625	1,947	4,572	" 60-64 "	4,686	2,874	7,560
				" 65-69 "	6,247	3,979	10,226
1 year	270	221	491	" 70-74 "	6,317	4,763	11,080
2 years	175	119	294	" 75-79 "	5,459	5,228	10,687
3 "	120	90	210	" 80-84 "	4,194	4,711	8,905
4 "	89	86	175	" 85-89 "	2,520	3,311	5,831
				" 90-94 "	877	1,314	2,191
Total under 5 years ..	3,279	2,463	5,742	" 95-99 "	137	286	423
				" 100 and over	21	20	41
				Age not stated	16	6	22
				Total, All Ages	46,188	35,848	82,036

There are different mortality rates at various stages of life and the actual number of deaths in any period depends upon the impact of these rates on the numbers living at the respective stages. Changes in the number of deaths from one period to another are caused by changes in the rate of mortality in the various age groups and by the changed proportions of persons living in the different groups.

In Australia, during the last fifty years, there has been a steady improvement in the rate of mortality at all ages, which has tended to reduce the number of deaths. This has been most pronounced at ages under one year. The increased length of life due to this factor, coupled with the long-term decline in the birth rate and the effects of past and present migration, has been a significant cause in changing the age distribution of the population and consequently the age distribution of deaths, thus obscuring the effects of improved mortality rates.

The combined effect of these various influences can be seen from the following table, which shows the proportion of deaths in various age groups in periods of ten years from 1901 to 1950 and for the year 1955.

PROPORTION OF DEATHS IN EACH AGE GROUP : AUSTRALIA.
(Per Cent.)

Period.	Age at Death (Years).								Total.
	Under 1.	1-4.	5-19.	20-39.	40-59.	60-64.	65 and over.	Unspec- ified.	
1901-10 ..	20.51	6.45	6.37	14.99	17.99	5.31	28.26	0.12	100.00
1911-20 ..	16.66	6.09	5.49	14.44	20.32	6.19	30.68	0.13	100.00
1921-30 ..	13.10	4.51	4.85	12.12	20.55	8.26	36.53	0.08	100.00
1931-40 ..	7.40	2.56	3.83	9.36	20.54	8.36	47.92	0.03	100.00
1941-50 ..	6.79	1.71	2.26	6.01	19.04	9.33	54.84	0.02	100.00
1955—									
Males ..	5.68	1.42	2.15	5.57	19.20	10.15	55.80	0.03	100.00
Females ..	5.43	1.44	1.40	3.58	14.24	8.02	65.87	0.02	100.00
Persons ..	5.57	1.43	1.83	4.70	17.03	9.21	60.20	0.03	100.00

A table showing these proportions for males and females separately for the period 1901 to 1950 was published in Official Year Book No. 39, p. 614.

(ii) *Age-specific Death Rates.* The following table gives the average annual age-specific death rates for each State and Australia for the years 1953-55 based on the age distribution of the population at the Census of 30th June, 1954. Similar tables for the years 1932-34 and 1946-48 were published in earlier issues of the Official Year Book (see No. 37, p. 778 and No. 39, pp. 615-6).

AGE-SPECIFIC DEATH RATES(a), 1953-55.

Age Group (Years).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
0- 4	7.30	5.88	6.62	6.41	7.04	6.62	6.69
5- 9	0.75	0.61	0.60	0.52	0.70	0.70	0.67
10-14	0.70	0.53	0.69	0.65	0.52	0.59	0.63
15-19	1.56	1.21	1.70	1.48	1.61	1.97	1.51
20-24	1.85	1.66	1.93	1.85	1.97	1.74	1.82
25-29	1.61	1.54	1.90	1.70	1.89	1.44	1.67
30-34	1.93	1.49	2.07	1.58	1.81	1.97	1.80
35-39	2.50	2.11	2.71	2.32	2.22	1.90	2.38
40-44	4.02	3.13	4.02	3.55	3.22	3.23	3.65
45-49	6.56	5.60	5.68	5.51	5.77	5.05	5.96
50-54	10.96	9.65	10.12	10.16	9.04	8.95	10.18
55-59	19.48	16.82	16.96	15.79	15.81	15.43	17.63
60-64	29.08	25.45	26.02	24.22	24.85	23.39	26.71
65-69	43.39	41.30	38.69	39.28	41.49	36.53	41.43
70-74	67.28	64.88	61.70	63.06	62.80	61.57	64.94
75-79	101.18	98.81	93.63	94.23	93.80	92.27	97.91
80-84	150.20	148.13	143.48	141.12	146.87	153.31	147.61
85-89	236.29	232.63	211.09	209.28	225.73	230.41	227.85
90 and over ..	329.46	331.78	281.63	329.71	299.02	304.35	319.63
FEMALES.							
0- 4	5.79	4.62	5.38	5.01	5.07	5.73	5.28
5- 9	0.52	0.47	0.50	0.45	0.52	0.54	0.50
10-14	0.39	0.36	0.42	0.41	0.23	0.23	0.37
15-19	0.66	0.51	0.51	0.52	0.68	0.47	0.58
20-24	0.67	0.61	0.76	0.65	0.67	0.68	0.67
25-29	0.87	0.71	0.92	0.85	0.78	0.99	0.82
30-34	1.21	0.91	1.37	1.00	0.96	1.21	1.11
35-39	1.76	1.56	2.20	1.78	1.47	1.23	1.73
40-44	2.64	2.33	2.82	2.56	2.13	2.94	2.54
45-49	4.50	3.69	4.58	3.63	3.58	4.34	4.14
50-54	6.50	6.25	6.19	5.87	5.95	6.54	6.28
55-59	10.21	9.28	9.39	9.08	8.57	10.10	9.61
60-64	15.03	14.72	14.21	14.07	13.88	15.04	14.66
65-69	24.65	25.26	22.34	22.97	20.74	22.84	24.07
70-74	41.77	41.15	37.62	40.38	39.29	40.51	40.73
75-79	71.39	69.56	67.82	72.30	67.81	73.65	70.31
80-84	116.39	117.91	117.17	110.09	109.71	122.03	116.04
85-89	193.81	197.40	182.59	183.50	189.56	212.06	192.86
90 and over ..	298.18	296.80	275.59	317.31	284.81	312.17	296.55

(a) Average annual number of deaths per 1,000 of population in each age group at 30th June, 1954.

AGE-SPECIFIC DEATH RATES(a), 1953-55—continued.

Age Group (Years).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
PERSONS.							
0-4	6.56	5.26	6.01	5.73	6.07	6.19	6.00
5-9	0.64	0.54	0.55	0.48	0.61	0.62	0.58
10-14	0.55	0.45	0.56	0.54	0.38	0.41	0.50
15-19	1.12	0.87	1.11	1.01	1.15	1.23	1.06
20-24	1.28	1.16	1.37	1.29	1.35	1.23	1.27
25-29	1.25	1.14	1.44	1.30	1.37	1.23	1.27
30-34	1.58	1.21	1.74	1.30	1.40	1.60	1.46
35-39	2.13	1.84	2.46	2.06	1.85	1.57	2.06
40-44	3.34	2.74	3.44	3.07	2.70	3.09	3.11
45-49	5.57	4.68	5.16	4.62	4.77	4.72	5.09
50-54	8.76	7.98	8.24	8.06	7.66	7.78	8.28
55-59	14.66	12.89	13.20	12.29	12.32	12.71	13.51
60-64	21.65	19.68	20.08	18.82	19.31	18.99	20.37
65-69	33.47	32.55	30.53	30.60	30.91	29.31	32.27
70-74	53.26	51.35	49.31	50.57	50.37	50.36	51.66
75-79	84.16	81.50	79.89	81.59	79.80	82.25	82.20
80-84	130.17	129.51	129.00	122.51	125.91	135.82	128.94
85-89	210.52	210.58	195.20	193.40	205.60	220.46	206.82
90 and over ..	309.91	308.19	278.22	321.61	290.38	309.21	305.00

(a) Average annual number of deaths per 1,000 of population in each age group at 30th June, 1954.

10. **Causes of Death.**—The classification of causes of death adopted for Australia by the Commonwealth Bureau of Census and Statistics at the inception of its mortality statistics in 1907 was that introduced by the International Institute of Statistics in 1893, reviewed by that Institute in 1899 and revised by an International Commission in 1900. This classification became known as the International List of Causes of Death and further international revisions in 1909 (Second), 1920 (Third), 1929 (Fourth), 1938 (Fifth) and 1948 (Sixth) were successively adapted for use in Australian statistics.

The Sixth Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death has been used in Australia since 1950. For the first time in connexion with the International List, international rules for a uniform method of selecting the main cause to be tabulated, if more than one cause is stated on the death certificate, were laid down. Prior to 1950, the rules adopted in Australia for the selection of the cause of death to be tabulated were those laid down in the United States Manual of Joint Causes of Death, first published in 1914 and revised to conform with successive revisions of the International List.

The adoption of the new method marked a fundamental change in Australian cause of death statistics, with emphasis now placed on the underlying cause of death as indicated by the certifying practitioner. The introduction of this method required the adoption by all States of a form of medical certificate substantially identical with the International Form of Medical Certificate of Cause of Death as laid down in Article 9 of the World Health Organization Regulations No. 1. By 1950, all States had adopted satisfactory forms of certificate and it was possible to apply the new principles uniformly to all State cause of death records.

This change in principle affects the comparability of the statistics for 1950 and subsequent years with those for earlier years. For convenience in assessing the extent of the change and in accordance with a recommendation of the Sixth Decennial Revision Conference, causes of death for Australia for 1950 were also classified according to the detailed classification of the Fifth Revision, 1938, on the joint cause rules current for that revision. A complete detailed classification according to both the Fifth and Sixth Revisions was shown in *Demography*, Bulletin No. 68. Commencing with 1951, the classification is according to the Sixth Revision only.

In order to facilitate the briefer presentation of cause of death statistics, the present International Classification provides two special lists of causes for tabulation—the Intermediate List of 150 causes and the Abbreviated List of 50 causes. The latter has been used for the cause of death tabulations A to C which follow. Tables A and B show deaths of males and females, respectively, for 1955 and Table C shows the numbers of persons who died and the death rates and proportion per 10,000 deaths for the years 1954 and 1955.

A.—CAUSES OF DEATH : MALES, 1955.

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE INTERNATIONAL LIST).

Cause of Death.	Detailed List Numbers.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
B 1 Tuberculosis of respiratory system ..	001-008	179	163	105	30	25	18	..	1	521
B 2 Tuberculosis, other forms ..	010-019	7	9	6	2	..	2	..	..	26
B 3 Syphilis and its sequelae ..	020-029	35	32	17	14	7	8	..	..	113
B 4 Typhoid fever ..	040	..	..	..	..	1	..	..	..	1
B 5 Cholera ..	043	..	..	..	..	..	..	..	..	..
B 6 Dysentery, all forms ..	045-048	8	2	1	2	2	1	..	..	16
B 7 Scarlet fever and streptococcal sore throat ..	050, 051	1	..	..	..	1	..	..	..	2
B 8 Diphtheria ..	055	9	1	7	3	3	..	..	..	23
B 9 Whooping cough ..	056	..	2	..	2	..	..	..	..	4
B10 Meningococcal infections ..	057	15	16	6	3	2	3	..	..	45
B11 Plague ..	058	..	..	..	..	..	..	..	..	..
B12 Acute poliomyelitis ..	080	6	4	2	5	1	..	..	..	18
B13 Smallpox ..	084	..	..	..	..	..	..	..	..	..
B14 Measles ..	085	3	9	1	1	1	..	..	..	15
B15 Typhus and other rickettsial diseases ..	100-108	..	..	1	..	..	..	..	..	1
B16 Malaria ..	110-117	1	..	..	..	..	..	..	..	1
B17 All other diseases classified as infective and parasitic ..	(a)	72	41	33	25	14	6	1	..	192
B18 Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues ..	140-205	2,471	1,715	913	561	410	187	3	11	6,271
B19 Benign and unspecified neoplasms ..	210-239	47	31	24	11	10	3	..	..	126
B20 Diabetes mellitus ..	260	142	143	46	37	22	10	..	1	401
B21 Anaemias ..	290-293	42	50	18	14	7	3	1	..	135
B22 Vascular lesions affecting central nervous system ..	330-334	2,052	1,209	640	475	288	134	5	8	4,811
B23 Non-meningococcal meningitis ..	340	30	18	15	6	4	1	..	..	74
B24 Rheumatic fever ..	400-402	12	18	8	5	1	..	..	..	45
B25 Chronic rheumatic heart disease ..	410-416	117	87	42	30	28	11	..	..	315
B26 Arteriosclerotic and degenerative heart disease ..	420-422	5,673	3,679	1,762	1,304	974	361	10	21	13,784
B27 Other diseases of heart ..	430-434	681	227	240	85	26	40	3	2	1,304
B28 Hypertension with heart disease ..	440-443	396	244	175	73	68	22	..	1	979
B29 Hypertension without mention of heart ..	444-447	224	115	91	28	36	13	..	..	507
B30 Influenza ..	480-483	22	13	13	3	5	3	..	..	59
B31 Pneumonia ..	490-493	748	297	155	172	118	54	4	1	1,549
B32 Bronchitis ..	500-502	273	216	77	43	38	35	1	3	686
B33 Ulcer of stomach and duodenum ..	540, 541	188	152	82	48	24	14	..	2	510
B34 Appendicitis ..	550-553	41	19	20	14	9	2	..	..	105
B35 Intestinal obstruction and hernia ..	560, 561, 570	131	69	48	27	22	7	..	..	304
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn ..	543, 571, 572	105	41	49	25	10	8	..	..	238
B37 Cirrhosis of liver ..	581	100	105	29	34	13	7	3	..	291
B38 Nephritis and nephrosis ..	590-594	292	173	146	62	40	26	1	1	741
B39 Hyperplasia of prostate ..	610	162	212	85	56	44	22	..	..	581
B41 Congenital malformations ..	750-759	231	146	93	69	46	23	4	2	614
B42 Birth injuries, post-natal asphyxia and atelectasis ..	760-762	231	175	114	48	46	24	2	2	642
B43 Infections of the newborn ..	763-768	29	29	14	7	11	4	..	..	94
B44 Other diseases peculiar to early infancy, and immaturity unqualified ..	769-776	363	144	112	82	76	29	6	2	814
B45 Senility without mention of psychosis, ill-defined and unknown causes ..	780-795	242	108	97	55	16	9	6	1	534
B46 All other diseases ..	Residual	1,502	1,221	695	372	270	133	17	9	4,219
BE47 Motor vehicle accidents ..	E810-E835	648	469	239	171	147	54	12	7	1,747
BE48 All other accidents ..	E800-E802, E840-E962	798	416	335	154	159	55	16	5	1,938
BE49 Suicide and self-inflicted injury ..	E963, E970-E979	299	148	112	53	68	16	2	3	701
BE50 Homicide and operations of war ..	E964, E965, E980-E999	42	18	13	4	9	2	2	1	91
All Causes ..	..	18,670	11,986	6,681	4,211	3,106	1,351	99	84	46,188

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

B.—CAUSES OF DEATH : FEMALES, 1955.

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE INTERNATIONAL LIST).

Cause of Death.	Detailed List Numbers.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
B 1 Tuberculosis of respiratory system ..	001-008	57	39	25	15	6	9	..	..	151
B 2 Tuberculosis, other forms ..	010-019	9	12	1	5	2	2	..	..	31
B 3 Syphilis and its sequelae ..	020-029	4	10	8	3	..	1	..	..	26
B 4 Typhoid fever ..	040	..	..	1	..	..	..	..	..	1
B 5 Cholera ..	043	..	..	..	..	..	..	..	..	..
B 6 Dysentery, all forms ..	045-048	1	2	1	6	..	..	..	..	10
B 7 Scarlet fever and streptococcal sore throat ..	050, 051	..	..	2	1	..	..	..	..	3
B 8 Diphtheria ..	055	5	1	3	..	3	..	..	..	12
B 9 Whooping cough ..	056	2	4	..	1	..	..	..	..	7
B10 Meningococcal infections ..	057	17	13	6	1	2	2	..	..	41
B11 Plague ..	058	..	..	..	..	..	..	..	..	..
B12 Acute poliomyelitis ..	080	2	5	3	1	..	1	..	..	12
B13 Smallpox ..	084	..	..	..	..	..	..	..	..	..
B14 Measles ..	085	1	7	1	2	5	..	..	..	16
B15 Typhus and other rickettsial diseases ..	100-108	..	..	..	..	1	..	..	..	1
B16 Malaria ..	110-117	..	..	..	..	..	..	..	..	..
B17 All other diseases classified as infective and parasitic ..	(a)	45	41	16	10	10	3	1	1	127
B18 Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues ..	140-205	2,086	1,817	688	489	351	181	..	3	5,615
B19 Benign and unspecified neoplasms ..	210-239	56	45	24	11	14	5	..	..	155
B20 Diabetes mellitus ..	260	241	276	91	63	41	19	..	1	732
B21 Anaemias ..	290-293	79	66	32	21	5	6	..	1	210
B22 Vascular lesions affecting central nervous system ..	330-334	2,418	1,850	763	596	376	212	1	8	6,224
B23 Non-meningococcal meningitis ..	340	18	10	7	8	5	1	..	..	49
B24 Rheumatic fever ..	400-402	15	9	7	5	3	1	..	..	40
B25 Chronic rheumatic heart disease ..	410-416	152	118	43	44	21	17	..	..	395
B26 Arteriosclerotic and degenerative heart disease ..	420-422	3,485	2,564	973	846	639	199	..	10	8,716
B27 Other diseases of heart ..	430-434	490	266	139	72	24	26	1	3	1,021
B28 Hypertension with heart disease ..	440-443	434	355	175	105	77	25	..	..	1,171
B29 Hypertension without mention of heart ..	444-447	204	214	111	37	36	23	..	..	625
B30 Influenza ..	480-483	24	16	15	3	8	4	..	..	70
B31 Pneumonia ..	490-493	499	271	162	128	61	54	..	1	1,176
B32 Bronchitis ..	500-502	95	66	26	20	12	6	..	..	225
B33 Ulcer of stomach and duodenum ..	540, 541	67	48	14	9	5	6	..	1	150
B34 Appendicitis ..	550-553	28	12	8	8	3	1	1	..	61
B35 Intestinal obstruction and hernia ..	560, 561, 570	105	56	39	24	15	3	..	..	242
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn ..	543, 571, 572	93	52	53	33	19	5	2	..	257
B37 Cirrhosis of liver ..	581	53	49	17	15	8	8	..	..	150
B38 Nephritis and nephrosis ..	590-594	244	139	125	33	27	16	..	..	584
B40 Complications of pregnancy, childbirth and the puerperium ..	{ 640-652, 670-689 }	55	31	20	8	14	4	..	1	133
B41 Congenital malformations ..	750-759	185	153	77	41	38	18	1	2	515
B42 Birth injuries, post-natal asphyxia and atelectasis ..	760-762	169	129	62	31	25	18	1	2	437
B43 Infections of the newborn ..	763-768	26	15	9	4	6	3	..	..	63
B44 Other diseases peculiar to early infancy, and immaturity unqualified ..	769-776	255	110	88	47	59	37	7	2	605
B45 Senility without mention of psychosis, ill-defined and unknown causes ..	780-795	313	119	86	104	20	21	2	2	667
B46 All other diseases ..	Residual	1,155	1,162	458	291	211	150	3	..	3,430
BE47 Motor vehicle accidents ..	E810-E835	158	117	49	36	48	11	..	2	421
BE48 All other accidents ..	E800-E802, E840-E962	397	214	156	122	54	33	..	1	977
BE49 Suicide and self-inflicted injury ..	E963, E970-E979	119	47	39	19	13	7	..	1	245
BE50 Homicide and operations of war ..	E964, E965, E980-E999	22	11	3	7	6	..	..	..	49
All Causes ..	..	13,883	10,541	4,626	3,325	2,273	1,138	20	42	35,848

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

C.—CAUSES OF DEATH : PERSONS, AUSTRALIA.

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE INTERNATIONAL LIST).

Cause of Death.	Detailed List Numbers.	Number of Deaths.		Rate per 1,000,000 of Mean Population.		Proportion per 10,000 Deaths.	
		1954.	1955.	1954.	1955.	1954.	1955.
B 1 Tuberculosis of respiratory system	001-008	823	672	91	73	101	82
B 2 Tuberculosis, other forms	010-019	74	57	8	6	9	7
B 3 Syphilis and its sequelae	020-029	174	139	19	15	21	17
B 4 Typhoid fever	040	3	2	..	..	..	..
B 5 Cholera	043	..	..	..	..	..	..
B 6 Dysentery, all forms	045-048	27	26	3	3	3	3
B 7 Scarlet fever and streptococcal sore throat	050, 051	9	5	1	1	1	1
B 8 Diphtheria	055	34	35	4	4	4	4
B 9 Whooping cough	056	15	11	2	1	2	1
B10 Meningococcal infections	057	128	86	14	9	16	10
B11 Plague	058	..	..	..	..	..	..
B12 Acute poliomyelitis	080	80	30	9	3	10	4
B13 Smallpox	084	..	..	..	..	..	..
B14 Measles	085	43	31	5	3	5	4
B15 Typhus and other rickettsial diseases	100-108	..	2	..	..	..	..
B16 Malaria	110-117	5	1	1	..	1	..
B17 All other diseases classified as infective and parasitic	(a)	275	319	31	35	34	39
B18 Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues	140-205	11,611	11,886	1,292	1,292	1,419	1,449
B19 Benign and unspecified neoplasms	210-239	348	281	39	31	43	34
B20 Diabetes mellitus	260	1,096	1,133	122	123	134	138
B21 Anaemias	290-293	305	345	34	38	37	42
B22 Vascular lesions affecting central nervous system	330-334	10,963	11,035	1,220	1,199	1,340	1,345
B23 Non-meningococcal meningitis	340	126	123	14	13	15	15
B24 Rheumatic fever	400-402	76	85	8	9	9	10
B25 Chronic rheumatic heart disease	410-416	779	710	87	77	95	87
B26 Arteriosclerotic and degenerative heart disease	420-422	21,963	22,500	2,443	2,445	2,685	2,743
B27 Other diseases of heart	430-434	2,365	2,325	263	253	289	283
B28 Hypertension with heart disease	440-443	2,317	2,150	258	234	283	262
B29 Hypertension without mention of heart	444-447	1,253	1,132	139	123	153	138
B30 Influenza	480-483	396	129	44	14	49	16
B31 Pneumonia	490-493	2,774	2,725	309	296	339	332
B32 Bronchitis	500-502	862	911	96	99	105	111
B33 Ulcer of stomach and duodenum	540, 541	690	660	77	72	84	81
B34 Appendicitis	550-553	152	166	17	18	19	20
B35 Intestinal obstruction and hernia	560, 561, 570	502	546	56	59	61	67
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543, 571, 572	484	495	54	54	59	60
B37 Cirrhosis of liver	581	400	441	44	48	49	54
B38 Nephritis and nephrosis	590-594	1,433	1,325	159	144	175	162
B39 Hyperplasia of prostate	610	625	581	69	63	76	71
B40 Complications of pregnancy, child birth and the puerperium	640-652, 670-689	139	133	15	14	17	16
B41 Congenital malformations	750-759	1,064	1,129	118	123	130	138
B42 Birth injuries, post-natal asphyxia and atelectasis	760-762	1,167	1,079	130	117	143	132
B43 Infections of the newborn	763-768	179	157	20	17	22	19
B44 Other diseases peculiar to early infancy, and immaturity unqualified	769-776	1,411	1,419	157	154	173	173
B45 Senility without mention of psychosis, ill-defined and unknown causes	780-795	1,340	1,201	149	131	164	146
B46 All other diseases	Residual	7,264	7,649	808	831	888	933
BE47 Motor vehicle accidents	E810-E835	2,094	2,168	233	236	256	264
BE48 All other accidents	E800-E802, E840-E962	2,842	2,915	316	317	348	355
BE49 Suicide and self-inflicted injury	E963, E970-E979	969	946	108	103	119	115
BE50 Homicide and operations of war	E964, E965, E980-E999	126	140	14	15	15	17
All Causes	..	81,805	82,036	9,100	8,915	10,000	10,000

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

11. **Deaths from Principal Causes.**—(i) *General.* In the preceding tables particulars have been given for each of the causes of death comprising the Abbreviated Classification according to the Sixth Revision of the International List. Certain important causes are treated in detail hereunder. The Abbreviated Classification number used in tables A to C (pp. 618-620) is indicated in parentheses for each cause or group of causes.

(ii) *All Forms of Tuberculosis (B1, B2).* (a) *General.* The total number of deaths classified to all forms of tuberculosis in 1955 was 729, consisting of 547 males and 182 females. In comparing any of the figures for 1950 and subsequent years with those for 1949 and earlier years consideration should be given to the effect of the change in basis from the Fifth to the Sixth Revision of the International List. This was discussed in Official Year Book No. 39, p. 626.

(b) *Age at Death.* The following table shows the age groups of males and females who were classified as dying from tuberculosis in 1955 together with figures for 1921, 1931, 1941 and 1951.

TUBERCULOSIS (ALL FORMS) : DEATHS IN AGE GROUPS, AUSTRALIA.

Age Group (Years).	Males.					Females.				
	1921.	1931.	1941.	1951.	1955.	1921.	1931.	1941.	1951.	1955.
0-14	143	90	63	23	4	128	81	54	35	10
15-29	477	294	162	46	10	540	487	275	68	14
30-44	718	585	428	135	59	514	422	319	142	57
45-64	692	674	793	570	237	278	252	251	126	52
65 and over ..	138	193	279	306	237	56	89	110	86	49
Not stated ..	3	..	..	..	..	..	..	..	1	..
Total ..	2,171	1,836	1,725	1,080	547	1,516	1,331	1,009	458	182

(c) *Death Rates.* The reduction in mortality from tuberculosis is shown by the decline in the crude death rate (per 100,000 of mean population) from tubercular diseases, which fell from 68 in 1921 (males, 78; females, 56) to 18 in 1951 (males, 25; females, 11) and still further to 8 in 1955 (males 12; females, 4). The crude death rate does not reveal the even more striking fall in the number of deaths in the younger age groups, which can be seen from the table above.

(d) *Death Rates, Various Countries.* A comparison of the death rates from tuberculosis for Australia with those for various other countries, made on the latest figures available, shows that Australia, with a rate of 8 deaths per 100,000 of mean population, occupies a favourable position as regards this disease. Whereas the rate for Denmark is also only 8, rates range as high as 67 for Japan. For various other countries rates are as follows:—Netherlands, 9; Canada, 10; New Zealand, 12; United States of America, 12; United Kingdom, 18; Union of South Africa, 20; Italy, 24; France, 32; Finland, 45; and Portugal, 62.

(iii) *Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues (B18).* (a) *General.* It was shown in Official Year Book No. 39, p. 628, that deaths classified under this heading according to the Sixth Revision of the International List are not directly comparable in total with those on the Fifth Revision basis and comparability ratios were given to enable comparison to be made on an adjusted basis. This change must be kept in mind in considering the comparisons shown in the following pages.

(b) *Type and Seat of Disease.* Tables showing the type and seat of disease in conjunction with age and conjugal condition of the persons dying from malignant neoplasms in 1955 will be found in *Demography*, Bulletin No. 73. A summary regarding type and seat of disease for 1955 is given below. It may be pointed out that the significance of the number of deaths shown for the various types of neoplasms enumerated hereunder is doubtful, owing to the fact that, in the absence of a post-mortem, it is impracticable for the certifying doctor in the majority of cases to make an accurate diagnosis as to type in the detail required for the following classification.

DEATHS FROM MALIGNANT NEOPLASMS AND NEOPLASMS OF LYMPHATIC AND HAEMATOPOIETIC TISSUES: TYPE AND SEAT OF DISEASE, AUSTRALIA, 1955.

Type of Disease.	Males.	Females.	Persons.	Seat of Disease.	Males.	Females.	Persons.
Malignant Neoplasms—				Malignant Neoplasms—			
Cancer and carcinoma (other than skin) ..	5,168	4,720	9,888	Buccal cavity and pharynx	198	66	264
Skin cancer	55	41	96	Digestive organs and peritoneum—			
Sarcoma and myeloid sarcoma	99	117	216	Oesophagus	178	60	238
Myeloma .. ..	..	..	..	Stomach	1,125	704	1,829
Glioma	122	67	189	Small intestine	25	15	40
Endothelioma .. ..	..	..	..	Large intestine	583	814	1,397
Melanoma and melanotic sarcoma	95	94	189	Other	773	652	1,425
Hypernephroma	36	24	60	Respiratory system ..	1,128	206	1,334
Teratoma	13	3	16	Breast	5	1,102	1,107
Malignant disease and malignant tumor n.o.s.	192	166	358	Uterus .. ..	..	560	560
				Other female genital organs .. ..	..	330	330
<i>Total, Malignant Neoplasms</i> ..	<i>5,780</i>	<i>5,232</i>	<i>11,012</i>	Male genital organs ..	781	..	781
				Urinary organs	368	174	542
Neoplasms of Lymphatic and Haematopoietic Tissues—				Skin	171	134	305
Lymphosarcoma and reticulosarcoma ..	107	71	178	Other and unspecified organs	445	415	860
Hodgkin's disease ..	71	50	121	<i>Total, Malignant Neoplasms</i> ..	<i>5,780</i>	<i>5,232</i>	<i>11,012</i>
Other forms of lymphoma (reticulos) ..	14	21	35	<i>Neoplasms of Lymphatic and Haematopoietic Tissues</i> ..	<i>491</i>	<i>383</i>	<i>874</i>
Multiple myeloma (plasmocytoma) ..	38	40	78				
Leukaemia and aleukaemia	258	198	456				
Mycosis fungoides ..	3	3	6				
<i>Total, Neoplasms of Lymphatic, etc., Tissues</i> ..	<i>491</i>	<i>383</i>	<i>874</i>				
Grand Total ..	6,271	5,615	11,886	Grand Total	6,271	5,615	11,886

(c) *Age at Death.* The ages of males and females who died from malignant neoplasms in 1955 are given below, together with figures for 1921, 1931, 1941 and 1951. Inferences drawn from the great increase in the number of deaths from malignant neoplasms in 1955 compared with the number in 1921 need qualification in view of the altered age constitution of the population since the earlier year. While the total population increased by about 70 per cent. between 1921 and 1955, the number of people over 55 years of age, at which ages the risks of cancer are much greater, increased by about 150 per cent. It is only from age 75 onwards, however, that the rate of mortality, as distinct from the number of deaths, has increased. For groups up to age 75 there has been no increase in mortality rates since 1921; indeed in some age groups the rates have actually declined. It is also probable that a proportion of the increased number of deaths from cancer recorded in recent years has been due to better diagnosis and certification on the part of medical practitioners rather than to any actual increase in the disease itself.

MALIGNANT NEOPLASMS: NUMBER OF DEATHS IN AGE GROUPS, AUSTRALIA.

Age Group (Years).	Males.					Females.				
	1921.	1931.	1941.	1951.	1955.	1921.	1931.	1941.	1951.	1955.
Under 15	26	25	21	91	123	23	23	25	71	98
15-29	29	43	49	103	109	37	38	45	76	63
30-44	163	196	176	275	325	266	326	344	387	446
45-54	387	410	465	584	719	470	548	685	692	763
55-64	800	868	983	1,334	1,400	657	744	926	1,180	1,162
65 and over ..	1,032	1,942	2,561	3,128	3,595	875	1,426	2,198	2,698	3,083
Not stated ..	3	..	..	..	..	..	..	..	..	..
Total ..	2,440	3,484	4,255	5,515	6,271	2,328	3,105	4,223	5,104	5,615

(d) *Death Rates.* The death rates from malignant neoplasms have continued to rise over recent years. The rates are crude death rates representing the number of deaths from malignant neoplasms per 100,000 of mean population and do not take account of changes in the age constitution of the population, and to a substantial extent reflect the increasing age of the population rather than the true change in mortality from malignant neoplasms (see para. 11 (iii) (c), p. 622). In 1921, the rate for Australia was 87 (males, 88; females, 87); in 1931 it was 101 (males, 105; females, 97); in 1941 it was 119 (males, 119; females, 120) and in 1951 it had risen to 126 (males, 129; females, 122). Figures for 1955 show that a further rise has taken place, the rate being 129 (males, 135; females, 124).

(e) *Death Rates, Various Countries.* Death rates from malignant neoplasms per 100,000 of mean population for Australia and for various other countries are as follows:—Portugal, 75; Japan, 83; Spain, 115; Union of South Africa, 125; Australia, 129; Canada, 130; United States of America, 145; New Zealand, 145; France, 178; Switzerland, 190; and United Kingdom, 202. The rates are for the latest available year in each case.

(iv) *Diseases of the Heart (B25 to B28).* The number of deaths classified to diseases of the heart in 1955 was 27,685 (16,382 males and 11,303 females). This class is the largest amongst causes of death, the rate having increased from 102 per 100,000 of mean population in 1911–15 to 301 in 1955. The increase in the number of deaths recorded from heart diseases has been particularly pronounced during the past twenty years. The rapid increase in mortality is partly a reflection of the ageing of the population, but the figures have been influenced mainly by improved diagnosis and certification by medical practitioners.

The death rates for heart diseases for various years from 1921 were as follows:—1921, 93 (males, 102; females, 83); 1931, 159 (males, 178; females, 142); 1941, 269 (males, 306; females, 231); 1951, 314 (males, 367; females, 259); and 1955, 301 (males, 352; females, 249). Deaths from heart diseases in 1955 represented 34 per cent. of the total deaths.

(v) *Puerperal Causes (B40).* It was shown in Official Year Book No. 39, p. 634, that the changes introduced with the Sixth Revision of the International List did not significantly affect the comparability of the total number of deaths from puerperal causes. The death rate from these causes (including criminal abortion) has fallen rapidly during recent years and in 1955 the rate was 0.6 per 1,000 live births, compared with a rate of 6 per 1,000 in 1936. The 133 deaths in 1955 correspond to a death rate of 2.9 per 100,000 females. The death rate may be expressed in other terms by stating that 1 of every 1,544 women giving birth to a live child in 1955 died from puerperal causes; the corresponding ratios for married women were 1 in every 1,614, and for single women 1 in every 768.

The death rate per 1,000 live births from puerperal causes in various countries for the latest available years is as follows:—New Zealand, 0.5; United States of America, 0.6; France, United Kingdom, Canada and Denmark, 0.7; Union of South Africa and Spain, 1.1; Switzerland, 1.2; Portugal, 1.4; and Japan, 1.8.

The total number of children left by the 122 married mothers who died from puerperal causes in 1955 was 341, an average of 2.8 children per mother.

Three of the mothers who died had been married less than one year, 14 between one and two years, and 9 between two and three years. The duration of marriage ranged up to 28 years. Tabulations distinguishing the ages at marriage and at death will be found in *Demography*, Bulletin No. 73, which also includes a table showing in combination the duration of marriage and previous issue.

(vi) *Congenital Malformations and Diseases of Early Infancy (B41 to B44).* This combined group embraces two complete classes of the International List of Causes of Death which relate more specifically to infant deaths and they have already been presented in detail in the section devoted to causes of infant death (see pp. 613 and 614).

(vii) *Accidents, Poisonings and Violence (BE 47 to BE 50).* (a) *General.* Deaths in this class are classified according to external cause and not according to nature of injury. The classification provides sub-groups for accident, including adverse reactions to prophylactic inoculations, therapeutic misadventures and late effects of accidental injury; suicide; homicide and injuries purposely inflicted by other persons; and injury resulting from operations of war, including late effects.

The following table, showing the death rates in the main sub-groups per 100,000 of mean population indicates that the death rate from violence is generally about three times as great for males as for females. It can be seen also that in 1955 the percentage of deaths caused by violence was 7.52, compared with 6.76 in 1931–35.

The low level of the rates and proportions for the years 1941–45 is due largely to the exclusion of deaths of defence personnel from accidents, suicide and homicide, though the

rates have been based on total mean population (including defence personnel). A further contributing factor is the decrease during this period in the number of automobile accidents. From July, 1947, deaths of defence personnel from accidents, etc., have again been included.

ACCIDENTS, POISONINGS AND VIOLENCE : DEATH RATES.(a)

Period.	Death Rate(a) from—												All Violence. Proportion per 10,000 Deaths.		
	Accident.(b)			Suicide.			Homicide.(c)			Total Violence.					
	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.	M.	F.	P.
1931-35..	71	22	47	19	5	12	2	1	2	92	28	61	929	353	676
1936-40..	86	28	58	17	5	11	2	1	1	105	34	70	979	399	724
1941-45..	67	26	46	11	4	8	1	1	1	79	31	55	730	348	558
1946-50..	76	27	51	14	5	10	1	1	1	91	33	62	844	383	640
1951-55..	82	31	57	15	5	10	2	1	1	99	37	68	964	453	740
1951 ..	86	31	59	14	5	10	2	1	1	102	37	70	948	429	721
1952 ..	83	32	57	16	5	11	2	1	2	101	38	70	967	454	742
1953 ..	79	30	56	16	6	11	2	1	1	97	37	68	969	463	746
1954 ..	79	30	55	16	5	11	2	1	1	97	36	67	965	448	737
1955 ..	79	31	56	15	5	10	2	1	1	96	37	67	969	472	752

(a) Number of deaths per 100,000 of mean population. (b) Includes "open verdict".
(c) Includes late effects of injuries due to operations of war.

(b) *Accident (BE 47, BE 48)*. In 1955, the total number of deaths from accidental causes was 5,083 (3,685 males and 1,398 females). Half of the accidental deaths were the result of transport accidents. Of these, the numbers attributable to the major causes, and the percentages of the total accidental deaths in each case, were as follows:—Motor vehicle traffic accidents, 2,084 (41.00 per cent.); motor vehicle non-traffic accidents, 84 (1.65 per cent.); other road vehicle accidents, 132 (2.60 per cent.); railway accidents, 164 (3.22 per cent.); water transport accidents, 60 (1.18 per cent.); aircraft accidents, 41 (0.81 per cent.); a total of 2,565 (50.46 per cent.). Other important causes were accidental falls, 978 (19.24 per cent.); accidental drowning, 444 (8.73 per cent.); and accidents caused by fire and explosion of combustible material, 155 (3.05 per cent.).

(c) *Suicide (BE 49)*. (i) *Modes Adopted*. Deaths from suicide in 1955 numbered 946 (males, 701; females, 245). Firearms and explosives were used in 273 cases (28.86 per cent. of total deaths by suicide). Other important modes adopted, together with the numbers and relevant percentages, were as follows:—Hanging or strangulation, 184 (19.45 per cent.); poisoning by gases, 171 (18.07 per cent.); poisoning other than by gases, 157 (16.60 per cent.); submersion (drowning), 52 (5.50 per cent.); other modes, 109 (11.52 per cent.).

Of the 701 males who committed suicide, 254 (36.23 per cent.) used firearms and explosives. For females the most common mode was poisoning (other than by gases). This was used in 68 cases (27.75 per cent.).

(ii) *Age at Death*. From the following table which shows the age of persons who committed suicide in 1955 it will be seen that both young and extremely old people took their lives during this year.

AGE OF PERSONS WHO COMMITTED SUICIDE : AUSTRALIA, 1955.

Age Groups (Years).	Males.	Females.	Persons.	Age Group (Years).	Males.	Females.	Persons.
10-14 ..	1	..	1	60-64 ..	63	24	87
15-19 ..	19	3	22	65-69 ..	71	13	84
20-24 ..	42	4	46	70-74 ..	45	10	55
25-29 ..	48	15	63	75-79 ..	26	4	30
30-34 ..	59	26	85	80-84 ..	10	2	12
35-39 ..	61	27	88	85-89 ..	3	1	4
40-44 ..	58	25	83	90-94 ..	1	..	1
45-49 ..	67	28	95	Not stated ..	1	..	1
50-54 ..	61	37	98				
55-59 ..	65	26	91	Total Deaths ..	701	245	946

(d) *Homicide and Operations of War (BE 50)*. In 1955, there were 129 deaths from homicide and injury purposely inflicted by other persons (not in war), of which non-accidental poisoning caused 5 deaths, assault by firearms and explosives, 38; assault by cutting and piercing instruments, 25; and assault by other means, 61. Deaths from injury resulting from the operations of war numbered 11, but all were deaths from late effects of such injuries.

12. Age at Death of Deceased Married Males and Females, and Issue.—*Demography*, Bulletin No. 73, contains a number of tables showing, in combination with the issue, the age at marriage, age at death and occupation of married (including widowed or divorced) persons who died in Australia in 1955. Deaths of married males in 1955 numbered 34,167, and of married females, 27,982. The tabulations which follow deal, however, with only 33,679 males and 27,734 females, the information regarding issue in the remaining 736 cases being incomplete. The total number of children in the families of the 33,679 males was 108,262 and of the 27,734 females, 96,136. The average number of children is shown for various age groups in the following table.

AGE AT DEATH AND AVERAGE ISSUE OF DECEASED MARRIED^(a) MALES AND FEMALES : AUSTRALIA.

Age at Death (Years).	Average Issue.									
	Males.					Females.				
	1921.	1931.	1941.	1951.	1955.	1921.	1931.	1941.	1951.	1955.
Under 20 ..	..	0.75	..	0.43	0.40	0.77	0.66	0.79	0.83	0.92
20-24..	0.84	0.81	0.73	0.96	0.67	1.22	1.13	0.95	0.86	1.12
25-29..	1.29	1.33	1.12	1.29	1.42	1.86	1.81	1.45	1.61	1.59
30-34..	2.06	1.79	1.76	1.79	1.90	2.45	2.34	1.91	1.98	1.92
35-39..	2.58	2.13	2.11	2.12	2.07	3.29	2.89	2.30	2.49	2.41
40-44..	3.23	2.77	2.49	2.30	2.30	3.66	3.29	2.77	2.39	2.48
45-49..	3.48	3.10	2.68	2.51	2.40	3.76	3.55	2.93	2.59	2.47
50-54..	3.76	3.46	2.96	2.56	2.42	4.23	3.60	3.29	2.76	2.58
55-59..	4.41	3.69	3.28	2.71	2.60	4.69	4.01	3.55	3.03	2.75
60-64..	4.98	4.02	3.55	3.07	2.85	5.39	4.21	3.79	3.29	3.01
65-69..	5.50	4.41	3.73	3.25	3.17	5.86	4.82	4.01	3.63	3.35
70-74..	6.06	5.06	4.17	3.58	3.34	6.30	5.41	4.29	3.64	3.46
75-79..	6.66	5.65	4.56	3.83	3.58	6.56	6.02	4.85	3.96	3.65
80-84..	6.89	6.17	4.93	4.30	4.00	6.76	6.26	5.39	4.19	3.92
85-89..	7.18	6.59	5.70	4.63	4.28	6.93	6.57	5.85	4.68	4.36
90-94..	7.21	6.94	6.57	5.06	4.69	6.53	6.73	6.11	5.08	4.68
95-99..	6.97	6.69	7.04	5.78	5.18	6.05	7.10	6.34	5.76	4.85
100 and over ..	9.20	7.00	8.69	5.71	5.46	5.11	8.20	6.73	7.72	5.17
Age not stated	5.36	5.00	..	8.00	2.00	5.80	5.00	..	5.50	6.50
All Ages ..	4.97	4.44	3.91	3.39	3.21	5.05	4.72	4.22	3.68	3.47

(a) Includes widowed or divorced.

The figures in the preceding table include the issue both living and dead. The proportion of living to deceased issue, taking males and females together, is six to one. The totals for 1955 are shown in the following table:—

ISSUE OF DECEASED MARRIED^(a) MALES AND FEMALES : AUSTRALIA, 1955.

Issue of Married Males.				Issue of Married Females.			
Issue.	Males.	Females.	Total.	Issue.	Males.	Females.	Total.
Living ..	48,074	47,150	95,224	Living ..	40,345	40,110	80,455
Dead ..	7,732	5,306	13,038	Dead ..	9,303	6,378	15,681
Total ..	55,806	52,456	108,262	Total ..	49,648	46,488	96,136

(a) Includes widowed or divorced.

13. Age at Marriage of Deceased Males and Females, and Issue.—While the table giving the average issue of married males and females naturally shows an increase in the averages with advancing age at death, the following table, which gives the average issue of males and females according to the age at marriage of the deceased parent, shows a corresponding decrease in the averages as the age at marriage advances.

AGE AT MARRIAGE OF DECEASED MALES AND FEMALES, AND AVERAGE ISSUE: AUSTRALIA.

Age at Marriage (Years).	Average Issue.									
	Males.					Females.				
	1921.	1931.	1941.	1951.	1955.	1921.	1931.	1941.	1951.	1955.
Under 15 ..	..	..	..	..	..	7.60	6.36	7.80	4.88	6.60
15-19 ..	6.32	6.15	5.40	4.63	4.63	6.97	6.79	6.10	5.41	5.08
20-24 ..	6.05	5.56	4.89	4.23	3.98	5.50	5.23	4.80	4.28	4.04
25-29 ..	5.17	4.70	4.21	3.65	3.42	4.09	3.79	3.51	3.14	3.03
30-34 ..	4.45	3.96	3.41	3.00	2.89	2.66	2.42	2.35	2.23	2.21
35-39 ..	3.90	3.14	2.80	2.45	2.21	1.61	1.40	1.26	1.16	1.20
40-44 ..	2.67	2.36	2.01	1.69	1.61	0.62	0.39	0.35	0.36	0.38
45-49 ..	2.20	1.96	1.52	1.33	1.20	0.03	0.12	0.01	0.07	0.13
50-54 ..	1.70	1.60	1.05	0.80	0.83	..	..	..	..	..
55-59 ..	1.30	0.95	0.79	0.49	0.48	..	..	..	..	..
60-64 ..	0.33	0.63	0.29	0.24	0.35	..	..	..	..	..
65 and over ..	0.25	0.18	0.01	0.29	0.08	..	..	..	..	..
Age not stated	4.93	3.64	2.95	2.81	2.76	5.41	3.96	2.45	3.17	2.79
All Ages ..	4.97	4.44	3.91	3.39	3.21	5.05	4.72	4.22	3.68	3.47

§ 6. Vital Statistics of External Territories.

Because of the outbreak of hostilities in the Pacific during the 1939-45 War, civil administration in the external territories was suspended on 11th February, 1942, and registration of births, deaths and marriages was not resumed until 1946. The following table for the year 1955 shows the number of births, deaths and marriages registered in the external territories under the control of Australia, namely:—Norfolk Island; Papua; the Trust Territory of New Guinea; the Trust Territory of Nauru; and, as from 23rd November, 1955, the Territory of Cocos (Keeling) Islands. More detailed information will be found in a series of tables in *Demography*, Bulletin No. 73.

VITAL STATISTICS: EXTERNAL TERRITORIES, 1955.

(EXCLUDING INDIGENOUS POPULATION.)

Territory.	Marriages.	Births.			Deaths.		
		Males.	Females.	Persons.	Males.	Females.	Persons.
Norfolk Island	8	11	6	17	6	3	9
Papua	56	86	77	163	25	8	33
Trust Territory of New Guinea	100	162	165	327	43	20	63
Trust Territory of Nauru ..	1	5	6	11	1	..	1
Territory of Cocos (Keeling) Islands .. ..	..	..	1	1	..	..	..

CHAPTER XVIII.

HOUSING.

§ 1. Introduction.

1. **General.** In previous issues of the Official Year Book, certain information relating to the housing of the population was included in various chapters, but for a more convenient presentation of the material this complete chapter, which presents a summary of all available information on the subject, has been substituted in this issue.

In sections 2 and 3, a brief outline is given of government assistance to housing since 1945 and of operations under the War Service Homes Act 1918-1956. Other sections of the chapter are devoted to statistics of new building and to characteristics of dwellings at the Censuses of 1947 and 1954.

2. **Number of Dwellings, Censuses 1911 to 1954.**—At each census, in addition to the questions relating to the personal particulars of the individual members of households, there have been a number of important questions on the Census Schedule designed to elicit information concerning the dwellings in which the population was housed at the date of the census. For the purpose of the census, a "dwelling" is any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term has therefore a very wide reference, and includes, *in addition to houses and flats*, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution.

The following table shows the number of occupied and unoccupied dwellings in Australia at each Census from 1911 to 1954. Occupied dwellings are classified into private and other dwellings: Dwellings other than private include hotels, boarding houses, lodging houses, hostels, hospitals, educational, religious and charitable institutions, defence and penal establishments, etc. The term "unoccupied dwellings" is not synonymous with vacant houses and flats available for occupancy, but refers mainly to "week-end", holiday and other dwellings whose usual occupants were temporarily absent on the night of the Census. Newly-completed dwellings awaiting occupancy are also included.

DWELLINGS : AUSTRALIA, CENSUSES 1911 TO 1954.
(Excluding Dwellings occupied solely by Full-blood Aboriginals.)

Census.	Occupied.			Unoccupied.
	Private.	Other than Private.	Total.	
1911	894,389	29,870	924,259	33,473
1921	1,107,010	46,275	1,153,285	51,166
1933	1,509,671	37,705	1,547,376	68,772
1947	1,873,623	34,272	1,907,895	47,041
1954	2,343,421	36,932	2,380,353	112,594

§ 2. Government Assistance to Housing Since 1945.

1. **Agreements between the Commonwealth and State Governments.**—(i) *The 1945 Agreement.*—In November, 1945, the Commonwealth Government entered into an agreement with the Governments of the States whereby the Commonwealth Government would provide finance for and the State Governments would undertake the building of housing projects. Tasmania withdrew from the Agreement in 1950 and South Australia did not begin to operate under it until 1953. The Agreement expired on 30th June, 1956. Features of the 1945 Commonwealth and State Housing Agreement were :—

- (a) The Commonwealth Government agreed to make advances to each participating State for the construction of housing projects between 3rd December, 1943, and the date of the Agreement, and the amount required for the State's housing projects during a further period of ten years.
- (b) Each advance of money was to be repaid with interest thereon in equal annual instalments within a maximum period of 53 years from the date the advance was made, the interest to be at a rate not exceeding that payable in respect of the latest Commonwealth loan at the date of the advance.

- (c) Rents charged were to be economic rents, i.e., the rents were to be sufficient to meet repayments by the State to the Commonwealth of the capital cost of each dwelling with interest and of current outgoings such as the cost of maintenance, administration, rates and taxes and insurance.
- (d) The rental provisions of the Agreement provided for a system of rental rebates, whose basic principle was that a family with an income at the basic wage level did not need to pay more than one-fifth of its income in rent, regardless of the economic rent of the dwelling.
- (e) The Commonwealth Government was to bear three-fifths, and the State concerned two-fifths, of all losses sustained by the States on an annual basis.

The following table shows the amount of money advanced to each State under the 1945 Agreement :—

1945 COMMONWEALTH AND STATE HOUSING AGREEMENT : ADVANCES TO STATES.
(£'000.)

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Total.
1945-46	2,525	3,100	425	..	460	285	6,795
1946-47	5,530	4,000	750	..	735	..	11,015
1947-48	5,345	5,000	800	..	1,260	900	13,305
1948-49	6,295	5,200	900	..	1,647	450	14,492
1949-50	6,600	6,300	1,250	..	1,965	1,100	17,215
1950-51	7,890	8,600	2,700	..	2,350	100	21,640
1951-52	8,514	10,061	4,489	..	3,483	..	26,547
1952-53	12,100	11,270	3,730	..	2,900	..	30,000
1953-54	12,450	12,000	4,500	4,500	3,750	..	37,200
1954-55	10,800	9,450	1,800	3,600	3,500	..	29,150
1955-56	10,800	10,800	3,000	3,600	5,000	..	33,200
Total	88,849	85,781	24,344	11,700	27,050	2,835	240,559

The number of dwellings erected in each State under the 1945 Agreement is shown in the following table :—

1945 COMMONWEALTH AND STATE HOUSING AGREEMENT : NUMBER OF DWELLINGS^(a) COMPLETED.

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Total.
1945-46	1,589	1,768	224	..	293	154	4,028
1946-47	2,200	1,458	470	..	537	208	4,873
1947-48	2,582	2,231	547	..	849	218	6,427
1948-49	3,440	2,357	573	..	976	184	7,530
1949-50	3,076	2,454	643	..	981	284	7,438
1950-51	3,273	2,699	554	..	1,269	82	7,877
1951-52	3,708	2,970	1,082	..	1,023	..	8,783
1952-53	4,280	3,238	1,635	..	1,111	..	10,264
1953-54	5,109	3,590	1,506	1,006	1,472	..	12,683
1954-55	4,932	3,960	1,382	2,013	2,031	..	14,318
1955-56	3,529	4,152	840	1,865	1,531	..	11,917
Total	37,718	30,877	9,456	4,884	12,073	1,130	96,138

(a) Includes flats.

Initially, houses constructed under the 1945 Commonwealth and State Housing Agreement could be sold to tenants provided the tenant was able to arrange payment of the full purchase price of the house to the State Authority immediately on sale. Under this arrangement sales to tenants were relatively few. In April, 1955, the Commonwealth and the States entered into a supplementary agreement whereby the State Governments were permitted to sell houses to tenants on terms. These were : deposit, 5 per cent. of the first £2,000 and 10 per cent. of the balance of the cost of the house, the maximum amount of the remaining balance being limited to £2,750 and repayment of the balance to be made over a maximum period of 45 years at an interest rate of 4½ per cent. per annum. Tenants eligible under the War Service Homes Act were entitled to purchase houses built under the Agreement on the terms provided in that Act. The number of houses sold under the Agreement is as follows :—

1945 COMMONWEALTH AND STATE HOUSING AGREEMENT : HOUSES SOLD.

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Total.(a)
1947-48 .. ..	..	..	109	..	..	109
1948-49	15	..	63	..	..	78
1949-50	98	6	12	..	115	231
1950-51	122	39	94	..	508	763
1951-52	338	26	86	..	480	930
1952-53	528	13	13	..	309	863
1953-54	403	6	16	1	94	520
1954-55	165	..	26	7	96	294
1955-56	733	1,289	121	275	177	2,595
Total	2,402	1,379	540	283	1,779	6,383

(a) There were no sales in Tasmania.

(ii) *The 1956 Agreement.*—In 1956, the Commonwealth and the States entered into a new agreement under which added emphasis was placed on the construction of homes for private ownership. Features of the new agreement are :—

- (a) The Commonwealth Government will provide finance to the States over a period of five years ending 30th June, 1961, for the erection of housing projects.
- (b) For the first two years of the agreement, 20 per cent. of the money allocated to each State is to be advanced to building societies and other approved institutions for lending to private house builders. In the third and subsequent years of the currency of the agreement this proportion is to be increased to 30 per cent.
- (c) The remaining 80 per cent. (last three years 70 per cent.) of the allocation to each State may be used by the States for the erection of houses for either rental or sale. The States determine the type of houses to be erected, their location and the selection of tenants. They also fix the terms of selling.
- (d) In any one year, the Commonwealth may specify that an amount not exceeding 5 per cent. of the moneys referred to in (c) above be set aside for the erection of houses for serving members of the defence forces nominated by the Commonwealth. The Commonwealth will provide supplementary advances to the States equal to the amounts set aside by them for this purpose.
- (e) Each advance of money and interest thereon is to be repaid in equal annual instalments within a maximum period of 53 years from the date the advance is made. Interest on advances made during the years 1956-57 and 1957-58 shall be the long-term bond rate less (i) three-quarters of one per cent. per annum, if the long-term bond rate does not exceed 4½ per cent. ; and (ii) one per cent. per annum, if the long-term bond rate exceeds 4½ per cent.

Interest on advances made during the years 1958-59 to 1960-61 shall be as agreed between the Commonwealth and the States, or, in default of agreement, as determined by the Treasurer of the Commonwealth, but not exceeding the long-term bond rate less three-quarters of one per cent. per annum.

2. Imported Houses.—With the object of supplementing the number of houses being constructed by the building industry within Australia, the Commonwealth Government in 1950 sponsored a plan to import prefabricated houses from overseas. Under the States Grants (Imported Houses) Act 1950, the Commonwealth undertook to pay a subsidy not exceeding £300 per house to assist approved State Housing Authorities to meet the cost of houses brought to Australia from overseas.

A total of 14,016 houses were imported by State Authorities under this plan. Of these, 7,613 units were erected under the 1945 Commonwealth and State Housing Agreement on behalf of the State Governments themselves, whilst other houses were erected for governmental authorities concerned with public utilities such as the generation of electricity, railways and water supply.

The Commonwealth Government imported 4,176 houses for the Department of Works and the Snowy Mountains Hydro-Electric Authority. Of the 18,192 houses imported, the United Kingdom supplied slightly more than half, with France, Austria and Sweden the next largest suppliers in that order.

Expenditure by the Commonwealth Government on subsidies to the States importing houses under this plan was as follows : New South Wales, £252,000 ; Victoria, £1,645,200 ; Queensland, £703,800 ; South Australia, £1,173,000 ; Western Australia, £419,400 ; Total, £4,193,400. Imports of houses from overseas ceased in January, 1954.

3. Housing Schemes in Commonwealth Territories.—(i) *Australian Capital Territory.*—The Commonwealth Government, through the Department of Works (construction) and the Department of the Interior (management), provides houses primarily for rental to employees of Government organizations and to persons privately employed in the Australian Capital Territory. Since 1st July, 1945, 3,770 houses and flats have been erected by the Government.

Government rental houses may be purchased by tenants and the basis of sale is a minimum deposit of 5 per cent. of the first £2,000 of the purchase price fixed by the Department of the Interior and 10 per cent. of the balance, with a maximum advance by way of mortgage of £2,750. Repayment may be made over a maximum period of 45 years on all types of houses. Interest charged on loans is 4½ per cent. per annum. More than 1,100 houses have been sold to tenants since 1950.

Loans may be granted by the Commissioner for Housing to enable persons to purchase, erect or enlarge houses in the Territory or to discharge mortgages. Where the Commissioner's valuation of the property concerned does not exceed £2,000 the maximum loan may not exceed 95 per cent. of the valuation. If the Commissioner's valuation exceeds £2,000 the maximum loan is 95 per cent. of the first £2,000 and 90 per cent. of the balance (but in no case can the amount lent exceed £2,750). Repayment may be made over a maximum period of 45 years. The current rate of interest is 4½ per cent. per annum. From 1st July, 1949 to 30th June, 1956, 252 loans were granted.

(ii) *Northern Territory.* In 1946, control of all Government-owned residences in the Territory (excluding those belonging to the Defence Services or Commonwealth Railways or attached to post offices) was vested in the Administration. The Administration provides houses for rental for its own and other Commonwealth employees. In 1953, a Housing Scheme was inaugurated under which potential house builders may obtain loans of up to £2,750 for the erection of houses, the purchase or extension of existing houses or to discharge mortgages on houses. Up to 30th September, 1956, 179 loans had been approved. These were for : New houses, 117 ; extensions to existing houses and/or discharge of mortgages, 24 ; purchase of existing houses, 38.

(iii) *Papua and New Guinea.* The Housing Loans Ordinance 1953 permits the advance of loans of up to £2,750 to any member of the community for the purchase, erection or extension of an existing house. The loans are limited to declared township areas and are repayable over a maximum period of 45 years. The effective rate of interest is 4½ per cent. per annum. Up to 30th June, 1956, loans totalling £130,615 had been approved.

4. Other Housing Schemes in the States.—(i) *General.* In each State, the major Government housing schemes operated by the State Housing Authorities are those provided for under the Housing Agreements between the Commonwealth and State Governments referred to earlier. Other State Government assistance to housing is referred to in the following paragraphs.

(ii) *New South Wales.* The principal schemes operating in New South Wales are :—

- (a) *Commission-Financed Advances.* Under the Housing Act 1912–55, the Housing Commission is empowered to provide finance to persons to have houses erected on their own land, to purchase existing dwellings, or to effect improvements or repairs to houses. In respect of advances made under the Act prior to 1952, the maximum amount that could be lent was limited to £1,540, repayment of which could be made over a maximum period of 45 years. Interest charged was at the rate of 4½ per cent. per annum. Under this scheme 779 houses were erected. Regulations prescribing the present maximum amount that may be advanced and the limitation on income which may be received by an applicant for a loan have not been published and at present no advances are being made.
- (b) *Rental Housing (other than Housing Agreement).* Upon request by other State Departments, the Housing Commission will erect houses for employees of those Departments, e.g., Education, Agriculture, Water Conservation, etc. These Departments provide the necessary land and funds needed to finance the erection of the houses. Rentals charged are fixed by the Departments in accordance with the salaries of the officers occupying the houses. The number of houses erected under this scheme is 717.
- (c) *Sales Scheme.* During 1953–54, the Housing Commission began the erection of 100 houses for sale. Under this scheme, the Commission acted as the construction authority whilst administrative arrangements are carried out by the Rural Bank. Houses are sold on the basis of 10 per cent. deposit with repayment of the balance over a maximum period of 40 years. Construction of all houses has been completed.

(iii) *Victoria.* In 1956, a Homes Finance Trust was established with the object of receiving money from institutions and others in order to make loans for the erection or purchase of houses. Applicants for loans must declare that they intend to use the house as a home for themselves, their family and dependants. Except in special circumstances no loan will be granted if the borrower or wife or husband of the borrower already owns a house in Victoria at the date of the proposed mortgage.

Loans granted will be on the basis of a first mortgage over the house. Loans are not to exceed 95 per cent. of the value of the house and will not be made if the value of the house exceeds £4,500. In the case of purchase the house must not have been erected more than two years before the date of the mortgage. Repayment of loans may be made over a maximum period of 30 years, with interest charges determined by the Trust. At 30th June, 1956, 291 loans totalling £772,200 had been made.

(iv) *Queensland.* In this State there are two housing schemes operating—

- (a) Under the State Housing Acts 1949–1955, the Queensland Housing Commission makes advances to eligible applicants on the security of homes to be erected. A person to be eligible must be the proprietor of a suitable building site, must not already own a dwelling and must undertake to use the completed dwelling as a home for himself and family. The present maximum advances allowable under the Acts are £2,400 for a timber-frame building, £2,500 for a brick veneer and £2,750 for a brick or concrete building. The rate of interest at present chargeable on advances is 5½ per cent. per annum. Repayment may be made at the option of the borrower over either a 30-year or a 45-year period. A borrower or purchaser who elects to repay over a 30-year period, who is under 40 years of age, and who has passed a prescribed medical examination, is entitled to free life insurance cover in an amount sufficient to liquidate his indebtedness to the Commission in the event of his death before his loan has been fully repaid, provided that the maximum benefit payable under such insurance cover does not exceed £2,250. The total amount advanced on completed dwellings up to 30th June, 1956, was £15 million. The number of dwellings constructed under these Acts up to 30th June, 1956, was 24,086.
- (b) Workers homes are erected by the Queensland Housing Commission under the Workers' Homes Act 1919–1953. These homes are intended for persons who are not the owners of building sites, and applications are confined to persons with a net annual income for taxation purposes of not more than £800. The Housing Commission builds the home to suit the applicant's needs, on Crown Land, or on land purchased for the purpose, which is then converted to perpetual leasehold tenure. An applicant pays a deposit of

5 per cent. of the selling price of the home and the balance by monthly rent over a term of 30 to 45 years. The rate of interest is 5½ per cent. per annum. The number of houses constructed under this Act up to 30th June, 1956, was 2,343.

(v) *South Australia.* In South Australia, the Housing Trust builds houses for both rental and sale, and in addition administers an Emergency Dwelling Scheme for the South Australian Government. Since July, 1946, 27,060 houses have been erected in both city and country areas by the Trust.

(a) *Rental Houses.* The majority of the Trust's rental houses are of brick or stone construction and are built in pairs in housing groups. The Trust also has a large number of flats for rental, tenancy of which is restricted to married couples and others without young children. Recently a scheme of specially designed flats for pensioners and other elderly persons of limited means was inaugurated. Rents charged for accommodation are generally based on the overall cost of construction, and are likely to vary not only according to the size of the dwelling but also as to date of erection. As at 1st February, 1957, the rents of five-roomed houses (i.e., 3 bedrooms) ranged from £1 17s. 6d. per week for houses of an older type to £3 5s. per week for houses then being completed. Factors taken into consideration when allotting rental houses include date of application, housing need and suitability of tenant. Persons with high incomes are asked to consider purchasing their own homes.

(b) *Sales Scheme.* Houses built under this scheme, which was inaugurated in 1946, are of solid or timber-frame construction. More than 11,000 houses have been completed in both metropolitan and country areas since the scheme began. When houses are sold the usual practice is for the Trust to recover the total cost of the house and land by the purchaser paying the total amount in cash or (as is usually the case) paying a deposit (which varies according to the type of house—at present £300 for a timber-frame house and £600 for a 5-roomed brick house—and the purchaser's ability to pay) and raising the balance by way of mortgage. In cases where the deposit and first mortgage are insufficient, the Trust may advance the balance by way of a second mortgage, the repayment term of which is a maximum of 30 years, interest being at the rate of 5½ per cent. per annum. In 1956, the Trust began the erection of houses, which may be of solid or timber-frame construction or a mixture of both, for individuals on their own land. Houses are built by contract under the Trust's supervision. Prices for building and supervision of the standard houses covered by the scheme in early 1957 ranged from £2,930 for a 2-bedroom brick house to £4,480 for a 6-roomed (2 storey) house.

(c) *Rural Housing.* In order to assist primary producers, the Trust will erect houses on the applicant's own land for his own use or that of his employees, either using local materials or transporting prefabricated houses to the site. In early 1957, prices for houses erected on level sites within 100 miles of Adelaide ranged from £1,875 for a 2-bedroom minimum type timber house to £2,560 for a 3-bedroom, asbestos cement sheeted, timber house.

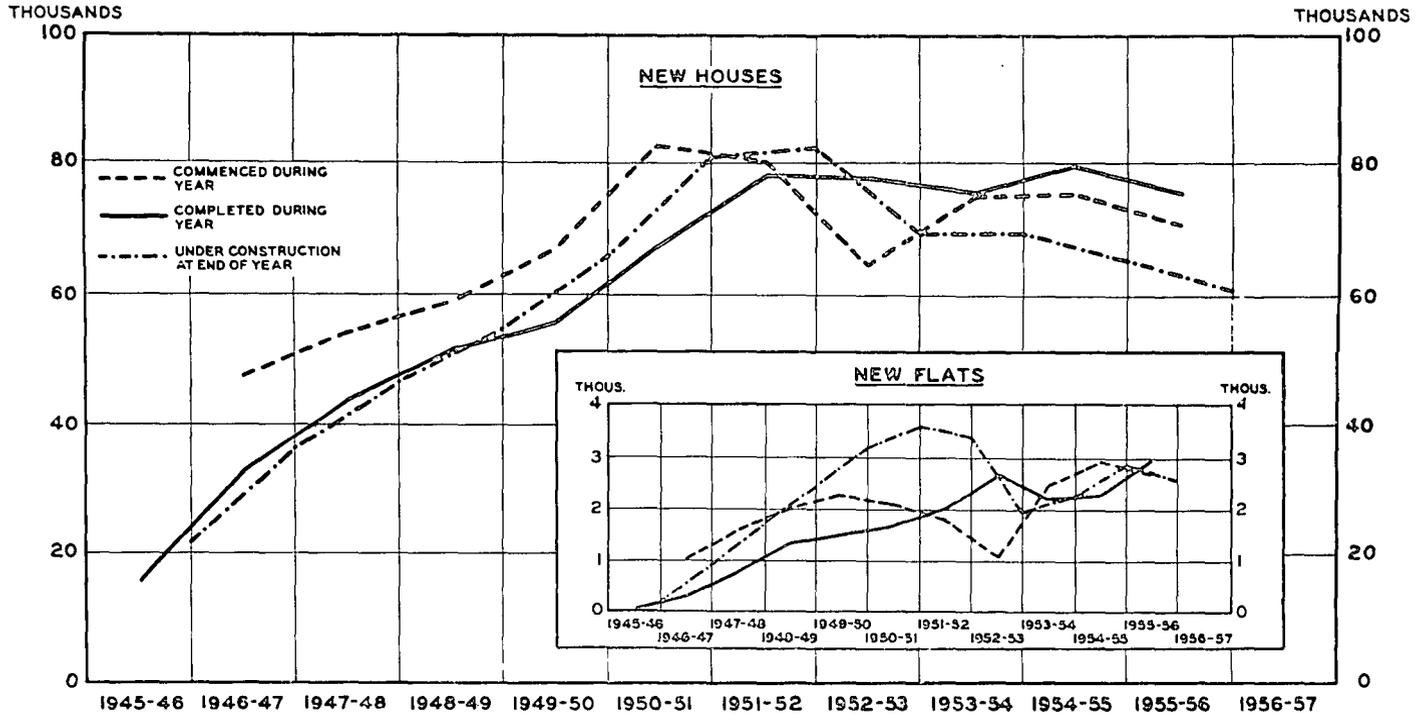
(vi) *Western Australia.* Under the State Housing Act 1946–56 the State Housing Commission has two types of home ownership schemes in operation. These are—(a) Freehold scheme on a mortgage basis; and (b) leasehold scheme on a contract of sale basis.

Under both schemes, the Housing Commission builds the houses on a contract basis—with the freehold scheme on land owned by the applicant; with the leasehold scheme on land owned by the Commission. With each scheme, the maximum loan granted is £2,500. Under the mortgage scheme, a deposit of not less than 10 per cent. is required, but with the contract of sale scheme a deposit of less than 10 per cent. may be accepted at the discretion of the Commission. The rate of interest chargeable in both cases is, at present, 5½ per cent. per annum. The repayment of the balance may be made over a maximum period of 45 years. An applicant's gross income is at present not to exceed £1,058 per annum plus £25 per year for each dependent child.

A second mortgage scheme also exists. This provides a maximum loan of £1,000 under the same conditions as above. The loan on a second mortgage, however, must not exceed the amount advanced under the first mortgage. The applicant has still to provide at least 10 per cent. of the cost of the house, which is not to exceed £3,000.

NEW HOUSES AND FLATS: AUSTRALIA

1945-46 TO 1955-56



The number of houses completed under the above Act up to 31st December, 1956, was—leasehold 2,575, freehold 345.

(vii) *Tasmania.* The Agricultural Bank is authorized under the terms of the Homes Act 1935 to make loans to eligible persons for home building on the security of a first mortgage over the property. A person to be eligible must be married or be about to marry or have dependants for whom it is necessary to provide a home. At present, there are no statutory limitations as to the maximum income which an eligible applicant may receive. However, it is the policy of the Bank not to make loans to persons who are well able to provide houses for themselves. The maximum amount which the Bank can loan at present is £3,300 on homes built in proclaimed brick areas, and £3,000 on timber houses. The rate of interest at present charged is 5½ per cent. per annum. As funds now coming to the Bank for the purposes of the Homes Act are provided under the 1956 Housing Agreement, the period of repayment is limited to 31 years.

5. War Service Homes.—The provision of War Service Homes is a function of the War Service Homes Division of the Department of National Development, and the administration of the War Service Homes Act is under the control of the Director of War Service Homes.

The War Service Homes Act 1918–1956 is a measure for the provision of homes for Australian ex-servicemen who served during the 1914–1918 War or the 1939–1945 War and, subject to the statutory provisions of the Act, to persons allotted for service in Korea or Malaya. Provision is made also for assistance to the female dependants of Australian ex-servicemen and other classes of eligible persons as defined in the Act. Assistance may be granted to an eligible person and the wife or husband of that person, as the case may be, as joint tenants.

The maximum amount of loan or advance which may be granted under the Act is £2,750. The period of repayment may be approved up to 45 years. In the case of a widow or widowed mother of an Australian ex-serviceman the period may be extended to a maximum of 50 years.

The War Service Homes Division does not provide homes for occupation on a purely tenancy basis.

From the inception of operations under the War Service Homes Act to 30th June, 1956, (figures in parentheses indicate cases where eligibility has been established as a result of service during the 1939–45 War or in Korea or Malaya), 158,435 (108,004) applications were approved; 60,775 (37,886) homes were built, or assistance to build them was given; 62,814 (47,391) homes were purchased; and 16,726 (13,205) mortgages were discharged. The total number of homes provided under the War Service Homes Act to 30th June, 1956, was 140,315, including 98,482 to persons who served during the 1939–45 War or in Korea or Malaya. In addition, the Division had approved 13,256 transfers and resales, of which 4,794 were in respect of persons whose eligibility had been established as a result of service during the 1939–45 War or in Korea or Malaya. Applications approved under the Commonwealth–State Housing Supplemental Agreement numbered 581 (562) and homes purchased 426 (411).

During 1955–56, 10,575 (10,019) applications were approved; 5,777 (5,587) homes were built or assistance to build them was given; 4,802 (4,520) homes were purchased; and 1,224 (1,180) mortgages were discharged. The total number of homes provided during the financial year 1955–56 was 11,803 (11,287). Transfers and resales approved numbered 1,298 (1,180). Applications approved under the Commonwealth–State Housing Supplemental Agreement numbered 569 (550) and homes purchased 423 (408).

At 30th June, 1956, 2,114 homes, including 131 group homes, were in course of construction; 748 contracts, of which 90 were for group homes, had been let but work had not started; and 681 tenders, including 32 for group homes, had been called but not finally dealt with. The majority of these homes are being provided for persons who served during the 1939–45 War.

The total capital expenditure from inception to 30th June, 1956, was £229,486,549, including £30,066,780 for 1955–56. Receipts from inception to 30th June, 1956, amounted to £94,953,981, including £11,960,509 during 1955–56. Of the total receipts, £49,067,452 had been paid to the National Debt Sinking Fund, including £5,864,437 for 1955–56.

At 30th June, 1956, the total amount of insurances in force, including cover notes, amounted to £273,008,103. During 1955–56, the premium income amounted to £203,692, and expenditure from the War Service Homes Insurance Trust Account to £188,027.

At 30th June, 1956, arrears of instalments outstanding amounted to £320,118, or 0.35 per cent. of the total instalments due.

6. **Other Forms of Government Assistance.**—(i) *General.* In addition to the assistance given to housing as outlined above, the Commonwealth and State Governments, through advances by Government Banks and the exercise of certain guarantees of the operations of private Co-operative Terminating Building Societies, further assist in making finance available for the erection and purchase of houses.

(ii) *Government Banks.* The terms and conditions governing the making of advances may be altered from time to time; consequently no attempt has been made to tabulate them. However, the usual loan for a house of solid construction (brick, etc.) is generally between £1,750 and £2,500. The average loan for a timber-frame house is £1,500. Interest rates charged average 5½ per cent. per annum. In some institutions this may be changed, usually after from 5 years to 10 years from the date of the loan. The maximum period of repayment ranges from about 20 years for timber-frame houses to 30 to 40 years for a house of solid construction.

(iii) *Building Societies.* The Co-operative Terminating Building Society movement in New South Wales and Victoria derives its strength from State legislation, under which the Governments of those States guarantee loans made to the societies by lending institutions and indemnify the societies against losses arising directly from that portion of loans made to members which exceeds 80 per cent. of the valuation of the property which is the security for the loan.

In States other than New South Wales and Victoria, there are at present no active Co-operative Terminating Building Societies, but Permanent and Starr-Bowkett Societies operate in each State under State legislation. The State Governments do not guarantee the borrowings of these societies, and the relevant Act in each State places strict limits on their borrowing powers.

§ 3. Statistical Summary—New Building.

1. *General.*—The statistics in this section relate to the operations of private contractors, Government authorities and owner-builders, with the exception of those relating to employment, which exclude the numbers of persons working on owner-built houses. In general, they relate to *new* building only, and data on alterations, additions, renovations and repairs to buildings are excluded, because of the difficulty in obtaining complete lists of persons who engage in these operations. Figures for houses exclude converted military huts, flats and shop dwellings. Some houses built on farms are excluded but these do not affect the figures materially.

These statistics are available for each quarter from the September quarter, 1945.

More detailed information on building activity may be found in the *Quarterly Bulletin of Building Statistics*.

The following definitions of terms used in this section are necessary for interpretation of the data presented:—

Owner-Built. An "owner-built" house is one actually erected or being erected by the owner or under the owner's direction without the services of a contractor who is responsible for the whole job.

Contract-Built. Includes the operations of all building contractors and Government instrumentalities which undertake the erection of new buildings.

Commenced. A building is regarded as having been commenced when work on foundations has begun. Owing to the difficulty of defining the exact point that this represents in building operations, it is probable that the classifications made by informants are not entirely uniform.

Completed. A building is regarded as having been completed when the contractor has fulfilled the terms of the contract. As with commencements, the classifications made may not be entirely uniform.

Under Construction. A building under construction at the end of a period is so classified regardless of whether construction was actively proceeding on that particular date. The figures for houses appearing under this heading in respect of New South Wales relate to buildings "remaining uncompleted".

Employment. Figures relate to persons actually working on the jobs of contractors who undertake the erection of new buildings and of Government instrumentalities which erect new buildings on their own account. They include persons actually engaged on alterations, additions, repairs and maintenance when these jobs are undertaken by such contractors and instrumentalities. The figures include working principals and their employees, men working as or for sub-contractors, and men temporarily laid off on account of weather.

Contractors are asked to give details of the persons employed *on a specified day* but, because of frequent movement between jobs and because some persons (such as electricians, etc.) may work on several jobs which are under construction simultaneously, some duplication may occur.

The figures *exclude* persons working on owner-built houses, and employees of builders who undertake only alterations, additions, repairs and maintenance.

Values. All values shown exclude the value of land and represent the estimated value of buildings on completion.

2. **New Houses.**—(i) *Commenced, Completed and Under Construction, 1948–49 to 1955–56.* The next table provides a summary of the number of new houses commenced, completed and under construction in each State and Territory for the years 1948–49 to 1955–56.

NEW HOUSES : NUMBER.

(Including Owner-built Houses.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T. (a)	A.C.T.	Aust. (b)
COMMENCED.									
1948–49	.. c 21,291	16,487	9,361	4,561	3,843	2,849	(d)	534	c 58,926
1949–50	.. c 22,055	19,643	10,009	6,109	5,031	3,664	(d)	389	c 66,900
1950–51	.. c 25,162	26,949	10,698	7,966	6,970	4,122	(d)	877	c 82,744
1951–52	.. c 24,364	23,506	11,995	8,510	7,730	3,584	(d)	312	80,001
1952–53	.. 21,030	16,254	9,381	7,967	7,012	2,285	(d)	528	64,457
1953–54	.. 28,395	20,915	8,513	6,792	7,608	2,665	(d)	355	75,243
1954–55	.. 25,502	22,674	7,784	7,190	8,575	2,867	249	640	75,481
1955–56	.. 24,437	21,245	7,173	8,377	6,336	2,490	341	499	70,898
COMPLETED.									
1948–49	.. c 17,864	14,278	9,354	3,989	3,244	2,287	(d)	323	c 51,339
1949–50	.. c 18,766	15,611	9,447	4,904	3,509	2,852	(d)	404	c 55,493
1950–51	.. c 19,771	21,194	10,275	6,725	5,160	3,914	(d)	574	c 67,613
1951–52	.. 23,351	24,088	11,803	7,711	6,577	3,999	(d)	584	78,113
1952–53	.. 24,890	21,241	10,598	8,940	7,965	3,314	(d)	590	77,538
1953–54	.. 26,513	21,593	8,961	7,522	7,627	2,630	(d)	552	75,398
1954–55	.. 28,882	23,839	7,925	7,323	8,792	2,480	199	398	79,838
1955–56	.. 26,369	22,652	7,396	7,721	7,760	2,721	312	605	75,536

UNDER CONSTRUCTION AT END OF YEAR.

	(c)						(d)		(c)
1948–49	.. 23,113	17,521	3,958	3,940	2,439	2,575	(d)	696	54,242
1949–50	.. 26,402	21,553	4,520	5,241	3,957	3,357	(d)	678	65,708
1950–51	.. 31,793	27,308	4,943	6,529	5,764	3,558	(d)	981	80,876
1951–52	.. 32,806	26,726	5,135	7,395	6,917	3,143	(d)	708	82,830
1952–53	.. 28,946	21,675	3,918	6,464	5,951	2,114	(d)	646	69,714
1953–54	.. 30,828	20,995	3,470	5,750	5,932	2,149	(d)	449	69,573
1954–55	.. 27,448	19,827	3,329	5,602	5,715	2,536	211	691	65,359
1955–56	.. 25,116	18,399	3,106	6,252	4,284	2,305	200	585	60,687

(a) Includes flats.

(b) Excludes Northern Territory prior to 1954–55.

(c) Partly estimated.

(d) Not available.

(ii) *Commenced, 1948-49 to 1955-56.* The number of new houses commenced in each State and Territory by contractors and owner-builders is shown in the following table for the years 1948-49 to 1955-56.

NEW HOUSES COMMENCED : NUMBER.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust. (b)
CONTRACT-BUILT.(c)									
1948-49 ..	(d)	11,790	6,719	3,841	2,855	1,683	(d)	518	(d)
1949-50 ..	(d)	12,400	7,238	4,905	3,262	2,224	(d)	366	(d)
1950-51 ..	(d)	15,629	7,530	6,191	4,108	2,363	(d)	859	(d)
1951-52 ..	11,943	12,964	8,335	6,815	4,183	2,012	(d)	291	46,343
1952-53 ..	9,896	9,704	7,237	6,422	3,913	1,288	(d)	483	38,943
1953-54 ..	16,105	12,756	6,625	5,017	4,557	1,477	(d)	332	46,869
1954-55 ..	15,049	14,543	6,075	5,386	5,764	1,636	221	600	49,274
1955-56 ..	13,812	13,154	5,469	6,303	4,489	1,342	283	410	45,262
OWNER-BUILT.									
1948-49 ..	(d)	4,697	2,642	720	988	1,166	(d)	16	(d)
1949-50 ..	(d)	7,243	2,771	1,204	1,769	1,440	(d)	23	(d)
1950-51 ..	(d)	11,320	3,168	1,775	2,862	1,759	(d)	18	(d)
1951-52 ..	12,421	10,542	3,660	1,695	3,547	1,572	(d)	21	33,458
1952-53 ..	11,134	6,550	2,144	1,545	3,099	997	(d)	45	25,514
1953-54 ..	12,290	8,159	1,888	1,775	3,051	1,188	(d)	23	28,374
1954-55 ..	10,453	8,131	1,709	1,804	2,811	1,231	28	40	26,207
1955-56 ..	10,625	8,091	1,704	2,074	1,847	1,148	58	89	25,636
TOTAL.									
1948-49 ..	e 21,291	16,487	9,361	4,561	3,843	2,849	(d)	534	e 58,926
1949-50 ..	e 22,055	19,643	10,009	6,109	5,031	3,664	(d)	389	e 66,900
1950-51 ..	e 25,162	26,949	10,698	7,966	6,970	4,122	(d)	877	e 82,744
1951-52 ..	24,364	23,506	11,995	8,510	7,730	3,584	(d)	312	80,001
1952-53 ..	21,030	16,254	9,381	7,967	7,012	2,285	(d)	528	64,457
1953-54 ..	28,395	20,915	8,513	6,792	7,608	2,665	(d)	355	75,243
1954-55 ..	25,502	22,674	7,784	7,190	8,575	2,867	249	640	75,481
1955-56 ..	24,437	21,245	7,173	8,377	6,336	2,490	341	499	70,898

(a) Includes flats. (b) Excludes Northern Territory prior to 1954-55. (c) Includes operations of Government Authorities. (d) Not available. (e) Partly estimated.

(iii) *Completed, 1948-49 to 1955-56.* The following table shows, for the years 1948-49 to 1955-56, the number of new houses completed in each State and Territory by contractors and owner-builders.

NEW HOUSES COMPLETED: NUMBER.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust. (b)
CONTRACT-BUILT(c).									
1948-49 ..	(d)	11,379	6,713	3,402	2,534	1,563	(d)	313	(d)
1949-50 ..	(d)	12,326	6,807	4,190	2,591	1,919	(d)	402	(d)
1950-51 ..	(d)	15,210	7,423	5,656	3,461	2,501	(d)	560	(d)
1951-52 ..	14,987	15,849	8,056	6,117	4,208	2,342	(d)	566	52,125
1952-53 ..	13,151	12,619	7,763	7,179	4,932	1,829	(d)	568	48,041
1953-54 ..	14,296	12,062	7,149	5,802	4,569	1,536	(d)	530	45,944
1954-55 ..	16,658	14,450	6,419	5,672	5,766	1,504	174	369	51,012
1955-56 ..	15,085	14,390	5,806	5,951	5,370	1,559	259	575	48,995
OWNER-BUILT.									
1948-49 ..	(d)	2,899	2,641	587	710	724	(d)	10	(d)
1949-50 ..	(d)	3,285	2,640	714	918	933	(d)	2	(d)
1950-51 ..	(d)	5,984	2,852	1,069	1,699	1,413	(d)	14	(d)
1951-52 ..	8,364	8,239	3,747	1,594	2,369	1,657	(d)	18	25,988
1952-53 ..	11,739	8,622	2,835	1,761	3,033	1,485	(d)	22	29,497
1953-54 ..	12,217	9,531	1,812	1,720	3,058	1,094	(d)	22	29,454
1954-55 ..	12,224	9,389	1,506	1,651	3,026	976	25	29	28,826
1955-56 ..	11,284	8,262	1,590	1,770	2,390	1,162	53	30	26,541

For footnotes see next page.

NEW HOUSES COMPLETED: NUMBER—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust. (b)
TOTAL.									
1948-49	(e)17,864	14,278	9,354	3,989	3,244	2,287	(d)	323	(e)51,339
1949-50	(e)18,766	15,611	9,447	4,904	3,509	2,852	(d)	404	(e)55,493
1950-51	(e)19,771	21,194	10,275	6,725	5,160	3,914	(d)	574	(e)67,613
1951-52	23,351	24,088	11,803	7,711	6,577	3,999	(d)	584	78,113
1952-53	24,890	21,241	10,598	8,940	7,965	3,314	(d)	590	77,538
1953-54	26,513	21,593	8,961	7,522	7,627	2,630	(d)	552	75,398
1954-55	28,882	23,839	7,925	7,323	8,792	2,480	199	398	79,838
1955-56	26,369	22,652	7,396	7,721	7,760	2,721	312	605	75,536

(a) Includes flats. (b) Excludes Northern Territory prior to 1954-55. (c) Includes operations of Government Authorities. (d) Not available. (e) Partly estimated.

(b) *Material of Outer Walls, 1955-56.* The following table shows the number of new houses completed in each State and Territory during 1955-56, classified according to the material of their outer walls.

NEW HOUSES COMPLETED : NUMBER, 1955-56.

(Including Owner-built Houses.)

Material of Outer Walls.	N.S.W.	Vic.	Q'ld.	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust.
Brick, Brick Veneer, Concrete and Stone ..	5,350	6,938	653	6,200	3,262	685	41	394	23,523
Wood (Weatherboard, etc.) ..	7,582	13,983	5,391	131	152	1,934	7	209	29,389
Fibro Cement ..	13,399	1,333	1,263	1,373	4,338	102	261	2	22,071
Other ..	38	398	89	17	8	..	3	..	553
Total ..	26,369	22,652	7,396	7,721	7,760	2,721	312	605	75,536

(a) Includes flats.

(c) *Material of Outer Walls, 1948-49 to 1955-56.* The following table shows the number of new houses completed in Australia during each of the years 1948-49 to 1955-56, classified according to the material of their outer walls.

NEW HOUSES COMPLETED : NUMBER, AUSTRALIA.(a)

(Including Owner-built Houses.)

Material of Outer Walls.	1948-49. (b)	1949-50. (b)	1950-51. (b)	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Brick, Brick Veneer, Concrete and Stone ..	19,973	19,996	21,498	23,450	23,865	22,008	23,901	23,523
Wood (Weatherboard, etc.) ..	16,295	19,917	27,595	33,905	32,140	31,347	31,050	29,389
Fibro Cement ..	14,504	14,848	17,847	19,976	20,700	21,631	24,501	22,071
Other ..	567	732	673	782	833	412	386	553
Total ..	51,339	55,493	67,613	78,113	77,538	75,398	79,838	75,536

(a) Excludes Northern Territory prior to 1954-55. (b) Partly estimated.

3. *New Flats.*—The figures in the foregoing tables, except those for the Northern Territory, do not include particulars of new flats. The summary below shows the number of new flats commenced, completed and under construction in each State and Territory for the years 1948-49 to 1955-56. It should be noted: (i) that the figures are additional to the numbers of houses shown in other tables, (ii) that each flat is counted as a separate unit, and the numbers shown therefore relate to individual flats, and (iii) that new flats only are included, i.e., the conversions of old buildings into flats are omitted.

NEW FLATS : NUMBER.
(Individual Flats.)

Year.	N.S.W.	Vic.	Q'land	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
COMMENCED.									
1948-49	1,302	505	19	..	17	34	(a)	144	2,021
1949-50	1,487	328	38	..	399	16	(a)	24	2,292
1950-51	1,320	509	22	52	174	19	(a)	..	2,096
1951-52	1,055	432	38	60	200	16	(a)	10	1,811
1952-53	291	490	101	2	168	3	(a)	..	1,055
1953-54	801	746	204	158	451	58	(a)	28	2,446
1954-55	782	1,183	278	72	380	85	(b)	130	2,910
1955-56	879	715	215	131	353	34	(b)	326	2,653
COMPLETED.									
1948-49	894	368	32	6	..	25	(a)	20	1,345
1949-50	1,075	246	16	..	101	24	(a)	32	1,494
1950-51	966	333	26	..	305	18	(a)	36	1,684
1951-52	1,225	416	29	..	215	21	(a)	100	2,006
1952-53	1,664	692	53	58	100	14	(a)	46	2,627
1953-54	1,011	689	156	99	212	13	(a)	..	2,180
1954-55	701	781	309	105	316	48	(b)	12	2,272
1955-56	776	1,273	200	86	584	49	(b)	..	2,968
UNDER CONSTRUCTION AT END OF YEAR.									
1948-49	1,549	643	..	..	17	27	(a)	180	2,416
1949-50	1,961	725	22	..	313	17	(a)	172	3,210
1950-51	2,315	901	18	52	182	17	(a)	136	3,621
1951-52	2,145	917	27	112	167	12	(a)	46	3,426
1952-53	891	721	75	56	235	1	(a)	..	1,979
1953-54	678	771	123	115	474	46	(a)	28	2,235
1954-55	739	1,173	92	82	538	85	(b)	146	2,855
1955-56	830	615	107	121	312	70	(b)	472	2,527

(a) Not available.

(b) Not available for publication. Included with houses.

4. Value of New Buildings.—(i) *Commenced, Completed and Under Construction, 1948-49 to 1955-56.* The following table summarizes the values of all new buildings commenced, completed and under construction in each State and Territory for the years 1948-49 to 1955-56.

NEW BUILDINGS : VALUE.
(Including Estimated Value of Owner-built Houses.)
(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust. (a)
COMMENCED.									
1948-49	545,154	37,935	13,192	7,599	5,825	5,371	(c)	1,792	b 116,868
1949-50	51,277	44,218	16,994	11,301	8,459	8,379	(c)	1,492	b 142,120
1950-51	79,750	74,750	21,082	17,827	14,186	10,336	(c)	2,439	b 220,370
1951-52	83,460	78,740	27,605	22,606	18,724	11,004	(c)	2,559	244,698
1952-53	71,005	60,244	25,680	25,819	20,919	6,611	(c)	2,788	213,066
1953-54	111,097	87,733	27,839	25,649	26,369	9,224	(c)	2,856	290,767
1954-55	124,420	101,995	32,073	29,946	35,458	10,836	1,605	5,932	342,265
1955-56	135,800	121,570	35,024	43,202	26,972	9,889	2,300	4,708	379,465
COMPLETED.									
1948-49	33,737	27,357	12,199	6,483	4,707	3,810	(c)	757	b 89,050
1949-50	40,920	34,684	13,953	9,074	5,352	5,342	(c)	1,462	b 110,787
1950-51	49,466	52,140	17,286	12,042	8,948	8,403	(c)	1,717	b 150,002
1951-52	76,207	68,925	25,339	18,123	14,426	10,511	(c)	2,723	216,254
1952-53	98,049	76,593	26,233	25,882	22,918	10,665	(c)	2,875	263,215
1953-54	101,545	85,250	25,913	26,108	25,785	9,692	(c)	3,878	278,171
1954-55	110,694	97,886	28,318	27,081	34,096	10,649	1,653	2,943	313,320
1955-56	124,138	110,932	30,519	33,717	33,678	12,798	1,935	4,287	352,004

For footnotes see next page.

NEW BUILDINGS : VALUE—*continued.*

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust. (a)
UNDER CONSTRUCTION AT END OF YEAR.									
1948-49	(b) 59,172	44,267	8,479	7,735	6,416	5,872	(c)	4,026	135,967
1949-50	75,006	56,096	11,805	10,519	10,022	8,989	(c)	4,396	176,833
1950-51	102,708	84,976	15,653	17,272	15,942	12,178	(c)	5,302	254,031
1951-52	125,674	102,278	18,728	23,813	22,302	13,770	(c)	6,208	312,773
1952-53	105,261	93,139	17,838	25,253	23,189	10,494	(c)	7,161	282,335
1953-54	120,460	99,372	19,699	23,730	25,701	11,782	(c)	7,249	307,993
1954-55	136,522	106,196	23,446	26,854	29,102	12,399	1,573	10,643	346,735
1955-56	157,617	123,445	28,210	36,996	25,550	9,864	1,967	11,240	394,889

(a) Excludes Northern Territory prior to 1954-55.

(b) Partly estimated.

(c) Not available.

(ii) *Completed, 1955-56.* The following table shows the value of all new buildings completed in each State and Territory during 1955-56, according to the kind of building. It should be remembered that all values shown exclude the value of land and represent the estimated value of buildings on completion.

NEW BUILDINGS COMPLETED : VALUE, 1955-56.

(Including Estimated Value of Owner-built Houses.)

(£'000.)

Kind of Building.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Houses—									
Brick, Brick Veneer, Concrete and Stone	22,980	25,692	2,112	19,456	11,768	2,378	155	1,795	86,336
Wood (Weatherboard, etc.)	22,160	38,711	13,058	389	438	(a)	48	(a)	80,473
Fibro Cement	31,349	2,728	2,200	3,399	10,318	(a)	1,031	(a)	51,184
Other	96	1,077	204	37	18	..	11	..	1,443
<i>Total, Houses</i>	<i>76,585</i>	<i>68,208</i>	<i>17,574</i>	<i>23,281</i>	<i>22,542</i>	<i>7,391</i>	<i>1,245</i>	<i>2,610</i>	<i>219,436</i>
Flats	1,666	3,152	350	194	1,282	178	(b)	..	6,822
Hotels, Guest Houses, etc.	3,424	1,523	651	438	70	73	21	122	6,322
Shops	4,565	3,850	1,255	911	985	407	128	360	12,461
Factories	9,448	17,652	1,456	4,489	1,878	2,191	60	72	37,246
Business Premises—									
Office	4,206	2,410	877	409	421	142	111	268	8,844
Other	4,124	2,781	3,412	1,707	1,314	588	27	86	14,039
Educational	6,297	4,553	1,391	1,029	1,081	1,071	55	200	15,677
Religious	1,013	701	269	125	196	42	(a)	(a)	2,409
Health	3,548	2,014	2,143	366	1,799	116	(a)	(a)	10,068
Entertainment and Recreation	1,823	879	343	171	532	174	80	66	4,068
Miscellaneous	7,439	3,209	798	597	1,578	425	172	394	14,612
<i>Total, Other Buildings</i>	<i>47,553</i>	<i>42,724</i>	<i>12,945</i>	<i>10,436</i>	<i>11,136</i>	<i>5,407</i>	<i>690</i>	<i>1,677</i>	<i>132,568</i>
Total, New Buildings	124,138	110,932	30,519	33,717	33,678	12,798	1,935	4,287	352,004

(a) Not available for publication.

(b) Included with houses.

(iii) *Completed, 1948-49 to 1955-56.* The following table shows the value of all new buildings completed in Australia for the years 1948-49 to 1955-56.

NEW BUILDINGS COMPLETED: VALUE.
(Including Estimated Value of Owner-built Houses.)
(£'000.)

Kind of Building.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Houses—								
Brick, Brick Veneer, Concrete and Stone Wood (Weatherboard, etc.)	(a)35,523	(a)40,480	(a)50,065	66,138	75,139	73,304	82,917	86,336
Fibro Cement	(a)19,918	(a)28,609	(a)47,839	70,147	73,341	75,187	79,100	80,473
Other	(a)17,234	(a)19,687	(a)26,113	34,970	39,896	44,813	54,141	51,184
	(a) 649	(a) 1,006	(a) 951	1,496	2,165	1,020	1,013	1,443
Total, Houses	(a)73,324	(a)89,782	a 124,968	172,751	190,541	194,324	217,171	219,436
Flats	2,102	2,588	2,849	4,297	6,636	4,791	4,856	6,822
Hotels, Guest Houses, etc.	472	961	561	678	1,213	1,989	3,675	6,322
Shops	956	1,457	2,045	2,968	4,406	8,297	10,694	12,461
Factories	5,098	6,444	6,444	9,813	19,788	22,018	23,613	37,246
Business Premises—								
Office								8,844
Other								14,039
Educational								15,677
Religious	7,098	9,555	13,135	25,747	40,631	46,752	53,311	2,409
Health								10,068
Entertainment and Recrea- tion								4,068
Miscellaneous								14,612
Total, Other Buildings	15,726	21,005	25,034	43,503	72,674	83,847	96,149	132,568
Total, New Buildings	(a)89,050	a 110,787	a 150,002	216,254	263,215	278,171	313,320	352,004

(a) Partly estimated.

5. **Persons engaged in New Building.**—(i) *At 29th June, 1956.* The following table shows, for each State and Territory, the numbers of tradesmen, contractors, sub-contractors and wage earners engaged on jobs *carried out by builders of new buildings* at 29th June, 1956.

**PERSONS ENGAGED ON JOBS CARRIED OUT BY BUILDERS OF NEW
BUILDINGS, 29th JUNE, 1956.**
(Excluding Persons working on Owner-built Houses.)

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Carpenters	15,267	13,489	9,364	3,504	3,199	2,172	212	595	47,802
Bricklayers	3,431	2,643	1,006	1,731	872	273	29	150	10,135
Painters	2,995	2,877	1,608	971	799	408	35	221	9,914
Electricians	2,183	1,192	899	454	376	186	37	101	5,428
Plumbers	3,554	2,326	1,360	842	743	283	46	134	9,288
Builders' Labourers	8,042	6,045	3,433	2,076	1,756	879	65	328	22,624
Other	5,306	3,734	1,757	1,680	1,335	419	40	428	14,699
Contractors (a)	3,429	2,617	2,185	790	616	435	45	90	10,207
Sub-contractors (a)	5,405	4,039	1,632	1,736	1,189	553	70	175	14,799
Wage earners	31,944	25,650	15,610	8,732	7,275	3,632	349	1,692	94,884
Total	40,778	32,306	19,427	11,258	9,080	4,620	464	1,957	119,890

(a) Actually working on jobs.

(ii) *Summary, 1949 to 1956.* The number of persons (including contractors and sub-contractors actually working on jobs) engaged in each State and Territory on jobs *carried out by builders of new buildings* is shown in the following table for each year from 1949 to 1956.

PERSONS ENGAGED ON JOBS CARRIED OUT BY BUILDERS OF NEW BUILDINGS.

(Excluding Persons working on Owner-built Houses.)

At 30th June—	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.(a)
1949 ..	41,982	28,442	14,030	7,727	6,220	4,920	(b)	1,389	104,710
1950 ..	42,393	31,684	15,643	8,743	6,908	5,700	(b)	2,022	113,093
1951 ..	45,470	34,420	16,623	10,168	7,985	6,700	(b)	2,075	123,441
1952 ..	39,779	31,653	17,037	10,371	8,654	5,267	(b)	2,229	114,990
1953 ..	31,790	26,564	16,074	9,371	8,820	5,180	(b)	1,812	99,611
1954 ..	36,600	28,476	17,269	10,038	9,245	4,826	(b)	1,341	107,795
1955 ..	38,209	32,396	18,655	10,876	10,437	5,904	425	1,913	118,815
1956 (c) ..	40,778	32,306	19,427	11,258	9,080	4,620	464	1,957	119,890

(a) Excludes Northern Territory prior to 1955.

(b) Not available.

(c) At 29th June.

§ 4. Census Dwellings.

1. **Number of Dwellings.**—The following table shows the number of occupied and unoccupied dwellings in the urban and rural areas of Australia at the Census of 30th June, 1954. (For definitions of "urban" and "rural" see para. 4, p. 545). As explained therein, the boundaries of the Metropolitan Urban and other divisions of State differ from census to census, and consequently accurate comparison cannot be made between figures for corresponding divisions. Moreover, the inclusion in the Other Urban Division in 1954 of the larger towns not separately incorporated has further reduced comparability. These factors should be borne in mind when referring to tables in this section showing divisions of State.

Occupied dwellings are classified into private and other dwellings (see para. 2, p. 644, for definitions of "private" and "other" dwellings). The term "unoccupied dwellings" is not synonymous with vacant houses and flats available for occupancy, but refers mainly to "week-end", holiday and other dwellings whose usual occupants were temporarily absent on the night of the Census. Newly-completed dwellings awaiting occupancy are also included.

The total number of occupied dwellings in Australia at the Census of 30th June, 1954, showed an increase of 24.8 per cent. over the corresponding figure for the 1947 Census, compared with an increase of 18.6 per cent. in population. Occupied private dwellings increased by 25.1 per cent. and occupied dwellings other than private by 7.8 per cent. At the 1954 Census, 98.4 per cent. of the total occupied dwellings in Australia were private dwellings, compared with 98.2 per cent. in 1947. Proportional increases in total occupied dwellings over 1947 figures in each State and Territory were:—New South Wales 22.3 per cent., Victoria 25.3 per cent., Queensland 24.7 per cent., South Australia 27.7 per cent., Western Australia 30.5 per cent., Tasmania 26.1 per cent., Australian Capital Territory 96.9 per cent., and Northern Territory 27.1 per cent.

Unoccupied dwellings increased by 139 per cent.

DWELLINGS: AUSTRALIA, CENSUS, 30th JUNE, 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Division.	Occupied.				Unoccupied.	
	Private.	Other than Private.	Total.		Number.	Proportion of Total.
			Number.	Proportion of Total.		
Urban—						
Metropolitan ..	1,309,188	19,203	1,328,391	55.81	32,984	29.30
Other ..	568,679	9,075	577,754	24.27	33,477	29.73
Rural ..	465,554	8,654	474,208	19.92	46,133	40.97
Total ..	2,343,421	36,932	2,380,353	100.00	112,594	100.00

The total numbers of occupied and unoccupied dwellings in each State and Territory at the Censuses of 1947 and 1954 were as follows:—

DWELLINGS: STATES AND TERRITORIES, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

State or Territory.	Census, 30th June, 1947.		Census, 30th June, 1954.	
	Occupied.	Unoccupied.	Occupied.	Unoccupied.
New South Wales	746,343	17,392	912,877	42,831
Victoria	527,406	11,412	660,690	27,491
Queensland	272,045	9,647	339,328	21,473
South Australia	168,538	3,547	215,301	8,524
Western Australia	124,767	2,606	162,823	6,614
Tasmania	62,484	2,351	78,789	5,288
Northern Territory	2,697	34	3,427	47
Australian Capital Territory	3,615	52	7,118	326
Australia	1,907,895	47,041	2,380,353	112,594

2. *Class of Dwelling.*—The following table shows the number of the various classes of occupied dwellings in the Metropolitan Urban, Other Urban and Rural Areas of Australia at the Censuses of 1947 and 1954. Definitions of the several classes of dwellings are as follows:—

Private dwellings comprise private houses (including sheds, huts, garages, etc. used for dwelling purposes), shares of private houses, flats, and rooms, apartments, etc. In previous censuses, dwellings returned on the Schedules as sheds, huts, garages, etc. were included with private houses. In the Census of 1954, particulars of these dwellings have been tabulated separately, but are linked with private houses to preserve continuity with past census results. Separate particulars were shown in the 1947 Census publications for private houses which were shared by two or more family units and for which only one Householder's Schedule was received, but in 1954 these dwellings were included with private houses.

Share of private house is a portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was furnished.

Flat is part of a house or other building which can be completely closed off and which includes both cooking and bathing facilities.

Other private dwelling is an apartment, room(s), etc., which is part of a building, but which is not a self-contained unit.

Dwellings other than private include hotels, boarding houses, lodging houses, hostels, hospitals, educational, religious and charitable institutions, defence and penal establishments, etc.

It is desirable when considering the question of housing to exclude those forms of accommodation which do not represent the normal housing conditions associated with family life, and the statistics which follow relate mainly to private dwellings only.

OCCUPIED DWELLINGS ACCORDING TO CLASS, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Class of Occupied Dwelling.	Census, 30th June, 1947.				Census, 30th June, 1954.				Increase, 1947-54.
	Urban.(a)		Rural. (a)	Total, Aus- tralia.	Urban.(a)		Rural. (a)	Total, Aus- tralia.	
	Metro- politan.	Other.			Metro- politan.	Other.			
Private House(b)— House .. Shed, Hut, etc. }	760,678	289,898	567,476	1,618,052	1,067,674 14,259	506,128 12,276	433,069 22,613	2,006,871 49,148	} 437,967
Total ..	760,678	289,898	567,476	1,618,052	1,081,933	518,404	455,682	2,056,019		437,967
Share of Private House(c)	72,724	19,627	13,660	106,011	77,344	22,747	7,125	107,216	1,205
Flat ..	94,822	12,697	3,880	111,399	104,603	20,784	2,033	127,420	16,021
Other ..	33,263	3,855	1,043	38,161	45,308	6,744	714	52,766	14,605
<i>Total Private Dwellings</i>	<i>961,487</i>	<i>326,077</i>	<i>586,059</i>	<i>1,873,623</i>	<i>1,309,188</i>	<i>568,679</i>	<i>465,554</i>	<i>2,343,421</i>	<i>469,798</i>
Caretaker's Quarters ..	1,110	279	352	1,741	998	264	194	1,456	-285
Licensed Hotel ..	1,686	1,776	2,854	6,316	1,720	2,457	2,015	6,192	-124
Boarding House, etc. ..	15,302	3,367	2,512	21,181	14,110	4,120	1,041	19,271	-1,910
Educational Institution	449	290	389	1,128	523	488	251	1,262	134
Religious Institution (non-educational) ..	85	21	42	148	142	31	24	197	49
Hospital ..	543	368	593	1,504	559	517	353	1,429	-75
Charitable Institution (other than Hospital)	206	72	128	406	299	107	104	510	104
Other ..	552	293	1,003	1,848	852	1,091	4,672	6,615	4,767
<i>Total Dwellings Other than Private</i> ..	<i>19,933</i>	<i>6,466</i>	<i>7,873</i>	<i>34,272</i>	<i>19,203</i>	<i>9,075</i>	<i>8,654</i>	<i>36,932</i>	<i>2,660</i>
Total Occupied Dwel- lings ..	981,420	332,543	593,932	1,907,895	1,328,391	577,754	474,208	2,380,353	472,458
Total Occupied Dwel- lings per square mile	711.92	121.89	0.20	0.64	592.88	123.44	0.16	0.80	0.16
Wagon, Van, etc. (in- cluding campers-out)	847	1,029	3,997	5,873	2,693	3,605	5,383	11,681	5,808

(a) See letterpress on p. 643 regarding comparability as between Censuses.

(b) Includes shared private houses for which only one Householder's Schedule was received.

(c) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received.

NOTE.—Minus sign (-) denotes decrease.

3. Population According to Class of Dwelling, etc.—The following table shows the number of the various classes of occupied dwellings at the Censuses of 1947 and 1954, together with the number of inmates therein.

Of the total population in 1954, 92.52 per cent. were living in private dwellings—houses, flats, apartments, rooms, etc.—whilst 672,168 persons, or 7.48 per cent. of the population, spent the night in other than private dwellings, or on ships, trains or aircraft or were camping out.

OCCUPIED DWELLINGS, ETC. AND INMATES, AUSTRALIA, 1947 AND 1954.

(EXCLUDING FULL-BLOOD ABORIGINALS AND DWELLINGS OCCUPIED SOLELY BY THEM.)

Particulars.	Census, 30th June, 1947.			Census, 30th June, 1954.		
	Number of Dwellings.	Inmates.		Number of Dwellings.	Inmates.	
		Number.	Proportion of Total.		Number.	Proportion of Total.
			%			%
Private House(a)—						
House	1,618,052	6,323,621	83.43	2,006,871	7,448,978	82.89
Shed, Hut, etc.					134,187	1.49
Total	1,618,052	6,323,621	83.43	2,056,019	7,583,165	84.38
Share of Private House(b) ..	106,011	303,996	4.01	107,216	290,579	3.23
Flat	111,399	316,115	4.17	127,420	329,265	3.67
Other	38,161	83,028	1.10	52,766	111,353	1.24
Total Private Dwellings ..	1,873,623	7,026,760	92.71	2,343,421	8,314,362	92.52
Dwellings Other than Private	34,272	520,204	6.86	36,932	618,743	6.89
Total Occupied Dwellings ..	1,907,895	7,546,964	99.57	2,380,353	8,933,105	99.41
Wagon, Van, etc.	5,873	13,791	0.18	11,681	30,056	0.33
Migratory(c) .. .. .	..	18,603	0.25	..	23,369	0.26
Total .. .. .	..	7,579,358	100.00	..	8,986,530	100.00

(a) Includes shared private houses for which only one Householder's Schedule was received.

(b) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received.

(c) Shipping, railway and air travellers.

4. Occupied Private Dwellings.—(i) *Material of Outer Walls.* In the following table, occupied private dwellings are classified according to the material of which the outer walls were built.

Wood has been the most extensively used material in the construction of the outer walls, followed by brick and fibro-cement, and in 1954 the respective proportions for Australia for occupied private dwellings for which the material of the outer walls was specified were—wood, 44.4 per cent., brick, 33.5 per cent. and fibro-cement, 12.7 per cent. The latter has shown a most spectacular increase since 1933, when the proportion was 1.6 per cent. (23,696 dwellings), compared with 6.3 per cent. in 1947 (117,631 dwellings). The proportions of both brick and wooden dwellings have shown small decreases since 1947. The numbers of dwellings of all other materials except fibro-cement and concrete have decreased. Brick dwellings in 1954 represented 51.5 per cent. of all occupied private dwellings in the Metropolitan Urban Divisions, whilst in the Other Urban and Rural Divisions wooden dwellings predominated, the percentages of such dwellings being 60.0 per cent. and 59.4 per cent. respectively.

OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO MATERIAL OF OUTER WALLS, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Material of Outer Walls.	Census, 30th June, 1947.				Census, 30th June, 1954.				Increase, 1947-54.
	Urban.(a)		Rural. (a)	Total, Australia.	Urban.(a)		Rural. (a)	Total, Australia.	
	Metro-politan.	Other.			Metro-politan.	Other.			
Brick ..	551,618	60,215	38,179	650,012	674,165	86,254	25,089	785,508	135,496
Stone ..	36,714	13,409	37,573	87,696	35,907	18,049	33,604	87,560	136
Concrete ..	10,442	5,411	13,283	29,136	24,299	13,497	13,639	51,435	22,299
Wood ..	315,567	204,863	364,221	884,651	422,010	341,145	276,584	1,039,739	155,088
Iron, Tin ..	6,087	14,498	45,347	65,932	7,387	19,652	31,177	58,216	7,716
Fibro-cement ..	31,924	23,586	62,121	117,631	140,542	84,835	71,176	296,553	178,922
Calico, Canvas, Hessian ..	656	1,539	13,255	15,450	426	1,843	5,446	7,715	7,735
Other ..	4,430	1,774	9,902	16,106	3,644	2,686	7,750	14,080	2,026
Not Stated ..	4,049	782	2,178	7,009	808	718	1,089	2,615	4,394
Total ..	961,487	326,077	586,059	1,873,623	1,309,188	568,679	465,554	2,343,421	469,798

(a) See letterpress on p. 643 regarding comparability as between Censuses.

NOTE.—Minus sign (—) denotes decrease.

(ii) *Number of Rooms.* For Census purposes, the kitchen and any permanently enclosed sleep-out were included in the number of rooms in the dwelling, but the bathroom, pantry, laundry and storehouse were excluded unless generally used for sleeping.

Excluding houses with rooms unspecified, private houses of four, five and six rooms represented 78.3 per cent. of the total number of private houses in Australia at 30th June, 1954, compared with 79.2 per cent. in 1947, and three-quarters of the total increase in the number of private houses since 1947 consisted of houses containing these numbers of rooms. Houses of seven and more rooms also showed substantial increases.

OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF ROOMS, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Number of Rooms(b) per Dwelling.	Census, 30th June, 1947.				Census, 30th June, 1954.					
	Private House. (c)	Share of Private House. (d)	Flat.	Other.	Total Private Dwellings.	Private House. (c)	Share of Private House. (d)	Flat.	Other.	Total Private Dwellings.
1 ..	2,913	9,547	1,055	11,263	24,778	5,383	9,353	678	15,186	30,600
2 ..	5,493	17,360	5,850	13,035	41,738	17,177	17,018	5,723	16,126	56,044
3 ..	27,929	18,433	20,505	5,495	72,362	39,250	18,164	21,614	7,841	86,869
4 ..	153,385	13,917	37,406	1,923	206,631	192,237	13,477	40,911	3,176	249,801
5 ..	271,401	7,776	20,338	508	300,023	377,643	9,176	23,221	1,175	411,215
6 ..	203,942	3,539	6,967	210	214,658	302,004	5,734	9,073	594	317,405
7 ..	61,279	1,106	1,572	35	63,992	96,252	2,095	2,098	193	100,638
8 ..	20,078	317	470	9	20,874	31,608	869	685	92	33,254
9 ..	6,888	103	147	1	7,139	10,562	264	213	41	11,080
10 and over ..	5,826	49	86		5,961	8,841	111	83	14	9,049
Not Stated ..	1,544	577	426	784	3,331	976	1,083	304	870	3,233
Total Private Dwellings ..	760,678	72,724	94,822	33,263	961,487	1,081,933	77,344	104,603	45,308	1,309,188
Average number of Rooms per Private Dwelling ..	5.28	3.15	4.07	2.02	4.89	5.32	3.37	4.16	2.15	5.00

METROPOLITAN URBAN.(a)

1 ..	2,913	9,547	1,055	11,263	24,778	5,383	9,353	678	15,186	30,600
2 ..	5,493	17,360	5,850	13,035	41,738	17,177	17,018	5,723	16,126	56,044
3 ..	27,929	18,433	20,505	5,495	72,362	39,250	18,164	21,614	7,841	86,869
4 ..	153,385	13,917	37,406	1,923	206,631	192,237	13,477	40,911	3,176	249,801
5 ..	271,401	7,776	20,338	508	300,023	377,643	9,176	23,221	1,175	411,215
6 ..	203,942	3,539	6,967	210	214,658	302,004	5,734	9,073	594	317,405
7 ..	61,279	1,106	1,572	35	63,992	96,252	2,095	2,098	193	100,638
8 ..	20,078	317	470	9	20,874	31,608	869	685	92	33,254
9 ..	6,888	103	147	1	7,139	10,562	264	213	41	11,080
10 and over ..	5,826	49	86		5,961	8,841	111	83	14	9,049
Not Stated ..	1,544	577	426	784	3,331	976	1,083	304	870	3,233
Total Private Dwellings ..	760,678	72,724	94,822	33,263	961,487	1,081,933	77,344	104,603	45,308	1,309,188
Average number of Rooms per Private Dwelling ..	5.28	3.15	4.07	2.02	4.89	5.32	3.37	4.16	2.15	5.00

(a) See letterpress on p. 643 regarding comparability as between Censuses. (b) Includes kitchen and permanently enclosed sleep-out, but does not include bathroom, pantry, laundry or storehouse, unless generally used for sleeping. (c) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (d) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received.

OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF ROOMS, AUSTRALIA, 1947 AND 1954—*continued.*

Number of Rooms(b) per Dwelling.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (c)	Share of Private House. (d)	Flat.	Other.	Total Private Dwellings.	Private House. (c)	Share of Private House. (d)	Flat.	Other.	Total Private Dwellings.
OTHER URBAN.(a)										
1	3,788	2,418	85	956	7,247	5,693	2,232	81	1,068	9,074
2	5,014	4,788	901	1,396	12,099	11,669	5,446	1,453	2,374	20,942
3	10,860	4,903	3,285	904	19,952	20,429	5,854	5,121	1,907	33,311
4	61,611	3,902	4,671	390	70,574	98,504	4,254	7,910	899	111,567
5	107,482	2,208	2,610	83	112,383	186,088	2,565	4,098	293	193,044
6	69,714	873	803	37	71,427	132,573	1,399	1,522	84	135,578
7	20,211	249	182	4	20,646	41,366	485	392	24	42,267
8	6,470	77	60	..	6,607	13,373	163	112	6	13,654
9	2,158	29	20	..	2,207	4,336	56	28	6	4,426
10 and over ..	1,543	13	12	..	1,568	3,208	32	12	3	3,255
Not Stated ..	1,047	167	68	85	1,367	1,165	261	55	80	1,561
Total Private Dwellings ..	289,898	19,627	12,697	3,855	326,077	518,404	22,747	20,784	6,744	568,679
Average number of Rooms per Private Dwelling ..	5.12	3.15	3.99	2.30	4.92	5.18	3.31	4.03	2.61	5.04
RURAL.(a)										
1	23,808	1,340	33	160	25,341	12,976	544	10	82	13,612
2	21,942	3,279	325	314	25,860	16,271	1,297	157	175	17,900
3	37,929	3,608	1,048	324	42,909	27,458	1,698	535	207	29,898
4	134,898	2,959	1,353	182	139,392	89,397	1,553	727	175	91,852
5	163,621	1,509	741	40	165,911	128,313	987	382	52	129,734
6	110,130	570	246	5	110,951	99,843	530	157	9	100,539
7	41,390	184	63	1	41,638	43,694	208	35	1	43,938
8	16,619	63	37	..	16,719	19,111	98	9	2	19,220
9	6,089	20	6	..	6,115	7,532	21	3	..	7,556
10 and over ..	7,095	26	2	..	7,123	8,759	20	3	1	8,783
Not Stated ..	3,955	102	26	17	4,100	2,328	169	15	10	2,522
Total Private Dwellings ..	567,476	13,660	3,880	1,043	586,059	455,682	7,125	2,033	714	465,554
Average number of Rooms per Private Dwelling ..	4.90	3.23	3.95	2.66	4.85	5.19	3.62	4.00	2.98	5.16
TOTAL, AUSTRALIA.										
1	30,509	13,305	1,173	12,379	57,366	24,052	12,129	769	16,336	53,286
2	32,449	25,427	7,076	14,745	79,697	45,117	23,761	7,333	18,675	94,886
3	76,718	26,944	24,838	6,723	135,223	87,137	25,716	7,270	9,955	150,078
4	349,894	20,778	43,430	2,495	416,597	380,138	19,284	49,548	4,250	453,220
5	542,504	11,493	23,689	631	578,317	692,044	12,728	27,701	1,520	733,993
6	383,786	4,982	8,016	252	397,036	534,420	7,663	10,752	687	553,522
7	122,880	1,539	1,817	40	126,276	181,312	2,788	2,525	218	186,843
8	43,167	457	567	9	44,200	64,092	1,130	806	100	66,128
9	15,135	152	173	1	15,461	22,430	341	244	47	23,062
10 and over ..	14,464	88	100	..	14,652	20,808	163	98	18	21,087
Not Stated ..	6,546	846	520	886	8,798	4,469	1,513	374	960	7,316
Total Private Dwellings ..	1,618,052	106,011	111,399	38,161	1,873,623	2,056,019	107,216	127,420	52,766	2,343,421
Average number of Rooms per Private Dwelling ..	5.12	3.16	4.06	2.07	4.88	5.26	3.38	4.14	2.22	5.04

(a) See letterpress on p. 643 regarding comparability as between Censuses. (b) Includes kitchen and permanently enclosed sleep-out but does not include bathroom, pantry, laundry or storehouse, unless generally used for sleeping. (c) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (d) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received.

(iii) *Number of Inmates.* A classification of occupied private dwellings according to the number of inmates is shown in the following table.

For Australia as a whole, private houses with four inmates were most numerous, followed very closely by those with two and three inmates in that order.

An increase of nearly 51 per cent. (149,348 houses) in the number of private houses occupied by two inmates brought this group from third position in 1947 to second position in 1954. Houses with two inmates in 1954 constituted 22 per cent. of the total number of occupied private houses in Australia, about the same proportion as for houses with four inmates. In 1947, houses with two inmates constituted 18 per cent. of the total and houses with four inmates 21 per cent. Houses with three inmates constituted 21 per cent. at both the 1947 and 1954 Censuses. The average number of inmates in private houses was 3.69 in 1954 compared with 3.91 in 1947.

The number of private houses which were shared, and for each share of which a separate Householder's Schedule was furnished, increased slightly between 1947 and 1954, but the average number of inmates therein decreased from 2.87 to 2.71. Separate particulars of shared houses for which only one Householder's Schedule was furnished were not compiled in 1954. These particulars are included with private houses in all tables in this section.

Flats and other classes of private dwellings increased in both numbers and total inmates, but the average number of inmates fell from 2.84 to 2.58 for flats and from 2.18 to 2.11 for others.

In flats those with two inmates and in other classes of occupied private dwellings those with one inmate predominated.

OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF INMATES, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Number of Inmates per Dwelling.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.
METROPOLITAN URBAN.(a)										
1	29,205	12,110	12,158	12,232	65,705	62,022	16,509	19,345	19,203	117,079
2	135,257	24,144	33,104	11,357	203,862	242,815	26,497	41,373	14,300	324,985
3	172,288	17,901	25,646	5,689	221,524	241,859	16,400	23,793	6,356	288,408
4	178,144	10,193	14,827	2,404	205,568	247,207	9,917	12,926	3,295	273,345
5	117,858	4,562	5,812	977	129,209	153,006	4,449	4,743	1,229	163,427
6	64,385	2,098	2,051	339	68,873	75,493	2,033	1,604	488	79,618
7	32,669	985	775	153	34,582	33,245	891	549	218	34,903
8	16,973	496	306	70	17,845	15,107	448	186	125	15,866
9	6,911	146	80	23	7,160	5,983	115	55	53	6,206
10 and over	6,988	89	63	19	7,159	5,196	85	29	41	5,351
Total Private Dwellings ..	760,678	72,724	94,822	33,263	961,487	1,081,933	77,344	104,603	45,308	1,309,188
Total Inmates ..	3,008,429	203,390	265,259	70,594	3,547,672	3,944,181	204,571	264,646	92,576	4,505,974
Average number of Inmates per Private Dwelling ..	3.95	2.80	2.80	2.12	3.69	3.65	2.64	2.53	2.04	3.44

(a) See letterpress on p. 643 regarding comparability as between Censuses. (b) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (c) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received.

OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER
OF INMATES, AUSTRALIA, 1947 AND 1954—*continued.*

Number of Inmates per Dwelling.	Census, 30th June, 1947.				Census, 30th June, 1954.					
	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwell- ings.	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwell- ings.
OTHER URBAN.(a)										
1 ..	18,520	2,838	1,229	941	23,528	39,178	4,609	2,945	1,883	48,615
2 ..	53,774	6,107	4,043	1,326	65,250	112,952	7,231	7,333	2,211	129,727
3 ..	60,924	4,853	3,328	870	69,975	107,678	4,986	5,085	1,389	119,138
4 ..	61,336	2,889	2,318	424	66,967	110,022	3,056	3,161	756	116,995
5 ..	42,519	1,477	1,021	174	45,191	73,416	1,479	1,383	278	76,556
6 ..	24,827	734	406	64	26,031	39,436	768	557	132	40,893
7 ..	13,595	377	203	33	14,208	18,961	353	211	51	19,576
8 ..	7,636	219	89	17	7,961	9,348	166	60	21	9,595
9 ..	3,266	69	34	4	3,373	3,777	56	32	11	3,876
10 and over ..	3,501	64	26	2	3,593	3,636	43	17	12	3,708
Total Private Dwellings ..	289,898	19,627	12,697	3,855	326,077	518,404	22,747	20,784	6,744	568,679
Total In- mates ..	1,140,137	58,651	38,823	9,579	1,247,190	1,913,307	63,029	58,201	16,430	2,050,967
Average num- ber of Inmates per Private Dwelling ..	3.93	2.99	3.06	2.48	3.82	3.69	2.77	2.80	2.44	3.61
RURAL.(a)										
1 ..	60,330	1,922	357	187	62,796	46,108	964	217	105	47,394
2 ..	105,800	3,788	1,190	337	111,115	88,412	1,898	597	167	91,074
3 ..	109,182	3,444	1,050	284	113,960	86,142	1,534	473	159	88,308
4 ..	107,455	2,296	693	116	110,560	89,458	1,285	381	134	91,258
5 ..	78,714	1,141	335	73	80,263	65,284	745	209	71	66,309
6 ..	48,670	577	155	21	49,423	39,762	370	102	34	40,268
7 ..	27,531	283	57	15	27,886	20,749	185	36	25	20,995
8 ..	15,958	147	29	9	16,143	10,788	90	10	14	10,902
9 ..	6,487	29	8	..	6,524	4,508	36	5	3	4,552
10 and over ..	7,349	33	6	1	7,389	4,471	18	3	2	4,494
Total Private Dwellings ..	567,476	13,660	3,880	1,043	586,059	455,682	7,125	2,033	714	465,554
Total In- mates ..	2,175,055	41,955	12,033	2,855	2,231,898	1,725,677	22,979	6,418	2,347	1,757,421
Average num- ber of Inmates per Private Dwelling ..	3.83	3.07	3.10	2.74	3.81	3.79	3.23	3.16	3.29	3.77
TOTAL, AUSTRALIA.										
1 ..	108,055	16,870	13,744	13,360	152,029	147,308	22,082	22,507	21,191	213,088
2 ..	294,831	34,039	38,337	13,020	380,227	444,179	35,626	49,303	16,678	545,786
3 ..	342,394	26,198	30,024	6,843	405,459	435,679	22,920	29,351	7,904	495,854
4 ..	346,935	15,378	17,838	2,944	383,095	446,687	14,258	16,468	4,185	481,598
5 ..	239,091	7,180	7,168	1,224	254,663	291,706	6,673	6,335	1,578	306,292
6 ..	137,882	3,409	2,612	424	144,327	154,691	3,171	2,263	654	160,779
7 ..	73,795	1,645	1,035	201	76,676	72,955	1,429	796	294	75,474
8 ..	40,567	862	424	96	41,949	35,243	704	256	160	36,363
9 ..	16,664	244	122	27	17,057	14,268	207	92	67	14,634
10 and over ..	17,838	186	95	22	18,141	13,303	146	49	55	13,553
Total Private Dwellings ..	1,618,052	106,011	111,399	38,161	1,873,623	2,056,019	107,216	127,420	52,766	2,343,421
Total In- mates ..	6,323,621	303,996	316,115	83,028	7,026,760	7,583,165	290,579	329,265	111,353	8,314,362
Average num- ber of Inmates per Private Dwelling ..	3.91	2.87	2.84	2.18	3.75	3.69	2.71	2.58	2.11	3.55

(a) See letterpress on p. 643 regarding comparability as between Censuses. (b) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (c) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received.

(iv) *Nature of Occupancy.* At the 1954 Census, 52.5 per cent. of occupied private houses in Australia for which particulars were supplied were occupied by owners, 16.8 per cent. by purchasers by instalments, 28.1 per cent. by tenants, and 2.6 per cent. by others. The corresponding percentages in 1947 were—owners, 50.5 per cent; purchasers by instalments, 9.0 per cent; tenants, 37.6 per cent; and others, 2.9 per cent. Owner-occupied houses in Australia increased by 33.4 per cent. between 1947 and 1954, and those being purchased by instalments by 139.3 per cent., the increase in these two groups combined being nearly 50 per cent., while tenant-occupied houses decreased by 4.1 per cent.

In the Metropolitan Areas, 70.5 per cent. of all occupied private houses were either owner-occupied or being purchased by instalments, as compared with 69.0 per cent. in the Other Urban areas, and 66.9 per cent. in the Rural Areas.

Tenants occupied by far the greater proportion of flats and other private dwellings.

OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NATURE OF OCCUPANCY, AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Nature of Occupancy.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.

METROPOLITAN URBAN.(a)

Owner	325,942	13,401	8,368	617	348,328	512,632	19,525	12,272	1,899	546,328
Purchaser by Instalments	95,232	2,562	370	86	98,250	249,018	5,777	1,503	481	256,779
Tenant (Governmental Housing)(d)	} 328,974	55,776	84,889	31,890	501,529	48,011	379	4,127	1,795	54,312
Tenant						259,955	50,133	85,530	40,267	435,885
Caretaker						6,617	449	681	391	8,138
Other Methods of Occupancy	2,694	129	290	202	3,315	3,682	448	322	211	4,663
Not Stated	3,486	551	281	240	4,558	2,018	633	168	264	3,083
Total Private Dwellings	760,678	72,724	94,822	33,263	961,487	1,081,933	77,344	104,603	45,308	1,309,188

OTHER URBAN.(a)

Owner	146,329	4,091	1,677	141	152,238	279,042	6,469	3,271	426	289,208
Purchaser by Instalments	25,712	580	84	16	26,392	77,063	1,158	280	70	78,571
Tenant (Governmental Housing)(d)	} 109,027	14,448	10,712	3,594	137,781	27,414	115	712	83	28,324
Tenant						122,146	14,367	16,214	6,043	158,770
Caretaker						5,715	186	184	67	6,152
Other Methods of Occupancy	2,222	53	53	12	2,351	4,440	150	81	28	4,699
Not Stated	2,913	296	62	43	3,314	2,584	302	42	27	2,955
Total Private Dwellings	289,898	19,627	12,697	3,855	326,077	518,404	22,747	20,784	6,744	568,679

(a) See letterpress on p. 643 regarding comparability as between Censuses. (b) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (c) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received. (d) These figures were compiled from the answers furnished in response to the instruction on the Householder's Schedule "Tenant paying rent to a Government Authority to write 'Tenant (G)'".

OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NATURE
OF OCCUPANCY, AUSTRALIA, 1947 AND 1954—*continued.*

Nature of Occupancy.	Census, 30th June, 1947.					Census, 30th June, 1954.				
	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.	Private House. (b)	Share of Private House. (c)	Flat.	Other.	Total Private Dwellings.
RURAL. (a)										
Owner	333,131	3,641	635	52	337,459	283,022	2,778	431	47	286,278
Purchaser by Instalments	22,650	330	49	6	23,035	17,544	164	33	2	17,743
Tenant (Governmental Housing)(d) ..	160,572	8,801	3,107	960	173,440	16,543	66	96	35	16,740
Tenant						99,712	3,464	1,398	625	105,199
Caretaker	17,528	257	43	10	17,838	12,975	137	23	2	13,137
Other Methods of Occupancy ..	15,645	189	17	4	15,855	19,163	271	32	2	19,468
Not Stated	17,950	442	29	11	18,432	6,723	245	20	1	6,989
Total Private Dwellings	567,476	13,660	3,880	1,043	586,059	455,682	7,125	2,033	714	465,554

TOTAL, AUSTRALIA.

Owner	805,402	21,133	10,680	810	838,025	1,074,696	28,772	15,974	2,372	1,121,814
Purchaser by Instalments	143,594	3,472	503	108	147,677	343,625	7,099	1,816	553	353,093
Tenant (Governmental Housing)(d) ..	598,573	79,025	98,708	36,444	812,750	91,968	560	4,935	1,913	99,376
Tenant						481,813	67,964	103,142	46,935	699,854
Caretaker	25,563	721	776	286	27,346	25,307	772	888	460	27,427
Other Methods of Occupancy ..	20,571	371	360	219	21,521	27,285	869	435	241	28,830
Not Stated	24,349	1,289	372	294	26,304	11,325	1,180	230	292	13,027
Total Private Dwellings	1,618,052	106,011	111,399	38,161	1,873,623	2,056,019	107,216	127,420	52,766	2,343,421

(a) See letterpress on p. 643 regarding comparability as between Censuses. (b) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (c) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received. (d) These figures were compiled from the answers furnished in response to the instruction on the Householder's Schedule "Tenant paying rent to a Government Authority to write 'Tenant (G)'".

(v) *Weekly Rent.* (a) *All Tenanted Private Dwellings.* The following table shows tenanted private dwellings in the Metropolitan Urban, Other Urban and Rural Areas of Australia classified according to weekly rent (unfurnished).

Information tabulated concerning rents was restricted to the actual rent paid per week by tenants for unfurnished private dwellings. Particulars of rents shown in the following tables are therefore on an *unfurnished* basis. Dwellings shown as rent "Not Stated" include those whose rents were shown on Householders' Schedules on a *furnished* basis, and those whose rents were not applicable (e.g., for shop and dwelling combined). In this section information on "tenanted private dwellings" relating to the 1954 Census *excludes particulars of dwellings occupied by "Tenants" (Governmental Housing) in each State*, i.e., those who furnished answers in response to the instruction on the Census Householder's Schedule "Tenant paying rent to a Government Authority to write 'Tenant (G)'". For the Australian Capital Territory and the Northern Territory, particulars of all tenanted private dwellings are included. Particulars for the 1947 Census relate throughout to all tenanted private dwellings.

TENANTED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO WEEKLY RENT (UNFURNISHED), AUSTRALIA, 1947 AND 1954.

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Weekly Rent (Unfurnished).	Census, 30th June, 1947.				Census, 30th June, 1954.(a)				
	Private House. (b)	Share of Private House.(c)	Flat.	Total Tenanted Private Dwellings. (d)	Private House. (b)	Share of Private House.(c)	Flat.	Other.	Total Tenanted Private Dwellings.
METROPOLITAN URBAN.									
Under 5s.	303	77	20	456	206	64	29	70	369
5s. and under 10s.	2,992	1,157	110	4,664	1,290	238	51	97	1,676
10s. " " 15s.	22,678	4,551	626	28,903	8,292	1,231	171	403	10,097
15s. " " 20s.	44,526	4,984	1,847	53,095	16,680	1,486	461	556	19,183
20s. " " 25s.	68,155	7,272	5,342	82,739	33,203	3,634	1,582	1,191	39,610
25s. " " 30s.	67,162	6,308	8,520	83,418	36,380	3,037	3,252	1,144	43,813
30s. " " 35s.	48,973	4,979	13,045	67,933	37,612	4,573	6,332	1,541	50,058
35s. " " 40s.	23,343	2,201	12,468	38,456	25,523	2,298	8,371	837	37,029
40s. " " 50s.	15,745	1,636	14,242	31,958	34,047	4,517	16,250	1,470	56,284
50s. " " 60s.	4,778	467	5,489	10,854	14,278	2,327	10,642	855	28,102
60s. " " 70s.	1,883	151	2,226	4,309	9,327	1,523	6,294	584	17,728
70s. " " 80s.	702	45	1,047	1,815	4,287	602	3,163	286	8,338
80s. " " 90s.	446	11	621	1,084	2,679	421	2,199	167	5,466
90s. " " 100s.	206	9	271	487	940	116	1,283	66	2,405
100s. and over	440	10	679	1,129	2,877	282	3,398	165	6,722
Not Stated	26,642	21,918	18,336	90,229	36,062	23,900	22,259	30,844	113,065
Total Private Dwellings	328,974	55,776	84,889	501,529	263,683	50,249	85,737	40,276	439,945
Average Weekly Rent (Unfurnished) per Private Dwelling	25s. 9d.	23s. 6d.	37s. 9d.	27s. 5d.	34s. 10d.	35s. 8d.	51s. 11d.	37s. 4d.	38s. 3d.

OTHER URBAN.

Under 5s.	775	85	1	876	369	33	13	25	440
5s. and under 10s.	3,404	714	48	4,296	2,026	190	18	61	2,295
10s. " " 15s.	13,840	1,670	249	15,940	6,946	596	109	136	7,787
15s. " " 20s.	18,751	1,385	584	20,876	9,304	544	226	141	10,215
20s. " " 25s.	24,555	1,894	1,651	28,365	15,650	1,159	594	282	17,685
25s. " " 30s.	18,296	1,305	1,331	21,092	14,109	896	914	294	16,213
30s. " " 35s.	10,582	784	1,225	12,659	15,744	1,360	1,346	316	18,766
35s. " " 40s.	3,312	213	685	4,237	8,448	501	1,001	214	10,164
40s. " " 50s.	2,148	131	641	2,940	13,140	1,181	1,834	321	16,476
50s. " " 60s.	477	26	183	691	6,649	578	1,181	192	8,600
60s. " " 70s.	155	8	43	206	4,462	287	659	97	5,505
70s. " " 80s.	56	4	10	70	1,938	75	391	37	2,441
80s. " " 90s.	29	..	9	38	824	56	166	13	1,059
90s. " " 100s.	8	..	2	10	264	19	69	4	356
100s. and over	12	..	..	12	553	28	123	12	716
Not Stated	12,627	6,229	4,050	25,473	22,188	6,865	7,603	3,903	40,559
Total Private Dwellings	109,027	14,448	10,712	137,781	122,614	14,368	16,247	6,048	159,277
Average Weekly Rent (Unfurnished) per Private Dwelling	21s. 6d.	19s. 3d.	27s. 9d.	21s. 8d.	31s. 11d.	31s. 1d.	41s. 10d.	32s. 6d.	32s. 8d.

(a) The figures shown for 1954 exclude dwellings occupied by "Tenants" (Governmental Housing) except for those in the Northern Territory and Australian Capital Territory. (b) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (c) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received. (d) Includes "other private dwellings" not shown in the table.

TENANTED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO WEEKLY RENT (UNFURNISHED), AUSTRALIA, 1947 AND 1954—continued.

Weekly Rent (Unfurnished).	Census, 30th June, 1947.				Census, 30th June, 1954.(a)				
	Private House. (b)	Share of Private House.(c)	Flat.	Total Tenanted Private Dwellings. (d)	Private House. (b)	Share of Private House.(c)	Flat.	Other.	Total Tenanted Private Dwellings.
RURAL.									
Under 5s. ..	5,758	137	4	5,915	1,266	29	8	7	1,310
5s. and under 10s. ..	19,212	758	40	20,063	6,437	132	15	9	6,593
10s. " " 15s. ..	30,873	1,276	199	32,405	10,356	240	36	49	10,681
15s. " " 20s. ..	21,598	877	288	22,816	7,920	177	54	19	8,170
20s. " " 25s. ..	19,506	957	428	20,951	11,644	282	129	81	12,136
25s. " " 30s. ..	9,469	444	301	10,253	5,850	147	88	27	6,112
30s. " " 35s. ..	5,075	247	213	5,557	5,622	190	95	36	5,943
35s. " " 40s. ..	1,315	57	76	1,457	1,670	49	42	11	1,772
40s. " " 50s. ..	1,109	49	89	1,249	3,682	129	96	24	3,931
50s. " " 60s. ..	318	7	26	351	1,560	58	51	14	1,683
60s. " " 70s. ..	134	3	9	146	981	20	27	5	1,033
70s. " " 80s. ..	28	2	1	32	359	8	7	1	375
80s. " " 90s. ..	21	..	1	22	248	4	5	2	259
90s. " " 100s. ..	2	..	..	2	75	2	..	..	77
100s. and over ..	14	..	..	14	206	6	2	..	214
Not Stated ..	46,140	3,987	1,431	52,214	42,003	1,991	745	340	45,079
Total Private Dwellings ..	160,572	8,801	3,107	173,440	99,879	3,464	1,400	625	105,368
Average Weekly Rent (Unfurnished) per Private Dwelling ..	15s. 6d.	15s. 11d.	23s. 4d.	15s. 7d.	22s. 0d.	23s. 4d.	30s. 10d.	25s. 2d.	22s. 2d.

TOTAL, AUSTRALIA.

Under 5s. ..	6,836	299	25	7,247	1,841	126	50	102	2,119
5s. and under 10s. ..	25,608	2,629	198	29,023	9,753	560	84	167	10,564
10s. " " 15s. ..	67,391	7,497	1,074	77,248	25,594	2,067	316	588	28,565
15s. " " 20s. ..	84,875	7,246	2,719	96,787	33,904	2,207	741	716	37,568
20s. " " 25s. ..	112,216	10,123	7,421	132,055	60,497	5,075	2,305	1,554	69,431
25s. " " 30s. ..	94,927	8,057	10,152	114,763	56,339	4,080	4,254	1,465	66,138
30s. " " 35s. ..	64,630	6,010	14,483	86,149	58,978	6,123	7,773	1,893	74,767
35s. " " 40s. ..	27,970	2,471	13,229	44,143	35,641	2,848	9,414	1,062	48,965
40s. " " 50s. ..	19,002	1,816	14,972	36,147	50,869	5,827	18,180	1,815	76,691
50s. " " 60s. ..	5,573	500	5,698	11,896	22,487	2,963	11,874	1,061	38,385
60s. " " 70s. ..	2,172	162	2,278	4,661	14,770	1,830	6,980	686	24,266
70s. " " 80s. ..	786	51	1,059	1,912	6,584	685	3,561	324	11,154
80s. " " 90s. ..	496	11	631	1,144	3,751	481	2,370	182	6,784
90s. " " 100s. ..	216	9	273	499	1,279	137	1,352	70	2,838
100s. and over ..	466	10	679	1,155	3,636	316	3,523	177	7,652
Not Stated ..	85,409	32,134	23,817	167,916	100,253	32,756	30,607	35,087	198,703
Total Private Dwellings ..	598,573	79,025	98,708	812,750	486,176	68,081	103,384	46,949	704,590
Average Weekly Rent (Unfurnished) per Private Dwelling ..	22s. 8d.	22s. 0d.	36s. 7d.	24s. 2d.	32s. 2d.	34s. 2d.	50s. 6d.	36s. 2d.	35s. 0d.

(a) The figures shown for 1954 exclude dwellings occupied by " Tenants " (Governmental Housing) except those in the Northern Territory and the Australian Capital Territory. (b) Includes houses, sheds, huts, etc., and shared private houses for which only one Householder's Schedule was received. (c) Portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was received. (d) Includes " other private dwellings " not shown in the table.

At the 1947 Census, nearly 83 per cent. of the tenanted private houses in Australia shown in the table above had weekly rentals of between 10s. and 35s. ; at the 1954 Census, only 61 per cent. were within these limits. In 1947, 6 per cent. had rentals below 10s. and

11 per cent. above 35s. In 1954, 3 per cent. had rentals below 10s. and 36 per cent. above 35s. At the 1947 Census, 88 per cent. of the flats shown for Australia had rentals of between £1 and £3 per week, 5 per cent. were below this range, and 7 per cent. above it. At the 1954 Census, the corresponding proportions were:—74 per cent., 2 per cent. and 24 per cent. Dwellings whose rents were not stated were excluded in obtaining these proportions.

The average rentals shown in this table for all tenanted private dwellings in Australia at the 1954 Census were 45 per cent. higher than in 1947 (42 per cent. higher for houses and 38 per cent. higher for flats). Metropolitan rentals in 1954 were higher by 40 per cent., 35 per cent. and 37 per cent., respectively, than in 1947.

In all such comparisons as these, the difference in basis between the 1947 and 1954 Censuses, referred to in the opening paragraph above, and also the differences in the Urban and Rural divisions (*see p. 643*), should be borne in mind.

(*b Tenanted Private Houses of Three to Six Rooms.* The comparisons in the following table, restricted to houses of three to six rooms, with outside walls of wood, brick or stone, are of particular interest, since this group comprises more than three-quarters of all tenanted private houses in Australia.

**AVERAGE WEEKLY RENT(a) PER ROOM OF TENANTED PRIVATE HOUSES,
THREE TO SIX ROOMS, WITH WALLS OF WOOD, BRICK OR STONE,
AUSTRALIA, 1947 AND 1954.**

(EXCLUDING DWELLINGS OCCUPIED SOLELY BY FULL-BLOOD ABORIGINALS.)

Particulars.	Census, 30th June, 1947.				Census, 30th June, 1954.				Increase 1947-54. (Aus- tralia.)
	Urban.		Rural.	Total, Aus- tralia.	Urban.		Rural.	Total, Aus- tralia.	
	Metro- politan.	Other.			Metro- politan.	Other.			
Private Houses(a) with Walls of—	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Wood—									
3 rooms	5 1	5 1	3 10	4 7	7 3	7 11	5 10	7 1	2 6
4 " " " " " "	5 0	4 7	3 5	4 4	6 9	7 0	4 10	6 4	2 0
5 " " " " " "	4 9	4 3	3 3	4 2	6 8	6 4	4 6	6 1	1 11
6 " " " " " "	4 5	3 10	2 11	3 10	5 10	5 5	3 11	5 3	1 5
3 to 6 rooms	4 9	4 3	3 3	4 1	6 6	6 3	4 6	5 11	1 10
Brick or Stone—									
3 rooms	5 7	5 7	4 5	5 6	8 3	9 4	6 8	8 3	2 9
4 " " " " " "	5 9	5 0	3 8	5 7	7 10	7 2	5 1	7 8	2 1
5 " " " " " "	5 6	4 9	3 8	5 3	7 2	6 8	4 9	7 0	1 9
6 " " " " " "	5 4	4 6	3 6	5 1	6 9	6 1	4 3	6 6	1 5
3 to 6 rooms	5 6	4 9	3 8	5 4	7 3	6 8	4 9	7 1	1 9
Wood, Brick or Stone—									
3 rooms	5 5	5 3	3 11	5 1	7 11	8 4	6 0	7 9	2 8
4 " " " " " "	5 6	4 8	3 6	5 0	7 6	7 1	4 11	7 1	2 1
5 " " " " " "	5 3	4 4	3 4	4 9	7 0	6 6	4 6	6 7	1 10
6 " " " " " "	5 0	4 1	3 1	4 6	6 5	5 7	4 0	5 11	1 5
3 to 6 rooms	5 3	4 5	3 4	4 9	7 0	6 5	4 7	6 7	1 10

(a) Rents relate to tenanted private houses (one family) in 1947 and to all tenanted private houses, excluding those occupied by "Tenants" (Governmental Housing) in 1954.

The average rent per room of 3- to 6-roomed tenanted private houses of wood, brick or stone increased by about 39 per cent. between 1947 and 1954 (wood by 45 per cent. and brick by 33 per cent.). The average for 3-roomed tenanted houses of wood, brick or stone increased by about 52 per cent., 4- and 5-roomed houses by about 40 per cent., and 6-roomed houses by 32 per cent. The increases in respect of houses of wood were higher than those for brick or stone in each case. The increases in the Metropolitan Areas were relatively lower than for Australia as a whole.

(vi) *Date of Building.* The number of occupied private dwellings in Australia at the Census of 30th June, 1954, classified according to date of building, were as follows :— Built before 30th June, 1947, 1,758,448; 1st July–31st December, 1947, 19,742; 1948, 60,360; 1949, 63,897; 1950, 78,965; 1951, 85,852; 1952, 91,712; 1953, 88,467; 1954, 44,725; built after 30th June, 1947 but particular year not stated, 19,641; not stated, 31,612; total, 2,343,421.

(vii) *Facilities, etc.* At the 1947 Census, a detailed question was asked concerning facilities, and a summary of the information obtained therefrom was published on p. 571 of Official Year Book No. 38. The question asked at the 1954 Census was much less detailed, and was designed partly to clarify replies to the question on class of dwelling. Information obtained in reply to this question and to that on farm dwellings has not been compiled.

CHAPTER XIX.

LOCAL GOVERNMENT.

§ 1. Introduction.

1. **Local Government Authorities.**—In each State of the Commonwealth, there exists a system of local government whose powers and responsibilities are in general similar, and cover such matters as the upkeep and construction of roads, streets and bridges, water, sewerage and drainage systems and health and sanitary services, the supervision of building and the administration of regulations relating to items such as weights and measures, slaughtering, the registration of dogs, etc. In addition to these obligatory functions, there are also many which may be performed by a local government authority either with or without the consent of the ratepayers or the Governor-in-Council. These include transport facilities, electricity, gas and other business undertakings, hospitals, charitable institutions, recreation grounds, parks, baths, libraries, museums, etc.

The system is based on the principle of a grant of specific powers by the State legislatures to the local authorities, their autonomy, however, being more or less limited by the provision for general supervision by a department of the central government or by the Governor-in-Council. Otherwise, within the scope of the Acts under which they are constituted or which they have to administer, they are responsible only to the ratepayers.

While the broad pattern of local government throughout the States of Australia is similar, the range of activities, election of officers, methods of valuation and rating powers, etc., differ considerably.

The areas over which local government bodies exercise general control, numbering 914, are known in New South Wales as cities, municipalities and shires; in Victoria as cities, towns, boroughs and shires; in Queensland as cities, towns and shires; in South Australia as cities, corporate towns and district council areas; in Western Australia as cities, municipalities and road districts; and in Tasmania as cities and municipalities. In New South Wales, some local government authorities in an area have combined to provide services such as electricity, water, sewerage and drainage—e.g., the county councils. Within shires, there are also some municipal units known as urban areas. In Western Australia, there are local health boards, whose personnel in most cases coincide with those of municipalities and road boards. Apart from the more thinly populated parts of New South Wales and South Australia and the Commonwealth Territories, practically the whole of Australia comes within local government jurisdiction.

The financial statistics in § 2 following are classified under the headings of Ordinary Services and Business Undertakings. The former covers the obligatory and general functions referred to above. Business Undertakings include public utilities such as water supply, sewerage, electricity, gas, transport and hydraulic power undertakings, and other miscellaneous works such as abattoirs, quarries, ice works, cinemas, etc.

2. **Semi-Governmental Authorities.**—In addition to local government authorities, a large number of authorities have been set up to control specific activities, which are often identical with some of those performed by either, or both, of the other classes of public authority—central government and local government—and a complete picture of any field of activity for a State or Australia as a whole cannot be obtained without reference to each class operating in that particular field. These semi-governmental authorities differ primarily from local government authorities in that their operations are restricted to the specific activity for which they were constituted—e.g., roads and bridges, or water and sewerage, or electricity and irrigation, or harbours, or tramways, etc.—i.e. each dispenses a specific service throughout an area as distinct from the general services of the local authority.

In §§ 3 to 7, which deal with debt, roads and bridges, water supply and sewerage, and harbours and fire brigades, particulars are included of the more important of these authorities which operate within the range covered by this chapter.

3. **Roads, Bridges, etc.**—The construction and maintenance of roads, bridges and ferries are generally part of the functions of local authorities, but in each State there exists a central road authority or a Government department whose duties relate to the construction, reconstruction and maintenance of "main" and "developmental" roads, the distribution of funds to local bodies, and the supervision and co-ordination of road construction and policy throughout the State. Although roads and bridges constructed and maintained directly by the Government or by the central road authority do not properly come under the heading of "Local Government", they have been included in this chapter for the

sake of convenience. Owing to difficulty in obtaining complete particulars of receipts and expenditure by the various local governing bodies in regard to roads under their control, the details of receipts and expenditure given in § 4 are those of the Government only, relating either to the supervisory board or commission in the State or to direct activities of a department. In § 2, some information is given of the revenue and expenditure of local government authorities in respect of roads.

4. **Water Supply and Sewerage.**—In the cities of Sydney and Melbourne, the control of water supply and sewerage is in the hands of special Boards, while in Adelaide and Perth these services are under the direct supervision of Government departments. In most of the other cities and towns, the municipal councils, or, in some cases, water trusts, are the controlling bodies which either construct the works out of their own resources or take them over after they have been constructed by the Government.

5. **Harbours.**—The majority of the harbours in Australia are managed by Boards, the members of which are either elected by persons interested, or are appointed by the Government. In a few instances, however, they are directly controlled by the Government.

6. **Fire Brigades.**—In all the States, the management of fire brigades is undertaken by Boards. These Boards usually comprise members elected by the councils of municipalities and insurance companies within the districts placed under their jurisdiction, and one or more members appointed by the Government. Occasionally volunteer or country fire brigades are represented.

7. **Other Local or Semi-Governmental Activity.**—The activities referred to above are not the only forms of local or semi-governmental undertakings. There are others, the most important being tramways and omnibus services and electricity and gas undertakings, which are not dealt with in this chapter, except to the extent that they are represented in the finances as shown in the following section. Chapter XI.—Transport and Communication contains information on municipal transport services, and Chapter VIII.—Electric Power Generation and Distribution deals with the various types of electricity undertakings in each State. In addition, particulars of municipal electricity and gas undertakings, although not shown separately, are included in the relevant sections in Chapter VII.—Manufacturing Industry.

§ 2. Local Government Authorities.

1. **New South Wales.**—For purposes of local government, the whole of the Eastern and Central land divisions and a small portion of the sparsely populated Western division have been divided into cities, municipalities (most principal towns) and shires (mainly large rural areas, some of which embrace important towns). At the end of 1953, the area incorporated was 184,000 square miles, or nearly three-fifths of the total area of the State.

All local government authorities in the State are subject to the general provisions of the Local Government Act.

Municipalities and shires may combine to form county councils for the establishment and conduct of services of joint benefit, e.g., electricity, water, sewerage. There were 35 county councils and the Grafton and South Grafton Water Board at 31st December, 1953.

2. **Victoria.**—Local government is established throughout the State, the various divisions being termed cities, towns, boroughs or shires. The only unincorporated areas are French Island (42,000 acres) in Westernport Bay, Julia Percy Island (650 acres), off Port Fairy, and Tower Hill (1,350 acres), adjacent to the Borough of Koroit. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, but are now subject to several provisions of the Local Government Act. The law relating to local government was consolidated by the Local Government Act 1946.

3. **Queensland.**—The whole of the State (except certain islands along the coast, the Dawson Valley Irrigation Area and the Somerset Dam Area) is incorporated into cities, towns and shires under the Local Authorities Act 1902 and its amendments.

4. **South Australia.**—The settled portion of South Australia is incorporated, being mostly under municipal corporations in the larger cities and towns, and district councils in the agricultural areas.

5. **Western Australia.**—In this State, local government is carried on by means of municipalities and district road boards. Certain functions are delegated to health boards, whose personnel, in most cases, coincide with those of the municipalities and district road boards.

6. **Tasmania.**—The whole State is divided into municipal districts, Hobart and Launceston being incorporated under separate Acts.

7. Area, Population, Dwellings and Value of Ratable Property.—The area, population, dwellings and value of ratable property in the incorporated areas of each State are shown in the following table. The valuations relate to ratable property only and exclude Government and other non-ratable property, whose value in the aggregate is considerable. In this table, particulars of dwellings are in accordance with the definition used in the 1954 Census, and are the results of information collected on the Census Schedules. For the purpose of the Census, a dwelling was defined as any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term has, therefore, a very wide meaning and includes, in addition to houses and flats, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution. Unoccupied dwellings include "week-end" and holiday dwellings and other dwellings temporarily unoccupied on the night of the Census. Dwellings being built are not included.

LOCAL GOVERNMENT AUTHORITIES : AREA, POPULATION, DWELLINGS AND VALUE OF RATABLE PROPERTY, 1953-54.(a)

Local Bodies.	Number	Area. '000 Acres.	Popula- tion. (a) '000.	Dwellings.(a)		Value of Ratable Property.		
				Occu- pied. No.	Unoccu- pied. No.	Unim- proved Capital Value. £'000.	Im- proved Capital Value. £'000.	Annual Value. £'000.
NEW SOUTH WALES.(b)								
Metropolitan—								
Capital City ..	1	7	193	52,763	1,099	101,588	289,452	17,059
Other ..	34	702	1,696	470,664	13,464	259,053	970,563	55,715
Outside Metropolitan Area	205	117,110	1,510	385,517	28,128	303,555	(c)	(c)
<i>Total ..</i>	<i>240</i>	<i>117,819</i>	<i>3,399</i>	<i>908,944</i>	<i>42,691</i>	<i>664,196</i>	<i>(c)</i>	<i>(c)</i>
VICTORIA.(d)								
Metropolitan—								
Capital City ..	1	8	93	22,348	455	(c)	154,155	7,708
Other ..	40	438	1,329	371,340	6,316	(c)	789,383	39,674
Outside Metropolitan Area	160	55,630	1,022	267,089	20,713	(c)	601,780	30,081
<i>Total ..</i>	<i>201</i>	<i>56,076</i>	<i>2,444</i>	<i>660,777</i>	<i>27,484</i>	<i>(c)</i>	<i>1,545,318</i>	<i>77,463</i>
QUEENSLAND.(f)								
Capital City ..	1	246	502	133,064	3,948	63,142	(c)	(c)
Outside Metropolitan Area	133	428,874	809	205,598	17,436	98,514	(c)	(c)
<i>Total ..</i>	<i>134</i>	<i>429,120</i>	<i>1,311</i>	<i>338,662</i>	<i>21,384</i>	<i>161,656</i>	<i>(c)</i>	<i>(c)</i>
SOUTH AUSTRALIA.(f)								
Metropolitan—								
Capital City ..	1	4	30	7,454	211	19,435	54,000	2,717
Other ..	20	99	454	126,649	2,737	(c)	172,000	8,598
Outside Metropolitan Area	122	34,423	298	78,505	5,399	(c)	199,000	9,962
<i>Total ..</i>	<i>143</i>	<i>34,526</i>	<i>782</i>	<i>212,608</i>	<i>8,347</i>	<i>(c)</i>	<i>425,000</i>	<i>21,277</i>
WESTERN AUSTRALIA.(g)								
Metropolitan—								
Capital City ..	1	14	97	25,460	577	(c)	55,750	2,926
Other ..	19	107	251	65,281	1,262	(c)	(c)	1,049
Outside Metropolitan Area	127	624,467	289	72,082	4,775	(c)	(c)	4,556
<i>Total ..</i>	<i>147</i>	<i>624,588</i>	<i>637</i>	<i>162,823</i>	<i>6,614</i>	<i>(c)</i>	<i>(c)</i>	<i>4,487</i>
TASMANIA.(f)								
Metropolitan—								
Capital City ..	1	18	55	14,624	375	7,052	24,433	1,499
Other ..	2	99	38	9,333	531	3,626	16,993	867
Outside Metropolitan Area	46	16,661	215	54,905	4,382	26,478	84,920	4,556
<i>Total ..</i>	<i>49</i>	<i>16,778</i>	<i>308</i>	<i>78,862</i>	<i>5,288</i>	<i>37,156</i>	<i>126,346</i>	<i>6,922</i>

(a) Particulars of population and dwellings are as at Census 30th June, 1954. (b) Year ended 31st December, 1953. (c) Not available. (d) Year ended 30th September, 1954. (e) Excludes Yallourn area under the jurisdiction of the State Electricity Commission. (f) Year ended 30th June, 1954. (g) Municipalities—Year ended 31st October, 1954; Road Districts—Year ended 30th June, 1954.

8. Finances.—(i) *General.* The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1953-54, except for New South Wales, where they relate to the year 1953.

(ii) *Ordinary Services.* In the returns of revenue and expenditure for 1953-54 in the following table, the proceeds from loans and expenditure thereof have been excluded. The financial operations of business undertakings controlled by the various local government authorities are given in the next paragraph. The profits resulting from the working of these undertakings, where taken into general revenue, have been included.

LOCAL GOVERNMENT AUTHORITIES : ORDINARY SERVICES—REVENUE AND EXPENDITURE, 1953-54.

Particulars.	N.S.W. (a)	Vic. (b)	Q'land. (c)	S. Aust. (c)	W. Aust. (d)	Tas. (c)	Total.
Number of Local Government Authorities	240	201	134	143	147	49	914
REVENUE (EXCLUDING LOAN RECEIPTS). (£.)							
<i>Taxation—</i>							
Rates (net) ..	20,186,689	12,480,001	8,960,942	3,262,235	2,154,825	1,282,156	48,471,324
Penalties ..	107,973	36,085	75,209	48,109	55,697	418	253,083
Licences ..	441,266	70,925	75,209	48,109	55,697	14,834	706,040
<i>Total</i> ..	<i>20,735,928</i>	<i>12,587,011</i>	<i>9,036,151</i>	<i>3,310,344</i>	<i>2,210,522</i>	<i>1,297,408</i>	<i>49,177,364</i>
<i>Public Works and Services—</i>							
Sanitary and Garbage Services	2,437,794	935,851	2,073,065	77,146	386,300	86,438	5,996,594
Council Properties	1,808,446	1,778,985	594,228	261,753	631,587	186,478	5,261,477
Street Construction ..	1,227,731	622,645	183,841	(e) 309,054	165,969	23,887	2,533,127
Other ..	1,270,754	299,143	63,351	90,332	24,436	30,318	1,778,334
<i>Total</i> ..	<i>6,744,725</i>	<i>3,636,624</i>	<i>2,914,485</i>	<i>738,285</i>	<i>1,208,292</i>	<i>327,121</i>	<i>15,569,532</i>
<i>Government Grants—</i>							
Roads ..	4,749,997	108,981	1,687,540	1,728,639	741,152	165,123	9,181,432
Other ..	872,931	428,570	(f) 1,325,782	205,048	962,610	27,101	3,822,042
<i>Total</i> ..	<i>5,622,928</i>	<i>537,551</i>	<i>3,013,322</i>	<i>1,933,687</i>	<i>1,703,762</i>	<i>192,224</i>	<i>13,003,474</i>
Profits from Business Undertakings ..	..	259,162	1,126	..	30,809	..	291,097
Fees and Fines ..	..	43,781	..	64,481	13,846	..	122,389
All Other ..	..	148,744	418,928	157,730	183,918	137,654	1,169,082
<i>Total Revenue</i> ..	<i>33,103,581</i>	<i>17,212,873</i>	<i>15,384,012</i>	<i>6,204,527</i>	<i>5,351,149</i>	<i>1,954,407</i>	<i>79,210,549</i>
EXPENDITURE (EXCLUDING LOAN EXPENDITURE). (£.)							
General Administration ..	2,305,395	2,424,868	1,359,061	495,351	639,177	218,430	7,442,282
<i>Debt Services (excluding Business Undertakings)—</i>							
Interest ..	975,656	574,310	1,184,442	49,701	139,646	61,266	2,985,021
Redemption ..	2,166,595	802,910	1,752,635	344,153	317,794	123,360	5,507,447
Exchange ..	19,657	11,706	179,587	..	..	..	210,950
Other ..	..	..	17,810	..	..	170	17,980
<i>Total</i> ..	<i>3,161,908</i>	<i>1,388,926</i>	<i>3,134,474</i>	<i>393,854</i>	<i>457,440</i>	<i>184,796</i>	<i>8,721,398</i>
<i>Public Works and Services—</i>							
Roads, Streets and Bridges ..	15,190,050	5,694,016	5,143,166	3,564,727	1,701,269	793,491	32,086,719
Health Administration ..	605,118	693,510	225,421	81,570	152,996	42,846	1,801,461
Sanitary and Garbage Services	3,040,875	1,507,385	1,209,622	311,876	424,983	94,688	6,589,429
Street Lighting ..	825,325	393,912	219,543	125,259	77,092	50,340	1,691,471
Council Properties	3,943,798	3,348,870	1,484,516	553,747	1,349,708	256,700	10,937,339
Other ..	1,081,076	133,066	1,714,752	102,900	49,945	39,990	3,121,729
<i>Total</i> ..	<i>24,686,242</i>	<i>11,770,759</i>	<i>9,997,020</i>	<i>4,740,079</i>	<i>3,755,993</i>	<i>1,278,055</i>	<i>56,228,148</i>
<i>Grants—</i>							
Fire Brigades ..	230,175	291,587	155,739	79,974	60,908	34,647	853,030
Hospitals and Ambulances ..	88,563	64,006	1,927	119,900	5,004	175	1,981,033
Other Charities ..	(h) 510,477	(i) 857,274	276,317	27,183	14,456	9,199	1,801,461
<i>Total</i> ..	<i>829,215</i>	<i>1,212,867</i>	<i>437,178</i>	<i>229,832</i>	<i>80,368</i>	<i>44,603</i>	<i>2,834,063</i>
All Other ..	897,876	114,541	192,676	..	182,501	217,131	1,604,725
<i>Total Expenditure</i>	<i>31,880,636</i>	<i>16,911,961</i>	<i>15,120,409</i>	<i>5,859,116</i>	<i>5,115,479</i>	<i>1,943,015</i>	<i>76,830,616</i>

(a) Figures for New South Wales relate to the year ended 31st December, 1953, and are on an income and expenditure basis as distinct from those of other States, which are on a cash basis. (b) Year ended 30th September, 1954. (c) Year ended 30th June, 1954. (d) Municipalities—Year ended 31st October, 1954, Road Districts—Year ended 30th June, 1954. (e) Includes £72,816 reimbursement from Highways Department for work done. (f) Includes £927,005 for sewerage and drainage. (g) Includes £1,148,415 for sewerage, mosquito control and drainage. (h) To Main Roads Department. (i) Includes £385,725 to Country Roads Board.

The following table shows the revenue and expenditure (excluding loan) of local government authority ordinary services for the years 1938-39 and 1949-50 to 1953-54 :—

LOCAL GOVERNMENT AUTHORITIES : ORDINARY SERVICES—REVENUE AND EXPENDITURE.
(£.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
1939 ..	10,657,409	6,070,551	4,177,632	1,578,688	1,447,154	518,755	24,450,189
1950 ..	16,293,311	9,454,755	8,291,960	2,917,606	2,858,147	1,050,939	40,866,718
1951 ..	18,591,800	11,044,520	10,182,127	3,460,747	3,581,714	1,214,430	48,075,338
1952 ..	24,169,405	13,503,694	12,471,901	4,390,093	4,158,300	1,590,395	60,283,788
1953 ..	30,750,584	15,640,763	13,816,308	4,937,701	4,987,847	1,799,958	71,933,161
1954 ..	33,103,581	17,212,873	15,384,012	6,204,527	5,351,149	1,954,407	79,210,549
EXPENDITURE (EXCLUDING LOAN EXPENDITURE).							
1939 ..	10,790,273	6,192,859	4,334,634	1,558,169	1,489,079	506,976	24,871,990
1950 ..	15,923,965	9,737,254	8,379,575	2,965,857	2,808,053	1,049,961	40,864,665
1951 ..	18,520,494	11,658,885	9,995,576	3,491,448	3,424,844	1,237,117	48,328,364
1952 ..	24,166,870	14,040,324	12,614,922	4,451,992	4,270,946	1,604,932	61,149,986
1953 ..	29,605,365	15,457,485	13,150,493	5,031,698	4,793,057	1,780,648	69,818,746
1954 ..	31,880,636	16,911,961	15,120,409	5,859,116	5,115,479	1,943,015	76,830,616

(a) Years ended previous 31st December. (b) Years ended 30th September. (c) Municipalities—Years ended 31st October ; Road Districts—Years ended 30th June.

(iii) *Business Undertakings.* The table hereunder shows, for 1953-54, particulars of the revenue and expenditure, other than loan, of business undertakings under the control of local government authorities. These particulars are not included in the foregoing tables.

LOCAL GOVERNMENT AUTHORITIES : BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE, 1953-54.
(£.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
<i>Water Supply and Sewerage—</i>							
Rates	1,504,671	..	50,655	..	9,650	418,698	1,983,674
Charges for Services and Sales of Products ..	475,834	103,308	2,194,542	1,641	2,061	96,799	2,874,185
Other (including Grants)	(a)625,679	3,821	974,778	..	..	40,212	1,644,490
<i>Total</i>	<i>2,606,184</i>	<i>107,129</i>	<i>3,219,975</i>	<i>1,641</i>	<i>11,711</i>	<i>555,709</i>	<i>6,502,349</i>
<i>Electricity and Gas—</i>							
Rates	191,263	..	10,213	1,893	..	..	203,369
Charges for Services and Sales of Products ..	35,247,729	7,480,662	6,216,524	458,161	460,497	..	49,863,573
Other (including Grants)	945,180	124,916	324,170	18,827	5,761	..	1,418,854
<i>Total</i>	<i>36,384,172</i>	<i>7,605,578</i>	<i>6,550,907</i>	<i>478,881</i>	<i>466,258</i>	<i>..</i>	<i>51,485,796</i>
<i>Railways, Tramways and Omnibuses—</i>							
Rates .. .. .	..	..	..	..	..	39,677	39,677
Charges for Services and Sales of Products ..	..	..	3,162,022	..	..	703,102	3,865,124
Other (including Grants)	..	..	114,039	..	..	9,790	123,829
<i>Total</i>	<i>..</i>	<i>..</i>	<i>3,276,061</i>	<i>..</i>	<i>..</i>	<i>752,569</i>	<i>4,028,630</i>
<i>Other—</i>							
Rates	(b) ..	(c) ..	(d) ..	(e) 3,947	(f) 590	(g) 194	4,731
Charges for Services and Sales of Products ..	2,373,934	461,379	45,109	15,566	37,539	56,303	2,989,830
Other (including Grants)	2,868	14,370	16,180	3,661	..	1,522	38,601
<i>Total</i>	<i>2,376,802</i>	<i>475,749</i>	<i>61,289</i>	<i>23,174</i>	<i>38,129</i>	<i>58,019</i>	<i>3,033,162</i>
Grand Total ..	41,367,158	8,188,456	13,108,232	503,696	516,098	1,366,297	65,049,937

NOTE.—See next page for footnotes.

LOCAL GOVERNMENT AUTHORITIES : BUSINESS UNDERTAKINGS—
REVENUE AND EXPENDITURE, 1953-54—*continued.*

(£.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
EXPENDITURE (EXCLUDING LOAN EXPENDITURE).							
<i>Water Supply and Sewerage—</i>							
Working Expenses ..	1,179,393	69,009	1,310,962	1,658	8,088	198,967	2,768,077
Depreciation ..	<i>h</i> -77,834	4,784	..	..	..	..	-73,050
Debt Charges ..	736,218	19,050	797,390	..	2,740	230,697	1,786,095
Other (including Transfers to General Revenue and Construction) ..	..	695	973,384	..	..	99,292	1,073,371
<i>Total</i>	<i>1,837,777</i>	<i>93,538</i>	<i>3,081,736</i>	<i>1,658</i>	<i>10,828</i>	<i>528,956</i>	<i>5,554,493</i>
<i>Electricity and Gas—</i>							
Working Expenses ..	30,548,292	6,507,897	5,394,242	404,465	377,125	..	43,232,021
Depreciation ..	<i>h</i> 1,056,818	267,305	..	..	40,346	..	1,364,469
Debt Charges ..	2,688,491	389,145	745,636	29,734	32,827	..	3,885,833
Other (including Transfers to General Revenue and Construction) ..	..	280,680	437,542	14,908	15,764	..	748,894
<i>Total</i>	<i>34,293,601</i>	<i>7,445,027</i>	<i>6,577,420</i>	<i>449,107</i>	<i>466,062</i>	<i>..</i>	<i>49,231,217</i>
<i>Railways, Tramways and Omnibuses—</i>							
Working Expenses ..	..	..	3,081,480	..	..	535,458	3,616,938
Depreciation ..	..	..	..	..	..	..	..
Debt Charges ..	..	..	397,914	..	..	101,078	498,992
Other (including Transfers to General Revenue and Construction) ..	..	..	169,496	..	..	91,229	260,725
<i>Total</i>	<i>..</i>	<i>..</i>	<i>3,648,890</i>	<i>..</i>	<i>..</i>	<i>727,765</i>	<i>4,376,655</i>
<i>Other—</i>							
Working Expenses ..	(<i>b</i>) 2,236,278	(<i>c</i>) 357,835	(<i>d</i>) 51,996	(<i>e</i>) 23,398	(<i>f</i>) 42,158	(<i>g</i>) 34,263	2,745,928
Depreciation ..	7,659	9,588	..	..	..	..	17,247
Debt Charges ..	50,745	36,731	3,015	..	298	8,893	99,682
Other (including Transfers to General Revenue and Construction) ..	..	28,468	3,757	..	..	10,018	42,243
<i>Total</i>	<i>2,294,682</i>	<i>432,622</i>	<i>58,768</i>	<i>23,398</i>	<i>42,456</i>	<i>53,174</i>	<i>2,905,100</i>
<i>Grand Total</i>	<i>38,426,060</i>	<i>7,971,187</i>	<i>13,366,814</i>	<i>474,163</i>	<i>519,346</i>	<i>1,309,895</i>	<i>62,067,465</i>

(a) Includes Government grant, £574,158, for part of cost of new works borne by Government. (b) Abattoirs, ice-works, and production of building materials. (c) Abattoirs and hydraulic power undertakings. (d) Municipal markets, amusement parks, hotels, and cinemas. (e) Quarries. (f) Quarries, ice-works and abattoirs. (g) Abattoirs. (h) Net balance after deducting charge for debt redemption. The full amount of charge for debt redemption is included under debt charges.

NOTE.—For years to which particulars relate, see preceding table. Minus sign (—) indicates an excess of credits.

The next table shows the revenue and expenditure, other than loan, of local government business undertakings for the years 1938-39 and 1949-50 to 1953-54.

LOCAL GOVERNMENT AUTHORITIES : BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE.

(£.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
REVENUE (EXCLUDING LOAN RECEIPTS).							
1939 ..	6,405,010	1,813,796	3,373,966	113,132	962,470	528,461	13,196,835
1950 ..	16,337,869	4,520,756	6,608,609	272,369	523,654	795,929	29,059,186
1951 ..	20,773,694	5,094,127	7,923,664	328,840	550,538	927,257	35,598,120
1952 ..	26,803,005	6,309,342	10,435,609	379,576	436,151	1,088,285	45,451,968
1953 ..	35,653,575	7,655,688	12,798,252	462,477	468,860	1,212,219	58,251,071
1954 ..	41,367,158	8,188,456	13,108,232	503,696	516,098	1,366,297	65,049,937
EXPENDITURE (EXCLUDING LOAN EXPENDITURE).							
1939 ..	5,556,123	1,802,972	3,256,263	123,356	935,052	513,666	12,187,432
1950 ..	16,659,960	4,494,128	6,655,637	292,237	535,287	797,887	29,435,136
1951 ..	20,556,981	5,219,961	7,917,049	339,556	585,938	926,336	35,543,821
1952 ..	27,381,428	6,248,151	10,734,811	394,516	453,963	1,070,473	46,283,342
1953 ..	34,051,109	7,623,099	12,851,076	448,760	468,985	1,243,145	56,686,174
1954 ..	38,426,060	7,971,187	13,366,814	474,163	519,346	1,309,895	62,067,465

(a) Years ended previous 31st December. (b) Years ended 30th September. (c) Municipalities—Years ended 31st October; Road Districts—Years ended 30th June.

(iv) *Loan Expenditure.* The table below shows particulars for 1953–54 of loan expenditure on works connected with the ordinary services and the business undertakings of local government authorities.

LOCAL GOVERNMENT AUTHORITIES : LOAN EXPENDITURE ON WORKS, 1953-54.

(£.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
ORDINARY SERVICES.							
Roads, Bridges, Streets, Footpaths, Drainage and Sewerage	1,981,525	875,692	2,434,537	728,145	428,690	} 237,009	10,698,470
Council Properties	1,269,473	672,305	} 478,553	43,710	342,880		
Parks, Gardens and Recreational Reserves	405,573	172,763		} 55,460	..			35,683
Other	(a)464,795	26,354	13,531		31,792		
Total	4,121,366	1,747,114	2,968,550	785,386	839,045	237,009	10,698,470
BUSINESS UNDERTAKINGS.							
Water Supply	1,802,708	41,682	1,572,849	..	..	} 641,808	17,546,351
Sewerage	440,626	..	..	..	..
Electricity and Gas	8,015,079	1,265,412	3,127,551	61,973	70,559		
Railways, Tramways and Omnibuses .. ..	..	..	153,500	..	..
Abattoirs	177,883	101,256	..	..	..
Other .. ..	..	..	65,797	..	7,668		
Total	10,436,296	1,408,350	4,919,697	61,973	78,227	641,808	17,546,351
Grand Total	14,557,662	3,155,464	7,888,247	847,359	917,272	878,817	28,244,821

(a) Includes advances for homes, £28,774.

NOTE.—For years to which particulars relate, see next table.

The following table shows the loan expenditure on works connected with local government ordinary services and business undertakings during the years 1938–39 and 1949–50 to 1953–54 :—

LOCAL GOVERNMENT AUTHORITIES : LOAN EXPENDITURE ON WORKS.

(£.)

Year ended 30th June.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.	W. Aust.(c)	Tas.	Total.
ORDINARY SERVICES.							
1939 ..	1,757,704	662,986	1,316,651	43,479	117,172	39,481	3,937,473
1950 ..	2,769,996	924,630	2,737,791	331,047	500,905	315,439	7,579,808
1951 ..	3,242,674	1,194,723	3,546,437	280,704	586,386	347,347	9,198,271
1952 ..	4,255,591	1,700,714	4,412,322	512,166	692,908	467,938	12,041,639
1953 ..	4,659,765	1,797,220	2,897,953	410,015	715,260	350,754	10,830,967
1954 ..	4,121,366	1,747,114	2,968,550	785,386	839,045	237,009	10,698,470
BUSINESS UNDERTAKINGS.							
1939 ..	1,481,484	452,374	941,911	9,542	76,280	232,687	3,194,278
1950 ..	6,356,107	680,481	2,811,709	8,044	71,005	396,297	10,323,643
1951 ..	8,950,059	1,185,122	3,311,223	74,864	64,087	449,703	14,035,058
1952 ..	12,077,623	1,841,068	5,432,804	100,873	46,884	811,166	20,310,418
1953 ..	10,496,444	1,772,410	5,436,649	115,004	43,948	732,011	18,596,466
1954 ..	10,436,296	1,408,350	4,919,697	61,973	78,227	641,808	17,546,351

(a) Years ended previous 31st December. (b) Years ended 30th September. (c) Municipalities—Years ended 31st October ; Road Districts—Years ended 30th June.

§ 3. Local and Semi-Governmental Authorities' Debt.

1. **General.**—Statistics of local and semi-governmental debt for the years 1938–39 and 1951–52 to 1954–55 are given in the following paragraph. The information covers all local government authorities and those semi-governmental authorities responsible for the provision of the following services :—

New South Wales. Water Supply, Sewerage and Drainage, Electricity Supply, Fire Brigades, and Banking. County Councils are included among these authorities.

Victoria. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Tramways, Electricity and Gas Supply, Fire Brigades, Marketing (Buying and Selling), Industry Assistance, Grain Elevators, Housing, and Miscellaneous.

Queensland. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Electricity Supply, Roads and Bridges, Fire Brigades, Universities, Hospitals and Ambulances, Marketing (Buying and Selling and Agency), and Industry Assistance.

South Australia. Irrigation and Drainage, Tramways, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), Industry Assistance, Banking, Housing, and Miscellaneous.

Western Australia. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Tramways, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), and Housing.

Tasmania. Harbours, Electricity Supply, Fire Brigades, and Housing.

A detailed list of the authorities included is shown in *Finance Bulletin No. 46, 1954–55.*

2. **Local and Semi-Governmental Authorities' Debt.**—The following table provides a summary of new money loan raisings, provisions for debt redemption, debt outstanding and interest payable by local and semi-governmental authorities for the years ended 30th June, 1954 and 1955. For greater detail See *Finance Bulletin No. 46, 1954–55.*

LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES : NEW MONEY LOAN RAISINGS, REDEMPTION, DEBT AND INTEREST PAYABLE 1953-54 AND 1954-55. (£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
LOCAL GOVERNMENT AUTHORITIES.							
1953-54.							
<i>New Money Loan Raisings—</i>							
From Government ..	308	56	1,997	586	18	35	3,001
From Public ..	10,058	3,341	7,553	433	1,285	1,174	23,843
<i>Total ..</i>	<i>10,366</i>	<i>3,397</i>	<i>9,550</i>	<i>1,019</i>	<i>1,303</i>	<i>1,209</i>	<i>26,844</i>
<i>Funds Provided for Redemption—</i>							
Government Loans ..	58	13	996	256	1	8	1,332
Loans due to Public ..	2,952	1,118	2,099	98	340	321	6,928
<i>Total ..</i>	<i>3,010</i>	<i>1,131</i>	<i>3,095</i>	<i>354</i>	<i>341</i>	<i>329</i>	<i>8,260</i>
Accumulated Sinking Fund Balance ..	5,198	2,029	2,743	1	199	269	10,439
<i>Debt—</i>							
Due to Government ..	1,687	336	12,062	1,036	42	127	15,290
Due to Banks (Net Overdraft) ..	146	543	27	55	4	20	795
Due to Public Creditor(a) ..	55,148	21,468	52,638	1,509	4,397	6,673	141,833
<i>Total(a) ..</i>	<i>56,981</i>	<i>22,347</i>	<i>64,727</i>	<i>2,600</i>	<i>4,443</i>	<i>6,820</i>	<i>157,918</i>
Maturing Overseas(a)(b) ..	1,812	..	2,102	..	..	..	3,914
Annual Interest Payable(a) ..	(c)	894	2,530	73	181	267	(c)

LOCAL GOVERNMENT AUTHORITIES.
1954-55.

<i>New Money Loan Raisings—</i>							
From Government ..	140	99	2,724	446	4	..	3,413
From Public ..	10,590	3,824	6,616	587	1,431	1,375	24,423
<i>Total ..</i>	<i>10,730</i>	<i>3,923</i>	<i>9,340</i>	<i>1,033</i>	<i>1,435</i>	<i>1,375</i>	<i>27,836</i>
<i>Funds Provided for Redemption—</i>							
Government Loans ..	77	37	1,037	310	7	9	1,477
Loans due to Public ..	3,509	1,748	1,993	130	477	345	8,202
<i>Total ..</i>	<i>3,586</i>	<i>1,785</i>	<i>3,030</i>	<i>440</i>	<i>484</i>	<i>354</i>	<i>9,679</i>
Accumulated Sinking Fund Balance ..	5,305	2,242	3,602	38	146	226	11,559
<i>Debt—</i>							
Due to Government ..	1,750	401	13,759	1,172	65	118	17,265
Due to Banks (Net Overdraft) ..	139	159	..	63	1	..	362
Due to Public Creditor(a) ..	62,007	24,178	58,166	1,984	5,339	7,661	159,335
<i>Total(a) ..</i>	<i>63,896</i>	<i>24,738</i>	<i>71,925</i>	<i>3,219</i>	<i>5,405</i>	<i>7,779</i>	<i>176,962</i>
Maturing Overseas(a)(b) ..	1,812	..	2,687	..	..	..	4,499
Annual Interest Payable(a) ..	(c)	1,032	2,892	100	231	318	(c)

SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.
1953-54.

<i>New Money Loan Raisings—</i>							
From Government ..	20,040	20,977	1,349	12,601	1,873	9,523	66,363
From Public ..	14,231	34,485	8,631	2,565	2,784	2,024	64,720
<i>Total ..</i>	<i>34,271</i>	<i>55,462</i>	<i>9,980</i>	<i>15,166</i>	<i>4,657</i>	<i>11,547</i>	<i>131,083</i>
<i>Funds Provided for Redemption—</i>							
Government Loans ..	573	800	211	424	370	360	2,738
Loans due to Public ..	2,527	4,650	1,271	2,312	82	113	10,955
<i>Total ..</i>	<i>3,100</i>	<i>5,450</i>	<i>1,482</i>	<i>2,735</i>	<i>452</i>	<i>473</i>	<i>13,693</i>
Accumulated Sinking Fund Balance ..	12,168	6,487	188	562	54	58	19,517
<i>Debt—</i>							
Due to Government ..	97,363	121,172	4,766	60,988	23,441	44,796	352,526
Due to Banks (Net Overdraft) ..	337	190	711	18	8	..	1,264
Due to Public Creditor(a) ..	151,268	220,823	34,492	17,746	6,059	7,964	438,352
<i>Total(a) ..</i>	<i>248,968</i>	<i>342,185</i>	<i>39,969</i>	<i>78,752</i>	<i>29,508</i>	<i>52,760</i>	<i>792,142</i>
Maturing Overseas(a)(b) ..	8,520	3,889	..	767	..	..	13,176
Annual Interest Payable(a) ..	(c)	12,510	1,646	2,916	1,145	1,792	(c)

NOTE.—See next page for footnotes.

LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES : NEW MONEY LOAN RAISINGS, REDEMPTION, DEBT AND INTEREST PAYABLE 1953-54 AND 1954-55—continued.

(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES. 1954-55.							
<i>New Money Loan Raisings—</i>							
From Government	12,552	14,722	1,584	10,921	2,112	9,343	51,234
From Public	12,343	39,697	7,092	786	2,992	1,574	64,484
<i>Total</i>	<i>24,895</i>	<i>54,419</i>	<i>8,676</i>	<i>11,707</i>	<i>5,104</i>	<i>10,917</i>	<i>115,718</i>
<i>Funds Provided for Redemption—</i>							
Government Loans ..	614	988	385	485	411	445	3,328
Loans due to Public ..	2,790	1,697	1,083	120	107	136	5,933
<i>Total</i>	<i>3,404</i>	<i>2,685</i>	<i>1,468</i>	<i>605</i>	<i>518</i>	<i>581</i>	<i>9,261</i>
Accumulated Sinking Fund Balance	13,520	7,208	599	683	115	115	22,240
<i>Debt—</i>							
Due to Government ..	109,484	134,691	6,523	71,545	25,142	53,695	401,080
Due to Banks (Net Overdraft) ..	1,105	80	986	18	6	..	2,195
Due to Public Creditor(a) ..	162,558	259,546	43,550	18,411	9,005	9,460	502,530
<i>Total(a)</i>	<i>273,147</i>	<i>394,317</i>	<i>51,059</i>	<i>89,974</i>	<i>34,153</i>	<i>63,155</i>	<i>905,805</i>
Maturing Overseas(a)(b) ..	8,492	4,357	..	767	..	..	13,616
Annual Interest Payable(a) ..	(c)	14,560	2,180	3,380	1,359	2,258	(c)

(a) Includes debt or interest payable in London and New York. The former is expressed in United Kingdom currency, the latter is payable in dollars which have been converted at the rate of 4.8665 dollars to £1. (b) Included in debt figures above. (c) Not available.

In this and the following tables, debt includes all liabilities for which arrangements have been made for repayment over a period of one year or more, and net overdrafts. Interest capitalized and amounts due for the capital cost of assets or for services rendered which are to be repaid over a period of one year or more are included. Current liabilities, such as interest accrued (but not capitalized), trade creditors, amounts held in trust and other debts which are to be repaid in less than one year are not included. Net overdraft is the gross overdraft of all funds less all bank credit balances (including fixed deposits) which do not form part of a sinking fund to repay a loan. New loans raised during the year include new loan liabilities incurred during the year, loans raised to repay indebtedness to the Government, and interest capitalized. Loans raised and redeemed within the year, increases in overdrafts and loans raised for conversion or redemption of existing debt are excluded. Funds provided for redemption include instalments of principal repaid and amounts credited to sinking funds established for the purpose of repaying the debt on maturity. Amounts provided for redemption from loans raised for that purpose are excluded.

In the following table, a summary is given of new money loan raisings, provisions for the redemption of debt and debt outstanding of local and semi-governmental authorities for the years 1938-39 and 1951-52 to 1954-55.

**LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES, AUSTRALIA : NEW MONEY
LOAN RAISINGS, REDEMPTION AND DEBT.**

(£'000.)

Particulars.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.
LOCAL GOVERNMENT AUTHORITIES.					
<i>New Money Loan Raisings—</i>					
From Government	371	3,175	1,648	3,001	3,413
From Public	7,060	18,381	21,522	23,843	24,423
<i>Total</i>	<u>7,431</u>	<u>21,556</u>	<u>23,170</u>	<u>26,844</u>	<u>27,836</u>
<i>Funds provided for Redemption—</i>					
Government Loans	2,141	942	1,267	1,332	1,477
Loans due to Public	2,995	5,351	6,475	6,928	8,202
<i>Total</i>	<u>5,136</u>	<u>6,293</u>	<u>7,742</u>	<u>8,260</u>	<u>9,679</u>
Accumulated Sinking Fund Balance	(a)	9,542	9,947	10,439	11,559
<i>Debt—</i>					
Due to Government	13,207	13,374	13,642	15,290	17,265
Due to Banks (Net Overdraft)	1,544	2,567	1,990	795	362
Due to Public Creditor(b)	76,582	109,609	125,051	141,833	159,335
<i>Total(b)</i>	<u>91,333</u>	<u>125,550</u>	<u>140,683</u>	<u>157,918</u>	<u>176,962</u>
Maturing Overseas(b)(c)	17,893	4,229	4,025	3,914	4,499
SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.					
<i>New Money Loan Raisings—</i>					
From Government	1,524	69,130	57,885	66,363	51,234
From Public	7,038	56,173	68,831	64,720	64,484
<i>Total</i>	<u>8,562</u>	<u>125,303</u>	<u>126,716</u>	<u>131,083</u>	<u>115,718</u>
<i>Funds provided for Redemption—</i>					
Government Loans	699	1,864	2,316	2,738	3,328
Loans due to Public	1,146	3,962	5,196	10,955	5,933
<i>Total</i>	<u>1,845</u>	<u>5,826</u>	<u>7,512</u>	<u>13,693</u>	<u>9,261</u>
Accumulated Sinking Fund Balance	(a)	16,119	17,487	19,517	22,240
<i>Debt—</i>					
Due to Government	(d)44,817	218,210	296,661	352,526	401,080
Due to Banks (Net Overdraft)	2,006	9,141	5,490	1,264	2,195
Due to Public Creditor(b)	118,506	307,240	376,390	438,352	502,530
<i>Total(b)</i>	<u>d165,329</u>	<u>534,591</u>	<u>678,541</u>	<u>792,142</u>	<u>905,805</u>
Maturing Overseas(b)(c)	12,088	13,267	13,207	13,176	13,616

(a) Not available. (b) Includes debt in London and New York. The former is expressed in United Kingdom currency, the latter is payable in dollars which have been converted at the rate of 4.8665 dollars to £1. (c) Included in debt figures above. (d) Approximate only.

§ 4. Roads and Bridges.

1. Commonwealth Government Grants.—The following table shows the allocation under the several Commonwealth Aid Roads Acts to the States for road construction, maintenance, repair and other works connected with transport for each of the years 1938-39 and 1949-50 to 1954-55, and to the Commonwealth for expenditure on the construction and maintenance of strategic roads and for the promotion of road safety practices for each of the years 1949-50 to 1954-55. See also Chapter XXI.—Public Finance, and *Finance* bulletins,

ROAD CONSTRUCTION, MAINTENANCE, ETC. : GRANTS UNDER THE COMMONWEALTH AID ROADS ACTS.

(£'000.)

Year ended 30th June—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Total.
1939 ..	1,199	747	815	474	819	213	..	4,267
1950 ..	2,472	1,526	1,683	965	1,683	438	600	9,367
1951 ..	3,819	2,357	2,600	1,490	2,600	677	600	14,143
1952 ..	4,131	2,549	2,812	1,611	2,812	732	600	15,247
1953 ..	4,260	2,629	2,900	1,662	2,900	756	600	15,707
1954 ..	4,641	2,863	3,160	1,810	3,160	823	600	(b)22,057
1955 ..	5,893	3,771	4,125	2,409	4,190	1,073	900	22,361

(a) Allocation for expenditure on the construction and maintenance of strategic roads and the promotion of road safety practices. (b) Includes £5,000,000 paid into the Commonwealth Aid Roads (Supplementary) Trust Account to be expended on grants to the States for roads purposes in subsequent years.

2. New South Wales.—(i) *General.* A central road authority was created by legislation in 1925 for the purpose of providing improved and uniform standards of construction, reconstruction and maintenance of the principal roads, and to administer Governmental subsidies for work on those roads. This authority, known as the Department of Main Roads, exercises control over Government activities in connexion with road works. Its activities embrace works on main and developmental roads throughout the State, all roads in the unincorporated portion of the Western Division, and proclaimed national works (principally bridges and vehicular ferries) constructed from Government funds. The department co-operates with the municipal and shire councils in the work of constructing and maintaining a well-organized system of main highways.

In the metropolitan district, the whole cost of the construction and maintenance of main roads is paid from the funds of the Main Roads Department, while in the country districts assistance in respect of road works may be granted for any area through which a main road passes. The cost of constructing developmental roads and works is borne in full by the Main Roads Department, but local councils are required to maintain them in satisfactory condition. For other roads, the cost of both construction and maintenance work is generally chargeable to the revenue of local authorities, although Governmental assistance is not infrequently granted for works of construction and re-construction. In the Western Division, the full cost of all roads and bridges is met by the Department of Main Roads.

The general system of road communication throughout the State is made up of main roads classified into State highways, trunk roads and ordinary main roads. There are also secondary roads (metropolitan area) and developmental roads.

Public roads, except those within the City of Sydney, may be proclaimed as main roads on the recommendation of the Commissioner for Main Roads, who takes into consideration representations made by councils concerned, availability of funds for construction and maintenance purposes, and the value as connecting links between centres of population or business.

(ii) *Length of Roads.* (a) *Proclaimed Roads.* The following table shows lengths of proclaimed roads at 30th June, 1955, according to class of road:—

PROCLAIMED ROADS, NEW SOUTH WALES : LENGTHS, 30th JUNE, 1955.
(Miles.)

Division.	Main Roads.				Secondary Roads.	Developmental Roads.	Total.
	State Highways.	Trunk Roads.	Ordinary Main Roads.	Total.			
Eastern and Central ..	5,198	2,874	9,703	17,775	(a) 76	2,934	20,785
Western	1,326	1,353	2,859	5,538	..	..	5,538
Total ..	6,524	4,227	12,562	23,313	76	2,934	26,323

(a) Metropolitan area.

During 1954-55, 156 miles of new developmental roads were proclaimed and 156 miles were removed from the list of proclaimed roads. There were 10 miles of main roads proclaimed during the year.

The length of main and secondary roads maintained by the Department of Main Roads at 30th June, 1955 (excluding the Western Division) was 2,823 miles (16 per cent.), while the length maintained by councils was 15,028 miles (84 per cent.). The proportions of the several classes of main roads maintained by the Department and councils respectively were:—State highways, 42 per cent., 58 per cent.; trunk roads, 2 per cent., 98 per cent.; ordinary main roads, 6 per cent., 94 per cent. Secondary roads were wholly maintained by councils. In the County of Cumberland (the metropolis and adjoining areas) the Department maintained 55 per cent. of the roads (504 miles).

(b) *Composition of Roads.* In 1955, the total length of all roads in New South Wales was estimated at 125,040 miles, including 8,645 miles in the Western Division. The lengths of roads, according to their composition or nature, were as follows:—cement concrete, 404 miles; asphaltic concrete, 200 miles; tar or bituminous macadam, 4,684 miles; surface water-bound macadam, 5,440 miles; water-bound macadam, 1,794 miles; gravel or crushed rock, 39,550 miles; formed only, 27,281 miles; cleared or natural surface only, 45,687 miles.

(iii) *Main Roads Department.* (a) *General.* Progress has continued with the implementation of the Main Roads Department plan for main road development in the metropolis and the balance of the County of Cumberland. The plan has been incorporated in the County of Cumberland Planning Scheme approved by Parliament under the Local Government (Amendment) Act 1951. Detailed planning of the Newcastle and District Arterial Roads System is well advanced and some sections of the system have already been constructed. Surveys and designs have been advanced in the planned Wollongong-Port Kembla District Main Roads System.

In addition to its construction and maintenance work on roads, the Main Roads Department is engaged on a scheme for widening metropolitan roads. The acquisition of land required to implement approved schemes is proceeding.

During 1954-55, 46 new bridges were completed on main roads by the Department and councils. Major bridge works under construction include steel and concrete bridges, over Middle Harbour at the Spit, Sydney (length 745 feet), over George's River at Liverpool (length 912 feet), over the Clyde River at Bateman's Bay (length 1,008 feet), over the Tuross River at Bodalla (length 630 feet), over the Cockfighters Creek at Warkworth (length 637 feet) and over the Hunter River at Denman (length 683 feet).

(b) *Receipts and Payments.* The funds of the Department of Main Roads are derived principally from taxation of motor vehicles, contributions by the Commonwealth Government under the Commonwealth Aid Roads Acts (see Chapter XXI.—Public Finance, for some particulars of the basis and distribution of grants under these Acts and para. 1 of this section for particulars of the amounts allocated in recent years), contributions by municipal and shire councils, and special (not statutory) assistance by the State Government by way of loan moneys or special grants from revenue funds. Receipts and payments for the four years 1951-52 to 1954-55 compared with the income and expenditure for 1938-39 are shown below.

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES : RECEIPTS AND PAYMENTS.
(£.)

Item.	1938-39. (a)	1951-52.	1952-53.	1953-54.	1954-55.
RECEIPTS.					
Motor Vehicle Taxation, and Registration and Licence Fees	2,018,556	5,046,392	6,381,289	6,693,215	7,279,705
Commonwealth Aid Roads and Works Acts	1,176,039	2,869,566	2,900,562	3,236,940	4,132,187
Councils' Contributions	250,679	396,766	486,352	559,780	707,230
Consolidated Revenue (State) .. .. .	..	300,000	100,000	850,000	..
Loans from State Government	302,643	225,000	150,000	..	200,000
Grants and Contributions from State Government and Departments, etc.	13,549	58,545	74,063	89,266	115,983
Commonwealth Funds for Special Works .. .. .	..	204,122	381,769	358,206	261,554
Other	54,782	128,339	127,378	98,935	48,350
Total	3,816,248	9,228,730	10,601,413	11,886,342	12,745,009

NOTE.—See next page for footnotes.

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES: RECEIPTS AND PAYMENTS—*continued.*
(£.)

Item.	1938-39. (a)	1951-52.	1952-53.	1953-54.	1954-55.
PAYMENTS.					
Roads and Bridges—					
Construction	1,736,898	3,617,048	4,279,212	6,314,770	6,896,403
Maintenance	1,519,929	4,921,212	4,554,159	5,146,618	5,546,974
Other Works .. .. .	..	..	28,178	27,156	2,546
Debt Charges—					
Interest, Exchange, etc.	152,469	123,297	122,651	136,450	140,233
Debt Redemption	200,591	27,776	(b) 129,472	31,442	33,735
Purchase of Assets(c) .. .. .	..	102,453	210,856	308,580	81,584
Suspense Accounts(d) .. .. .	..	680,959	110,069	107,327	-326,317
Administration, etc.	100,583	347,575	386,120	410,547	458,428
Other	914	119,978	109,598	73,275	33,950
Total	3,711,384	9,940,298	9,930,315	12,556,165	12,867,536

(a) Income and expenditure. (b) Includes £100,000 repayment to Treasury of funds specially provided by the State Government in earlier years from Consolidated Revenue. (c) Excludes plant and motor vehicles. (d) Includes purchase and operation of Departments' Plant and Vehicles not included elsewhere.

NOTE.—Minus sign (—) indicates excess of receipts over payments.

The figures shown above represent the aggregate receipts and payments of three funds—the County of Cumberland Main Roads Fund, the Country Main Roads Fund and the Developmental Roads Fund.

The total expenditure on roads, streets and bridges in the State by all authorities during the years 1938-39 and 1950-51 to 1954-55 was, respectively, £8,891,000, £14,822,000, £19,960,000, £22,560,000, £26,829,000, and £29,498,000. These figures are approximate and they include expenditure on construction, maintenance and direct administration, but not on debt charges. Expenditure on the Sydney Harbour Bridge is not included.

(c) *Sydney Harbour Bridge.* The Sydney Harbour Bridge was opened for traffic on 19th March, 1932. The main span is 1,650 feet and the clearance for shipping 170 feet from high water level. The deck, 160 feet wide, carries a roadway, two railway tracks and two tramway tracks, and there is also a footway on each side. The capital cost of the bridge to the 30th June, 1955, was £9,578,006, but this amount will be reduced slightly on completion of the disposal of the remaining surplus resumed property. The portion met from repayable loan funds, over £7,900,000, is repayable from toll income. The accumulated balance of the Bridge Account at 30th June, 1956, showed a surplus of £23,278, after the transfer of sums totalling £1,775,000 to a reserve account. Annual income, after a decline to less than £300,000 during the 1939-45 War, has risen from about £400,000 in 1938-39 to over £950,000 in 1955-56, expenditure over the same period has remained relatively stable, varying between £424,000 and £560,000. In 1955-56, income included road tolls £764,716, railway passenger tolls £146,577, and tram and omnibus passenger tolls £25,965. Expenditure amounted to £560,656, including interest, exchange, etc., £251,933, sinking fund, £59,832 and maintenance and improvement £163,461. During 1955-56, 25,785,000 rail travellers, 23,680,000 tram and omnibus travellers, and 35,201,000 road travellers in 20,535,000 road vehicles crossed the bridge, contributing respectively, 16 per cent., 3 per cent., and 81 per cent. of the total toll revenue.

3. Victoria—(i) *General.* With the object of improving the main roads of the State the Country Roads Board was established by legislation passed in 1912. The principal duties of the Board are to determine the main roads, State highways, tourists' roads, etc., to inquire into the State's resources in road materials and the most effective methods of road construction and maintenance, and to recommend deviations in existing roads or the construction of new roads in order to facilitate communication or to improve the conditions of traffic.

(ii) *Length of Roads.* (a) *Declared Roads.* The total length of declared roads in Victoria at 30th June, 1954, the latest date for which details are available, was 14,430 miles, classified as follows:—State highways, 3,849 miles; main roads, 9,791 miles; tourist roads, 414 miles; forest roads, 376 miles. The total length of the surface treated (black) or higher type of pavements included in the foregoing totals was 7,630 miles or 52.8 per cent.

(b) *Composition of Roads.* It is estimated that, in addition to the 14,430 miles of classified roads as above, there were approximately 85,500 miles of unclassified roads at 30th June, 1954. The latest detailed estimate of the length of roads and streets in Victoria (as at 30th September, 1954) provides the following information:—Wood or stone, 61 miles; portland cement concrete, 135 miles; asphaltic concrete and sheet asphalt, 233 miles; tar or bitumen surface seal, 12,197 miles; water-bound macadam, gravel, sand and hard loam pavements, 31,766 miles; formed only, 25,040 miles; not formed, 30,531 miles; total, 99,963 miles.

(iii) *Country Roads Board. (a) General.* During 1954–55, 1,267 miles of declared roads under the Board's control were treated with bitumen. In addition, 186 miles of undeclared roads, for which the Board contributed funds, were similarly treated. Work for other authorities carried out by the Board's plant amounted to 189 miles. The total length of bitumen treatment carried out in 1954–55 was 1,642 miles. Of the work on the roads under the Board's control, 519 miles related to State highways.

During 1954–55, 196 bridge projects with a total value of £1,502,347 were initiated. Of these new projects, 48 with a total value of £1,112,347 were supervised by the Board and 148 with a total value of £390,000, were supervised by municipalities.

(b) *Receipts and Payments.* The funds of the Country Roads Board are derived principally from motor registration fees, two thirds of all money received by way of owners' certificates, one half of drivers' licence fees, fines, payments by the Commonwealth Government under the Commonwealth Aid Roads Acts and repayments by municipalities. In addition, loans have been authorized from time to time under the Country Roads Acts for permanent works on main and developmental roads, State highways, tourists' and forest roads, while the State Government has provided, free of repayment, loan moneys for restoration of flood and bush fire damage. During the year ended 30th June, 1955, loan receipts and payments each amounted to £1,102,309, and expenditure included £146,309 for restoration of flood and bush fire damage. The total loan expenditure to 30th June, 1955, was £11,494,545. This figure does not include loan expenditure from the Developmental Roads Loan Account, which fund was created for the purpose of constructing and maintaining subsidiary or developmental roads. Loan money raised on this account was exhausted at 30th June, 1937, the total expenditure at that date being £6,425,758.

Total receipts and payments during each of the years 1938–39 and 1951–52 to 1954–55 are shown below:—

COUNTRY ROADS BOARD, VICTORIA : RECEIPTS AND PAYMENTS

(£.)

Item.	1938–39. (a)	1951–52.	1952–53.	1953–54.	1954–55.
RECEIPTS.					
Motor Vehicle Registration Fees ..	1,690,962	3,694,012	3,702,131	3,791,643	4,647,372
Drivers' Licence Fees(b) .. ..	..	159,950	159,402	178,885	181,728
Municipalities' Payments	318,878	283,391	344,320	331,605	387,561
Commonwealth Aid Roads Acts(c) ..	716,019	2,501,150	2,446,029	2,741,608	3,802,369
Loans from State Government	57,972	1,046,621	1,191,509	1,512,741	1,102,309
Surplus Transport Regulation Fund ..	..	..	..	..	387,992
Stores and Materials	233,104	..	..	..	..
Hire of Plant	53,724	..	..	..	..
Other	117,341	4,222	2,092	1,841	1,309
Total	3,188,000	7,689,346	7,845,483	8,558,323	10,510,640

NOTE.—See next page for footnotes.

COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS—*continued.*
(£.)

Item.	1938-39. (a)	1951-52.	1952-53.	1953-54.	1954-55.
PAYMENTS.					
Construction and Maintenance of Roads and Bridges—					
State Highways	453,708	2,158,205	2,250,803	2,503,912	3,033,653
Main Roads	1,027,210	2,626,675	2,492,855	2,843,251	3,566,478
Tourist Roads	77,694	196,512	232,778	217,804	294,590
Forest Roads .. .. .	.. .. .	69,150	113,895	108,504	139,119
Unclassified Roads	468,122	773,384	918,946	995,787	1,445,032
Roads adjoining Commonwealth Properties	13,321	1,099	.. .. .	.. .. .	.. .. .
Other	(d) 58,729	10,775	13,843	17,032	30,181
Relief to Municipalities	240,170	.. .. .	.. .. .	.. .. .	.. .. .
Plant, Stores and Materials	310,332	701,760	840,258	670,389	584,826
Interest, Debt Redemption, etc.	427,445	537,870	570,001	611,154	676,012
Administration Expenditure .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	.. .. .
Other	230,125	{ 450,351	449,030	551,046	621,478
		{ 289,471			
Total	3,306,856	7,815,252	7,882,409	8,518,879	10,391,369

(a) Figures for 1938-39 are not directly comparable with those of succeeding years owing to a change in the method of compilation adopted by the Country Roads Board. (b) Prior to 1st July, 1949 drivers' licence fees were paid into Consolidated Revenue Fund. From that date until 31st December, 1950 the fees were credited to the funds of the Country Roads Board. Since then one half of the fees has been credited to the funds of the Country Roads Board while the remaining half has been credited to the Municipalities Assistance Fund. (c) Excludes portion of Commonwealth Aid Roads Acts advances drawn by the Public Works Department for expenditure on wharfs, jetties, etc. (d) Includes £54,662 expenditure on unemployment relief works

(iv) *Level Crossings.* In 1954-55, the Level Crossings Fund was created under the Country Roads and Level Crossings Funds' Act 1954 to finance (a) the elimination of level crossings or the provision of alternative routes to enable road traffic to avoid level crossings, (b) the provision of lights, signs, and lighting at and to improve approaches to level crossings and (c) generally, to reduce danger at level crossings. A third of all moneys received by way of owners' certificates is paid into the Fund as well as payments under other Acts for similar purposes. In 1954-55, the Fund received £226,469 from collections in respect of additional registration fees and £250,000 from Surplus Revenue. Expenditure from the Fund amounted to £60,995 comprising £20,863 incurred by the Railways Department and £40,132 incurred by the Country Roads Board.

4. *Queensland*—(i) *General.* Under the Main Roads Act 1920, a Main Roads Board was constituted, consisting of three members appointed by the Governor-in-Council. In 1925, the Board was abolished and its powers conferred upon a single Commissioner. The Main Roads Commission was constituted a Department under the name of the Department of Main Roads in February, 1951, with the Commissioner of Main Roads as its permanent head. The duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main, developmental, secondary, mining access, farmers' and tourist roads and tourist tracks, and the responsibility for building and maintaining these declared roads is largely that of the Commissioner. Roads of purely local importance are constructed and maintained by local authorities. In many cases, construction is financed by the State Government by means of Treasury loans. Other roads are built by the Public Estate Improvement Branch of the Lands Department in order to open up areas of previously inaccessible or undeveloped country.

(ii) *Length of Roads.* (a) *Declared Roads.* The total length of declared roads in Queensland at 30th June, 1955, was 21,039 miles, comprising State highways, 7,778 miles; main roads, 11,186 miles; developmental roads, 241 miles; secondary roads, 648 miles; mining access roads, 574 miles; farmers' roads, 312 miles; tourist roads, 298 miles; tourist tracks, 2 miles. The length of roads improved in Queensland from the date of commencement of work under the Main Roads Acts 1920-1952 to 30th June, 1955, was 12,655 miles (60 per cent.). At that date also, 1,118 miles of new road construction and 695 miles of stage construction work were proceeding.

(b) *Composition of Roads.* The total length of roads and streets in Queensland at 30th June, 1955, was:—Concrete, 102 miles; bitumen, 6,142 miles; macadam, 14,461 miles; other formed, 41,517 miles; unconstructed, 61,949 miles; total, 124,171 miles.

(iii) *Department of Main Roads. (a) General.* During 1954-55, the Department completed 1,020 miles of roads including new construction and stage construction. Bridges of all types to a length of 4,763 linear feet were constructed, bringing the total constructed by the Department at 30th June, 1955, to 177,461 feet. In addition, at 30th June, 1955, 7,383 feet were under construction.

(b) *Receipts and Payments.* The funds of the Department of Main Roads are obtained chiefly from motor vehicle registration and collections, fees, etc., under the Transport Acts, contributions under the Commonwealth Aid Roads Acts and loans, grants and advances from the State Government. The total receipts and payments, including amounts for defence works, during each of the years 1938-39 and 1951-52 to 1954-55 are shown below :—

DEPARTMENT OF MAIN ROADS, QUEENSLAND : RECEIPTS AND PAYMENTS.
(£.)

Item.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.
RECEIPTS.					
Motor Vehicle Registration, Transport Acts Collections, Fees, etc. . .	938,227	2,573,971	3,523,958	3,766,460	4,075,193
Loans from State Government . .	392,225	1,313,000	825,000	100,000	..
Grants, Advances, Refunds, etc. from State Government . .	579,775	305,013	103,855	349,315	..
Commonwealth Aid Roads and Works Acts	806,218	3,141,560	3,135,034	3,454,665	4,414,226
Maintenance Repayments—Local Authorities	98,154	317,437	308,178	311,212	368,711
Hire, Rent, Sales of Plant, etc. . .	288,330	108,276	107,468	91,875	615,080
Other		68,572	386,210	400,676	329,549
Total	3,102,929	7,827,829	8,389,703	8,474,203	9,802,759
PAYMENTS.					
Permanent Road Works and Surveys	2,045,900	5,226,719	4,113,945	3,930,659	6,091,811
Maintenance of Roads	331,734	1,421,304	1,180,788	1,603,418	2,077,429
Plant, Machinery, Buildings, etc. (including Plant Maintenance) . .	73,632	1,133,565	966,963	837,504	1,390,728
Loans—Interest	38,861	221,271	265,074	264,619	265,079
Redemption	78,153	218,053	239,066	250,156	250,817
Payments to State Consolidated Revenue	340,244	..	..	..	..
Payments to Local Authorities . .	27,418	1,625	1,625	1,625	1,625
Other Works and Services . . . .	..	94,188	..	..	..
Administration, etc.	151,700	634,733	682,729	699,428	803,671
Total	3,087,642	8,951,458	7,450,190	7,587,409	10,881,160

5. *South Australia.—(i) General.* The Highways and Local Government Department is administered by the Commissioner of Highways, who is empowered, subject to the approval of the Minister of Roads to undertake the construction, maintenance, and protection of the main highways of the State. In addition the Commissioner—

(a) allocates grants to councils for roadworks and supervises the expenditure.

(b) assists Councils to purchase road-making plant and to defray the cost of roadworks.

(c) advises Councils on any question concerning the construction, maintenance or repair of road-works.

(ii) *Source of Funds.* Funds of the Department are derived mainly from—

(a) *State Government.* The Highways Fund, into which are paid the proceeds from motor vehicle registrations and drivers' licences (less cost of collection), appropriations from loan funds repayments of advances made to Councils and contributions by the Municipal Tramways Trust.

(b) *Commonwealth Government.* Contributions under the Commonwealth Aid Roads Acts.

(iii) *Length of Roads.* In South Australia, there are only two classifications of roads. These are Main Roads, proclaimed under the provisions of the Highways Act and all other roads, commonly designated District Roads. At 30th June, 1956, there were 8,188 miles of proclaimed Main Roads and 44,743 miles of District Roads, totalling 52,931 miles. Of these, 24,969 miles are unformed and carry little or no traffic and a further 8,859 miles, which have been formed only are open to traffic during most of the year. Of the remainder, there are 13,598 miles of road constructed with gravel or crushed rock and 5,505 miles of a higher standard constructed with either bitumen or concrete.

(iv) *State Highways and Local Government Department.* (a) *General.* The Department's metropolitan road widening scheme has been in operation for approximately nine years. During the year ended 30th June, 1956, an additional 24,300 lineal feet of frontages were purchased and the total length acquired to that date is equivalent to 40.6 miles of road frontages. In rural areas, increases in the volume of traffic have necessitated widening of roads and improving alignments.

(b) *Receipts and Payments.* The following table shows particulars of receipts and payments, during the years 1938-39 and 1951-52 to 1954-55, of funds controlled by the Highways and Local Government Department.

**HIGHWAYS AND LOCAL GOVERNMENT DEPARTMENT, SOUTH AUSTRALIA :
RECEIPTS AND PAYMENTS.**
(£.)

Item.	1938-39. (a)	1951-52.	1952-53.	1953-54.	1954-55.
RECEIPTS.					
Motor Vehicle Registration, Licences, Fees, Fines, etc. ..	690,849	1,409,510	1,497,227	2,230,045	2,997,668
Commonwealth Aid Roads and Works Acts	479,922	1,650,993	1,682,961	1,873,227	2,555,471
Loans from State Government ..	200,000	450,000	360,000	..	200,000
Recoups—Local and Semi-governmental Authorities	1,531	26,018	38,267	10,443	9,978
Other		211,483	864,480	263,456	348,467
Total	1,372,302	3,748,004	4,442,935	4,377,171	6,111,584
PAYMENTS.					
Construction and Reconstruction of Roads and Bridges ..	c 1,150,082	1,475,602	1,786,777	2,142,728	2,877,748
Maintenance		538,634	666,239	918,582	825,371
Recoups to Consolidated Revenue Fund—Interest, Debt Redemption and Exchange	d 178,273	139,811	148,651	157,749	168,297
Grants and Advances to Local and Semi-governmental Authorities Administration	(e)	1,033,519	670,460	1,343,381	1,209,958
Stores, Plant, Machinery, Suspense Accounts, etc.	45,753	199,915	231,542	267,042	310,971
Other		531,060	252,135	161,562	722,539
		19,578	48,506	36,644	31,949
Total	1,374,108	3,938,119	3,804,310	5,027,688	6,146,833

(a) Figures for 1938-39 are not completely comparable with those for following years. (b) Includes special contribution of £620,000 from Consolidated Revenue for roads for war service land settlement and developmental roads. (c) Roads, plant, etc. (d) Interest and sinking fund payments. (e) Not separately available ; included elsewhere.

The total expenditure, both revenue and loan, by State and local governments on roads, streets and bridges in South Australia during the years 1938-39 and 1951-52 to 1954-55 was, respectively, £1,966,000, £4,596,000, £4,667,000, £6,131,000 and £7,539,000.

6. *Western Australia.*—(i) *General.* Under the Main Roads Act 1930-39, the Main Roads Board previously existing was abolished and a Commissioner of Main Roads was

appointed. His duties relate to the determination of main roads after consideration of the funds available and the services to be rendered by the roads, the declaration and provision of developmental roads, the construction and maintenance of main roads, and the carrying out of surveys, investigations and experiments connected with roads and road materials. The Act authorizes two trust accounts (Main Roads Trust Account and Main Roads Contribution Trust Account) to record the moneys prescribed as available to the Commissioner for expenditure associated with roads, etc. In addition, the Commissioner operates on those Trust Accounts which are used for funds made available under the Commonwealth Aid Roads Acts.

(ii) *Length of Roads and Streets.* The total known lengths of roads and streets in existence in the various municipalities at 31st October, 1955, and in road districts at 30th June, 1955, were as follows :—Bituminous, 5,316 miles ; gravel water-bound, 14,287 miles ; other constructed surfaces, 1,211 miles ; formed only, 36,098 miles ; unprepared, 27,992 miles (incomplete) ; total, 84,904 miles.

The lengths of declared roads at 30th June, 1955, were :—Main roads, 3,178 miles ; important secondary roads, 7,232 miles ; developmental roads, 12,051 miles ; total, 22,461 miles.

(iii) *Main Roads Department.* During the year 1954-55, the activities of the Department included :—clearing, 1,437 miles ; forming, 1,557 miles ; gravelling, 1,027 miles ; reconditioning, 3,881 miles ; stabilizing, 225 miles ; side drains, 70 miles. In addition, lengths of tar and bitumen work performed aggregated 810 miles. Bridges constructed numbered 17. Two major bridges, one of timber over the Murray River at Pinjarra and the other of concrete over the Canning River at Riverton, and the Perth Causeway project were completed during the year. Detailed surveys were made for the projected bridge across the Swan River at the Narrows, Perth, as well as a comprehensive set of borings to determine the nature of the foundations at the site. Preliminary reclamation of the adjacent area by dredging was undertaken. Construction of the Wyndham-Ord River-Nicholson Road was continued during 1954-55. The first installation of traffic control lights within the Perth city block was made during the year.

(iv) *Receipts and Payments—Combined Road Funds.* The following table shows the combined transactions of the Main Roads Trust Account, the Main Roads Contributions Trust Account, the Metropolitan Traffic Trust Account, and the Commonwealth Aid Roads and Works Trust Accounts during the years ended 30th June, 1939 and 1952 to 1955.

ROAD FUNDS, WESTERN AUSTRALIA : RECEIPTS AND PAYMENTS.

(£.)

Item.	1938-39. (a)	1951-52.	1952-53.	1953-54.	1954-55.
RECEIPTS.					
Motor Vehicle Registration, Licences, Fees, Fines, etc. ..	218,962	427,432	472,477	523,495	584,454
Commonwealth Aid Roads and Works Acts ..	823,162	2,861,389	2,886,672	3,212,454	4,411,656
Recoups from Local Authorities, etc. ..	1,958	209,352	210,777	199,591	273,886
Other ..						22,572	43,129	116,373	96,174
Total ..	1,044,082	3,520,745	3,613,055	4,051,913	5,366,170
PAYMENTS.					
Construction and Reconstruction of Roads and Bridges ..	922,756	2,527,612	3,079,210	2,492,320	2,947,597
Maintenance ..						245,558	258,289	214,217	255,181
Grants to Local Authorities, etc. ..	143,544	260,492	273,796	295,713	323,410
Transfer to State Consolidated Revenue ..	..	70,272	70,000	70,000	70,000
Interest, Debt Redemption and Exchange—State Consolidated Revenue ..	7,616	7,396	7,396	7,396	7,396
Administration ..	52,176	44,682	68,703	47,583	69,947
Plant, Machinery, etc. ..	..	277,660	502,444	276,686	545,833
Other ..	19,181	415,359	640,478	540,945	463,969
Total ..	1,145,273	3,849,031	4,900,316	3,944,860	4,683,333

(a) Figures not completely comparable with those for following years. Includes Transport Co-ordination Trust Account.

7. Tasmania.—(i) *General*. Under the Road Construction (Transfer of Functions) Act 1951, which came into operation on 1st July, 1951, the control of the construction and maintenance of roads and certain road making plant was vested in the Minister for Lands and Works. Works authorized by the Minister in respect of roads classified as State highways, tourists' and developmental roads are constructed by the Department of Public Works and financed from the State Highways Trust Fund into which are paid the proceeds from Commonwealth Aid Roads grants, motor vehicle registration fees and taxes, licensing fees for drivers and public transport and other moneys made available by the Parliament. In addition, provision was made under the Road Construction (Transfer of Functions) Act for certain works authorized by the Transport Commission to be carried out and constructed by the Department. The expenditure by the Public Works Department during 1954–55 on the construction of roads, tracks and bridges amounted to £2,697,855 of which £1,784,265 was charged to road funds, £38,939 to revenue, £722,672 to loan and £151,979 to other funds. Except in special cases, municipal councils bear the cost of maintaining country roads and a proportion of the cost of main and secondary roads.

(ii) *Length of Roads*. (a) *Classified Roads*. The mileages of classified roads in Tasmania at 30th June, 1955 were as follows:—State highways, 1,161 miles; main roads, 651 miles; secondary roads, 186 miles; tourist roads, 45 miles; developmental roads, 50 miles; subsidized roads, 92 miles; total 2,185 miles. Country roads totalled more than 10,000 miles. The mileages of sealed roads, and their proportions to the respective totals, were:—State highways, 582 miles (49 per cent.); main roads, 216 miles (33 per cent.); secondary and other roads, 18 miles (10 per cent.); total, 816 miles (37 per cent. of all classified roads, and 6 per cent. of all roads, in Tasmania).

(b) *Composition of Roads*. The length of all roads in Tasmania, including those with surfaces of lower grade, at 30th June, 1955, was as follows:—Bituminous, 1,128 miles; concrete, 10 miles; granite, limestone, etc., water-bound, 8,596 miles; surfaces of lower grade, 2,940 miles; total, 12,674 miles.

(iii) *Receipts and Payments—Combined Road Funds*. The table hereunder shows particulars of the receipts and payments of the combined Road Funds for the years 1939–40 and 1951–52 to 1954–55:—

ROAD FUNDS, TASMANIA : RECEIPTS AND PAYMENTS.
(£.)

Item.	1939–40. (a)	1951–52.	1952–53.	1953–54.	1954–55.
RECEIPTS.					
Motor Vehicle Taxation and Registration, Licences, Fees, Fines, etc.	193,165	305,352	432,738	450,962	523,138
Commonwealth Aid Roads and Works Acts	220,241	739,989	745,985	830,922	1,125,259
Recoups from Local Authorities, etc. .. .. .	..	9,249	11,539	10,076	8,339
State Loan Fund .. .. .	..	577,931	494,125	825,502	860,862
Hire of Plant .. .. .	..	551,202	553,678	741,383	807,525
Other	719	98,071	152,556	115,064	167,414
Total	414,125	2,281,794	2,390,621	2,973,909	3,492,537
PAYMENTS.					
Construction and Reconstruction of Roads and Bridges	130,924	689,370	716,223	1,070,414	1,562,003
Maintenance	113,199	627,785	768,395	977,403	1,041,981
Jetties, etc.	22,467	..	..	..	..
Other works connected with Transport	5,748	21,870	15,566	9,823	10,480
Grants to Local Authorities, etc. .. .. .	..	2,256	2,762	3,671	5,018
Administration	15,053	51,979	58,736	56,807	39,315
Purchase, Hire and Maintenance of Plant	(b)	600,344	586,409	809,546	848,738
Other	31,894	156,358	120,925	22,558	93,332
Total	319,285	2,149,962	2,269,016	2,905,106	3,600,867

(a) First year of operation of Transport Commission. Figures not completely comparable with those for following years.

(b) Not available, included with other.

NOTE.—Minus sign (–) indicates an excess of credits.

8. **Summary of Roads used for General Traffic.**—(i) *Proclaimed or Declared Roads.* The table hereunder is a summary of the roads proclaimed or declared under the Acts of the several States relative to the operations of the central road authorities, and shows the lengths of various classes proclaimed or declared as at 30th June, 1955. These proclaimed or declared roads are those for which the central road authority assumes responsibility under the Act for the whole, or a proportion, of the cost of construction and/or maintenance, the extent varying from State to State and with the class and locality of the roads. Before proclamation of a main road, consideration is given, in general, to the following points :— availability of funds ; whether the road is, or will be, within one of several classes of main trunk routes ; whether the district is, or will be, sufficiently served by railways. Provision is also made in some States for the declaration of roads other than main roads. The absence of a particular class in any State does not necessarily imply that there are no roads within that State that might be so classified ; the classes are restricted only to roads proclaimed or declared under the Acts. A further point to make is that, through various causes, e.g., insufficiency of funds, man-power or materials, etc., construction or maintenance may not keep pace with gazettals of mileages, and therefore the condition of a road may not match its status.

PROCLAIMED OR DECLARED ROADS : LENGTHS, 30th JUNE, 1955.
(Miles.)

Class of Road.	N.S.W.	Vic. (a)	Q'land.	S. Aust. (b)	W. Aust.	Tas.	Total.
State highways	6,524	3,849	7,778	} 8,188	3,178 {	1,161 {	} 69,095
Trunk roads	4,227	} 9,791	11,186				
Ordinary main roads	12,562						
<i>Total Main Roads</i>	23,313	13,640	18,964	8,188	3,178	1,812	69,095
Secondary roads	76	..	648	..	7,232	186	8,142
Developmental roads	2,934	..	241	..	12,051	50	15,276
Tourist roads .. .. .	..	414	298	..	..	45	757
Other roads .. .. .	..	(c) 376	(d) 888	..	..	(e) 92	1,356
<i>Total Other Roads</i>	3,010	790	2,075	..	19,283	373	25,531
Grand Total	26,323	14,430	21,039	8,188	22,461	2,185	94,626

(a) As at 30th June, 1954. (b) As at 30th June, 1956. (c) Forest roads. (d) Includes mining access roads, 574 miles; farmers' roads, 312 miles; tourist tracks, 2 miles. (e) Subsidized roads.

(ii) *Composition of Roads.* The following table represents an attempt to classify all the roads used for general traffic in Australia, at the latest dates available, according to States and Territories and to certain broad composition groups. The results are not entirely satisfactory, (i) because it is doubtful whether the whole of Australia is covered. (ii) because the dates of reference differ, and (iii) because the figures constituting each group are not wholly comparable for the States and Territories. It is hoped, however, that despite these defects, the table will provide an approximate and general idea of the main types of roads in Australia.

The data in the table for the States are obtained from the State Government Statisticians, and are derived mainly from local government sources. Unincorporated areas in some States are probably excluded and the figures on the returns supplied by the local government authorities are in some cases of doubtful accuracy. Details of the composition of roads, as far as they are available, vary to such an extent that it is considered preferable to show here only major divisions.

Groups 1-4 as shown in the table include, respectively, the following types of composition :—

1. *Wood or Stone.* Wood blocks ; stone paved.
2. *Concrete.* Cement concrete ; asphaltic concrete ; bituminous concrete ; sheet asphalt on concrete base.
3. *Bituminous.* Tar or bituminous macadam ; tar and bituminous surface seal ; surfaced water-bound macadam or gravel ; bituminous or cement penetration.

4. *Macadam and Other.* Water-bound macadam ; granite, limestone, and blast-furnace slag, water-bound ; water-bound gravel ; gravel or crushed rock ; metallated (gravel or rubble) ; gravel, sand and hard loam pavements.

Groups 5 and 6 include roads so-called mainly because they are used for general traffic, irrespective of their surfaces, prepared or otherwise.

It will be noticed that some of the terms used above are practically synonymous. Such terms are, of course, not used by any one State, but are the classifications adopted by different States.

For details of any particular State, see the respective paragraphs in the preceding pages.

ALL ROADS USED FOR GENERAL TRAFFIC : LENGTHS.

(Miles.)

Composition of Road.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	A.C.T.	Total.
	30th June, 1955.	30th Sept., 1954.	30th June, 1955.	30th June, 1953.	1955. (a)	30th June, 1955.	30th June, 1955.	30th June, 1955.	
1. Wood or stone ..		61		6					67
2. Concrete ..	604	368	102	605		10		3	1,692
3. Bituminous	10,124	12,197	6,142	2,914	5,316	1,128	1,287	166	39,274
4. Macadam and other	41,344	31,766	14,461	16,829	15,498	8,596	164	173	128,831
5. Formed only	27,281	25,040	41,517	12,956	36,098		9,599	223	
6. Cleared, or natural surface, only	45,687	30,531	61,949	22,270	27,992	2,940	1,193		345,276
Total ..	125,040	99,963	124,171	55,580	84,904	12,674	12,243	565	515,140

(a) Municipalities, 31st October and Road Districts, 30th June.

It will be seen from the foregoing table that only about one third of the road lengths of Australia have actually been constructed, the remainder, for the greater part, being in little more than the natural state. The percentages for each group are as follows :—Group 1, 0.01 ; group 2, 0.33 ; group 3, 7.62 ; group 4, 25.01 ; groups 5 and 6, 67.03. The percentage of constructed lengths to total length in each State is as follows :—New South Wales, 42 ; Victoria, 44 ; Queensland, 17 ; South Australia, 37 ; Western Australia, 25 ; Tasmania, 77 ; Northern Territory, 12 ; Australian Capital Territory, 61. Comparisons between the States should be made with caution, however, because, in addition to the defects enumerated at the beginning of this section, factors such as the area, physiography, density and distribution of population, nature of economic activity, other facilities for transport, etc., in each State must be taken into account.

9. *Summary of Expenditure on Roads and Bridges.*—(i) *General.* In most States there are three classes of authorities—the State Government, the central road authority, and the numerous local government bodies. Most of these authorities may expend money either directly on road construction or indirectly by means of grants and miscellaneous payments to other authorities. Insufficient information is given in the accounts of many authorities to permit the exclusion of these indirect payments which would, if included in the aggregate, duplicate the expenditure. In addition, a number of authorities are not able to supply separate information concerning their expenditure on roads. For these reasons it has not been possible, up to the present, to compile statistics of the aggregate expenditure on roads.

The two paragraphs following therefore represent only : (a) aggregate expenditure from the various State road funds referred to in the foregoing pages, and (b) loan fund expenditure by State Governments. Expenditure by local government bodies is not included. Paragraph 8., Finances, of § 2. Local Government Authorities, contains some particulars of local government revenue and expenditure on roads, streets and bridges (see pp. 660 and 663).

(ii) *Aggregate Expenditure from State Road Funds.* The following table shows expenditure on the construction and maintenance of roads, including payments to local government bodies, by each State during the years 1938–39 and 1950–51 to 1954–55, as summarized from the foregoing tables dealing with the receipts and payments of the various State road authorities. Expenditure on plant and materials, not charged to construction

and maintenance of roads and bridges and expenditure on debt charges and payments to State consolidated revenues are not included. In some instances, expenditure on works other than roads and bridges is included. Because of differing accounting methods, figures are not completely comparable as between States, nor, in some States, as from year to year.

ROADS AND BRIDGES : AGGREGATE EXPENDITURE FROM ROAD FUNDS.
(£'000.)

Year ended 30th June—	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
1939.. ..	3,358	2,569	2,557	1,374	1,138	(b) 319	11,315
1951.. ..	6,416	6,184	4,908	2,334	2,746	1,442	24,030
1952.. ..	9,006	6,576	7,379	3,267	3,564	1,550	31,342
1953.. ..	9,357	6,472	5,979	3,404	4,390	1,683	31,285
1954.. ..	11,972	7,237	6,235	4,708	3,661	2,096	35,909
1955.. ..	12,938	9,131	8,975	5,256	4,130	2,752	43,182

(a) Excludes Sydney Harbour Bridge.

(b) Year 1939-40.

The foregoing particulars do not represent the total expenditure on roads and bridges in each State. To obtain this information, additions must be made on account of (a) State Government expenditure from revenue and loan through Departments or authorities other than the central road authority and (b) local government expenditure from revenue and loan, while, on the other hand, allowances must be made for grants and miscellaneous payments to other authorities (*see* (i) above).

(iii) *State Net Loan Expenditure.* In recent years, expenditure from State loan funds on roads and bridges has not been large, and it would appear, also, that a considerable proportion passes through the funds of the central road authorities and is therefore included in the figures of their financial operations in the foregoing sections. Gross loan expenditure by all State Governments during 1954-55 amounted to over £2,000,000, while net expenditure was about £350,000 less. Aggregate net loan expenditure on roads and bridges in each State to 30th June, 1955, amounted to the following approximate sums :—New South Wales, £22,000,000; Victoria, £19,000,000; Queensland, £11,000,000; South Australia, £5,000,000; Western Australia, £3,000,000; Tasmania, £9,000,000; total, £69,000,000.

§ 5. Water Supply, Sewerage and Drainage.

NOTE.—*See also* Chapter IX.—Water Conservation and Irrigation.

1. *New South Wales.*—(i) *General.* The two largest domestic water supply and sewerage systems are controlled by statutory boards each consisting of a president and a vice-president appointed by the State Government and five members elected by local councils. These are (a) the Metropolitan Water, Sewerage and Drainage Board, which administers the systems in the County of Cumberland, i.e., in Sydney and in the surrounding districts, and, in addition, has jurisdiction over territory extending along the South Coast beyond Wollongong to Lake Illawarra, and (b) the Hunter District Water Board, serving the Newcastle area. At Broken Hill, a similar board includes a representative of the mining companies. Other systems, apart from irrigation projects and water storage systems administered by the State Government, are controlled by county, municipal or shire councils.

(ii) *Water Supply—to 30th June, 1955.* (a) *Metropolitan.* The storage reservoirs of the metropolitan system, with a combined available capacity of 124,959 million gallons, drain catchment areas of 376 square miles (Upper Nepean, 347 square miles and Woronora, 29 square miles). Water is drawn also from the Warragamba River, with a catchment of 3,383 square miles. This system is being developed, and building has commenced on a dam to have an overall height of 415 feet (greatest depth of water 340 feet) having a storage capacity of 460,000 million gallons and giving a net safe draught estimated at 263 million gallons per day in addition to 11 million gallons per day for riparian purposes. The existing temporary storage is supplied by a weir 50 feet high with a maximum storage of 579 million gallons. At 30th June, 1955, there were 110 service reservoirs in use with a

combined capacity of 546.5 million gallons. Rating for water for 1954-55 was 10d. in the £1 of assessed annual value and the charge for water measured by meters 1s. 9d. per 1,000 gallons.

(b) *Newcastle*. The water supply is drawn from two sources (1) the Chichester Reservoir, with a storage capacity of about 5,000 million gallons and draining a catchment of 76 square miles, and (2) the Tomago Sandbeds, which extend northerly along the coast towards Port Stephens. Service reservoirs and tanks distributed throughout the Water Supply District have a total storage capacity of 111 million gallons. Water rating for 1954-55 was 1s. 8d. in the £1 on assessed annual value for occupied properties and 1s. 5d. in the £1 for unoccupied properties. The price of water to domestic and industrial consumers is 2s. per 1,000 gallons.

(c) *Water Supplied, etc.* The following tables show, for the Sydney and Newcastle systems, the number of properties, the estimated population supplied, and other details for the years 1938-39 and 1950-51 to 1954-55 :—

WATER SUPPLY, SYDNEY(a) : SERVICES.

Year.	Improved Properties for which Water Mains available.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for the Year.	Average Daily Consumption.		Length of Mains.	Number of Meters.
					Per Property.	Per Head of Estimated Population.		
1938-39 ..	350,161	1,466,000	Mill. gals. 106.3	Mill. gals. 38,790	Gallons. 304	Gallons. 72.5	Miles. 4,539	126,754
1950-51 ..	442,913	1,908,000	138.9	50,689	314	72.8	5,114	208,712
1951-52 ..	461,294	1,942,000	155.9	57,069	338	80.3	5,252	227,850
1952-53 ..	478,598	1,958,000	149.6	54,621	313	76.4	5,357	246,383
1953-54 ..	496,025	1,975,000	163.9	59,810	330	83.7	5,502	270,239
1954-55 ..	513,855	2,014,000	161.8	59,064	315	80.4	5,656	294,463

(a) Includes part of South Coast.

WATER SUPPLY, NEWCASTLE : SERVICES.

Year.	Properties Supplied.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for Year.	Average Daily Consumption.		Length of Mains.
					Per Property.	Per Head of Estimated Population.	
1938-39 ..	48,370	193,480	Mill. gals. 11.9	Mill. gals. 4,331	Gallons. 245	Gallons. 61.3	Miles. 936
1950-51 ..	65,445	261,780	22.3	8,131	340	85.1	1,234
1951-52 ..	67,122	268,488	25.1	9,144	373	93.1	1,257
1952-53 ..	69,244	276,976	23.9	8,719	345	86.3	1,262
1953-54 ..	71,307	285,228	25.5	9,416	362	90.4	1,284
1954-55 ..	73,770	295,080	25.1	9,179	341	85.2	1,322

(iii) *Sewerage and Drainage—to 30th June, 1955.* (a) *Metropolitan.* Sydney and suburbs are served by 3 major sewerage systems and 5 minor systems consisting of 6 outfalls discharging direct into the Pacific Ocean and 2 treatment works. A further treatment works is in course of construction near Kurnell and is designed to serve the whole of the Cronulla Peninsula. In addition, 4 centres outside the metropolitan area (Camden, Campbelltown, Liverpool and Wollongong) are served by local treatment works.

Stormwater drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30th June, 1955 were 175 miles long. Sewerage rating for 1954-55 was 9½d. in the £1 of assessed annual value and drainage rating ¾d. in the £1.

(b) *Newcastle.* The main sewerage system of the Newcastle area discharges into the Pacific Ocean at Merewether Gulf. In some of the outlying districts, treatment works have been installed.

Sewerage rates for 1954-55 were 1s. 3d. in the £1 of assessed annual value of occupied lands and 1s. 0d. in the £1 for unoccupied lands and drainage rates (on certain areas served) 2d. in the £1.

(c) *Particulars of Services.* The following table gives, for the Metropolitan system, details of sewerage services and stormwater drains as at 30th June, 1939 and 1951 to 1955.

SEWERAGE AND DRAINAGE, METROPOLITAN(a) : SERVICES.

At 30th June—				Improved Properties for which Sewerage Available.	Estimated Population Served.	Lengths of Sewers.	Length of Stormwater Channels.
						Miles.	Miles.
1939	..	..	..	254,632	1,066,000	2,561	87
1951	..	..	..	303,508	1,248,000	2,951	173
1952	..	..	..	309,995	1,266,000	3,000	176
1953	..	..	..	316,439	1,293,000	3,055	174
1954	..	..	..	324,737	1,354,000	3,163	175
1955	..	..	..	334,280	1,390,000	3,252	175

(a) Includes part of South Coast.

At 30th June, 1955, 49,093 premises had been connected to the Hunter District Water Board's sewerage system (Newcastle area). The total length of sewers under the Board's control was 640 miles, and the length of drains was 49 miles.

(iv) *Finances, Sydney and Newcastle Systems.* The following table shows the debt, revenue and expenditure of the Metropolitan Water, Sewerage and Drainage Board and the Hunter District Water Board for each of the services of water supply, sewerage and drainage during 1954-55 and for the three services combined during the years 1938-39 and 1953-54.

WATER SUPPLY, SEWERAGE AND DRAINAGE, METROPOLITAN AND NEWCASTLE : FINANCES.

(£.)

Year.	Capital Debt at 30th June.	Revenue.	Expenditure.				Surplus(+) or Deficit(-).
			Working Expenses. (a)	Interest and Exchange.	Debt Redemption.	Total.	
METROPOLITAN.(b)							
1954-55—							
Water	63,370,744	5,415,142	2,843,299	2,118,968	435,160	5,397,427	+ 17,715
Sewerage	26,823,067	2,933,887	1,779,155	951,194	198,209	2,928,558	+ 5,329
Drainage	1,240,460	158,635	110,171	39,585	7,795	157,551	+ 1,084
Total 1954-55	91,434,271	8,507,664	4,732,625	3,109,747	641,164	8,483,536	+ 24,128
1953-54	84,474,951	7,891,016	4,365,926	2,878,004	598,634	7,842,564	+ 48,452
1952-53	77,117,666	6,672,577	3,494,464	2,618,630	554,435	6,667,529	+ 5,048
1951-52	70,670,899	6,199,094	3,313,807	2,343,923	540,680	6,198,410	+ 684
1950-51	64,350,326	5,410,687	2,740,286	2,190,333	475,552	5,406,171	+ 4,516
1938-39	43,769,741	2,926,694	957,422	1,727,708	241,564	2,926,694	..
NEWCASTLE.							
1954-55—							
Water	8,611,163	1,046,322	667,397	272,536	52,061	991,994	+ 54,328
Sewerage	3,044,252	386,202	257,128	103,884	19,847	380,859	+ 5,343
Drainage	186,850	33,131	18,857	6,243	1,422	26,522	+ 6,609
Total 1954-55	11,842,265	1,465,655	943,382	382,663	73,330	1,399,375	+ 66,280
1953-54	10,439,017	1,245,444	828,021	332,628	66,407	1,227,056	+ 18,388
1952-53	9,431,369	1,119,775	726,137	294,769	59,747	1,080,653	+ 39,122
1951-52	8,794,710	858,729	572,382	278,211	55,888	906,481	- 47,752
1950-51	8,139,512	765,790	442,239	275,875	52,479	770,593	- 4,803
1938-39	4,574,880	385,732	167,620	188,185	20,886	376,691	+ 9,041

(a) Includes provision for renewals, long service leave, loss on exchange, etc. (b) Includes part of South Coast. (c) Excludes non-interest bearing capital in respect of stormwater drains transferred from Public Works Department—£2,199,223 at 30th June, 1955.

(v) *Country Water Supply and Sewerage Systems.* At 31st December, 1953, country water supply services were conducted or under construction by 63 municipalities, 61 shires and 4 county councils, and country sewerage services by 57 municipalities and 19 shires. The capital indebtedness of these schemes was £15,119,792 at 31st December 1953, namely, £10,752,997 for water and £4,366,795 for sewerage. Debt of the municipalities amounted to £8,550,016, shires to £3,383,377 and county councils to £3,186,399. Government advances amounting to £443,497 are included in these figures. Aggregate income and expenditure amounted to £2,606,184 and £2,003,011, respectively, in 1953.

(vi) *Other Water Supply and Sewerage Systems.* The water supply and sewerage services for Broken Hill are operated by a statutory board, the Broken Hill Water Board. Its capital indebtedness at 31st December, 1954 was £2,914,417. In 1954, income (excluding subsidies, State Government £106,946 and Mining Companies £315,546) amounted to £172,201 and expenditure (excluding debt redemption £125,242) amounted to £463,835.

The following country water supply systems—South-West Tablelands, Junee and Fish River—are administered by the Department of Public Works. These supply water in bulk to municipalities and shires, the Railways Department, and other large consumers; only a small quantity is sold directly to private consumers. The capital indebtedness of these systems was £3,575,074 at 31st December, 1955.

There are also the Mulwala Water Supply and Sewerage Service constructed as an urgent war-time work for the Commonwealth, and the Bethungra Water Supply System administered by the Department of Public Works in conjunction with the Junee supply.

2. *Victoria.*—(i) *Melbourne and Metropolitan Board of Works.* (a) *General.* The Board was established by Act of Parliament on 20th December, 1890. Since August, 1955, the Board has consisted of a Chairman and 50 Commissioners elected to represent the municipalities which lie wholly or partly within the metropolitan area. The Chairman is elected by the Commissioners for a four-year term. The principal functions of the Board until 1954 were to control and manage the metropolitan water supply system; to provide the metropolitan area with an efficient main and general sewerage; to deal with main drains and main drainage works; and to control and manage the rivers, creeks and watercourses within the metropolitan area. The Board has carried out since December, 1954, the additional functions of a permanent planning authority and in June, 1956, it became the authority directly responsible for metropolitan main highways, bridges, parks and foreshores.

(b) *Water Supply.* There are five storage reservoirs serving the metropolitan area—Yan Yean, 7,234 million gallons (available for consumption, 6,649 million gallons); Toorourrong, 60 million gallons; Maroondah, 6,289 million gallons (4,870 million gallons); O'Shannassy, 930 million gallons; Silvan, 8,853 million gallons (8,823 million gallons); total, 23,366 million gallons (21,332 million gallons). Service reservoirs number 25, with a total capacity of 257 million gallons. Two major projects are under construction. One is an 18 mile conduit to carry water from the Silvan Reservoir to the existing Mt. Waverley service reservoir and to a new service reservoir which is to be built south of Glen Waverley and which when completed will be capable of supplying an additional 110 million gallons a day. The other project, which was approved by the Board in 1946, consists of a dam, 293 feet high, which will impound 45,800 million gallons of water, on the River Yarra, immediately upstream from the confluence of the Yarra and Doctors Creek, and work on the project is proceeding. This work is estimated to cost £12,628,000.

The water rate levied by the Board in 1954–55 was 8d. in the £1 on the net annual value of the properties served. The charge for water consumed in excess of the quantity which at 1s. per 1,000 gallons would equal the water rates payable on each property was 1s. 6d. per 1,000 gallons. The following table shows particulars of Melbourne metropolitan water supply services for the years 1938–39 and 1950–51 to 1954–55.

WATER SUPPLY, MELBOURNE : SERVICES.

Year.	Number of Houses Supplied.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for the Year.	Average Daily Consumption.		Length of Aqueducts, etc., Mains and Reticulation.	Number of Meters.
					Per House.	Per Head of Estimated Population.		
			Mill. gals.	Mill. gals.	Gallons.	Gallons.	Miles.	
1938-39 ..	285,408	1,133,000	76.8	28,040	269	67.8	3,234	189,617
1950-51 ..	354,415	1,333,000	102.0	37,225	288	76.5	3,966	236,883
1951-52 ..	364,248	1,350,000	107.4	39,293	295	79.5	4,075	256,462
1952-53 ..	378,439	1,382,000	102.4	37,383	271	74.1	4,134	264,916
1953-54 ..	390,035	1,404,000	110.6	40,354	283	78.8	4,213	266,395
1954-55 ..	405,464	1,460,000	110.3	40,270	272	75.6	4,300	273,856

(c) *Sewerage and Drainage.* Particulars of sewerage and drainage services for 1938-39 and 1950-51 to 1954-55 are shown below. The rate levied in 1954-55 in respect of sewerage was 1s. 1d. in the £1 on the net annual value of the property served. The drainage rate was 1d. in the £1.

SEWERAGE AND DRAINAGE, MELBOURNE : SERVICES.

Year.	Number of Houses for which Sewers are Provided.	Estimated Population for which Sewers are Provided.	Average Daily Pumping.	Total Sewage Pumped for the Year.	Average Daily Pumping.		Length of Sewers, etc.	Length of Main Drains.
					Per House.	Per Head of Estimated Population.		
			Mill. gals.	Mill. gals.	Gallons.	Gallons.	Miles.	Miles.
1938-39 ..	269,411	1,070,000	48.2	17,601	179.0	45.1	2,586	97
1950-51 ..	321,548	1,209,000	67.1	24,491	208.7	55.5	2,927	128
1951-52 ..	329,872	1,223,000	66.9	24,490	202.8	54.7	2,958	128
1952-53 ..	338,314	1,236,000	73.1	26,692	216.1	59.2	2,989	131
1953-54 ..	345,370	1,243,000	70.1	25,599	203.1	56.4	3,019	134
1954-55 ..	351,617	1,266,000	74.8	27,315	212.8	59.1	3,071	137

The metropolitan sewerage system consists of the Main system (serving an area of 70,382 acres) and three subsidiary systems—the Sunshine system (serving an area of 1,022 acres), the Kew system (serving an area of 186 acres) and the South-eastern system (serving an area of 2,523 acres in Cheltenham, Parkdale, Mentone and Mordialloc). The Metropolitan Sewage Farm, 26,855 acres in extent and situated about 24 miles south-west of Melbourne beyond the township of Werribee, serves to purify and dispose of approximately 95 per cent. of the sewage flow of the metropolis before its discharge into Port Phillip Bay. The total capital cost (less depreciation) of the Farm to 30th June, 1955 was £2,812,749. Revenue during 1954-55 amounted to £106,873, cost of sewage disposal to £163,672, trading expenses to £101,758, interest to £111,365, and net cost of sewerage purification to £269,922. These financial particulars are included in the sewerage items of the summary below.

(d) *Finances.* The following table provides a summary, for the year 1954-55 of the financial operations of the three services conducted by the Melbourne and Metropolitan Board of Works.

MELBOURNE AND METROPOLITAN BOARD OF WORKS : FINANCES, 1954-55.
(£.)

Service, etc.	Capital cost of Works and Buildings at 30th June. (a)	Revenue.	Expenditure.				Surplus (+) or Deficit (-).
			Working Expenses.	Interest and Exchange.	Debt Redemption.	Total.	
Water	29,045,752	2,434,200	972,935	1,089,105	..	2,062,040	+ 372,160
Sewerage	22,384,574	2,460,249	1,035,527	887,508	..	1,923,035	+ 537,214
Drainage	4,257,840	196,659	113,747	134,979	..	248,726	- 52,067
General (b)	2,059,629	..	622,346	100,000	123,977	846,323	- 846,323
Total	57,747,795	5,091,108	2,744,555	2,211,592	123,977	5,080,124	+ 10,984

(a) Total loan indebtedness—1954-55, £49,590,850.

(b) Statutory and general expenditure not distributed over Services.

The following table shows the financial operations of the Melbourne and Metropolitan Board of Works (all services combined) for the years 1938-39 and 1950-51 to 1954-55 :—

MELBOURNE AND METROPOLITAN BOARD OF WORKS : FINANCES.
(£.)

Year.	Capital Cost of Works and Buildings at 30th June.	Revenue.	Expenditure.				Surplus (+) or Deficit (-).
			Working Expenses.	Interest and Exchange.	Debt Redemption.	Total.	
1938-39	28,513,539	2,214,295	762,558	1,316,603	64,269	2,143,430	+ 70,865
1950-51	40,398,350	3,278,641	1,782,356	1,422,196	81,607	3,286,159	- 7,518
1951-52	44,416,680	3,590,571	2,011,265	1,549,009	93,398	3,653,672	- 63,101
1952-53	48,162,372	3,862,048	2,230,431	1,691,613	101,564	4,023,608	- 161,560
1953-54	52,068,617	4,712,533	2,384,131	2,010,730	106,796	4,501,657	+ 210,876
1954-55	57,747,795	5,091,108	2,744,555	2,211,592	123,977	5,080,124	+ 10,984

(ii) *Geelong Waterworks and Sewerage Trust.* (a) *General.* The Geelong Waterworks and Sewerage Trust was constituted in 1908 and reconstituted under the Geelong Waterworks and Sewerage Act in 1910. It was further reconstituted in September, 1950, to include a Government nominee (Chairman) and provision was made for a commissioner to be elected by the ratepayers of the Shire of Corio, making a total of seven commissioners instead of five as formerly. The amount of loan money which may be raised is limited to £6,500,000 for water supply undertakings, £1,250,000 for sewerage undertakings, and £270,000 for sewerage installation to properties under the deferred payment system. The population supplied is estimated by the Trust at 82,000. This and other general information relates to 30th June, 1955.

(b) *Water Supply.* The catchment area is about 32,000 acres. There are five storage reservoirs and nine service basins whose total storage capacity is 4,386 million gallons. The length of water mains and reticulation is 412 miles. In addition, the State Rivers and Water Supply Commission has made available a supplementary supply of a minimum quantity of 545 million gallons of water per annum from the Bellarine Peninsula System. The total expenditure on water supply to 30th June, 1955 was £1,682,830. Expenditure for 1954-55 comprised £91,631 for working expenses and £83,332 for interest, redemption and reserves, while revenue amounted to £180,631. The sinking fund appropriations at June, 1955, amounted to £151,224. The replacement and contingencies reserve amounted to £226,459. There is a water rate of 1s. 5d. in the £1 (with minima of 5s. for vacant land and £1 for tenements) on the net annual value of ratable properties.

(c) *Sewerage Works.* The sewerage scheme consists of a main outfall sewer to the ocean at Black Rock, about 9 miles from Geelong, and 193 miles of main and reticulation sewers. The sewerage area is 10,559 acres, and the number of buildings within the sewered areas is 16,620; of which 16,602 have been connected. The total expenditure to 30th June, 1955, was £1,063,353 on sewerage works and £261,947, of which £2,631 was outstanding, on the cost of sewerage installation under deferred payment conditions. The revenue in 1954-55 amounted to £115,913 and the expenditure comprised £44,055 on working expenses and £59,757 on interest, redemption and reserves. Sinking fund appropriations at June,

1955, were £129,116. Replacement and contingencies reserve amounted to £215,768. A general rate of 1s. 4d. in the £1 is levied on the net annual value of ratable properties.

(iii) *The Ballarat Water Commission and the Ballarat Sewerage Authority.* (a) *General.* The Ballarat Water Commission was constituted on 1st July, 1880, and the Ballarat Sewerage Authority on 30th November, 1920. The members of the Water Commission constitute the Sewerage Authority. The Commissioners number eight, three (one of whom is chairman) being appointed by the Government, four being elected by the Council of the City of Ballaarat and one being elected by the Councils of the Borough of Sebastopol and the Shires of Ballarat, Bungaree, Buninyong and Grenville. General and financial information given herein relates to the year ended 31st December, 1955.

(b) *Water Supply.* The Water Supply District embraces an area of about 65 square miles, containing a population of about 50,000. The total storage capacity of the seven reservoirs is 5,563 million gallons and the catchment area is 18,695 acres.

The capital cost of construction of the waterworks was £2,087,565 to 31st December, 1955. The liabilities amounted to £1,132,147 at 31st December, 1955 including loans due to the Government totalling £1,082,608. The revenue for the year 1955 was £119,709. Working expenses during 1955 amounted to £57,660 and interest and other charges to £57,917. A rate of 1s. 1d. in the £1 is levied on the net annual value of all ratable properties, with a minimum of £1 per annum for land on which there is a building or water supply.

(c) *Sewerage.* The Ballarat sewerage district embraces the City of Ballaarat and parts of the Shires of Ballarat and Bungaree and the Borough of Sebastopol. Work was commenced in 1922 and up to 31st December, 1955 the Authority had constructed a disposals works, a nightsoil depot, an ejector station and more than 100 miles of sewers. The capital cost of sewerage construction works to 31st December, 1955 was £704,852. The method of sewage disposal is by sedimentation, oxidation and sludge digestion. One hundred and forty-six sewered areas had been declared as at 31st December, 1955. Assessments in the sewerage district numbered 15,372, while those in sewered areas numbered 12,278. There were 10,371 buildings connected.

The scheme is financed by debenture-issue loans from various financial institutions, The liabilities on account of loans secured for construction at 31st December, 1955, amounted to £569,547; redemption payments at that date totalled £217,027. An expenditure of £157,122 was incurred for house connexions, the whole of which has been redeemed. Revenue during 1955 amounted to £71,853 and expenditure, which included £33,629 on interest and redemption, was £72,103.

A sewerage rate of 1s. 4d. in the £1 is levied, with a minimum charge of £2 4s., on the net annual value of any ratable sewered property on which there is a building and £1 on any ratable sewered property on which there is no building.

(iv) *Other Sewerage Authorities.* At 30th June, 1955, 60 sewerage authorities had been constituted under the provisions of the Sewerage Districts Acts in districts outside the areas under the control of the Melbourne and Metropolitan Board of Works and the Geelong Waterworks and Sewerage Trust, and systems were in operation in 30 districts (including five partly operating) serving a population of 268,800 persons.

The operations of the other 30 districts constituted at this date had either been suspended or not commenced.

(v) *Water Supply in Country Towns and Districts.* Most of the country waterworks are controlled by the State Rivers and Water Supply Commission, but in some instances the control is by waterworks trusts or by municipal corporations.

The waterworks controlled by the State Rivers and Water Supply Commission at 30th June, 1955, included 38 large reservoirs and 240 subsidiary reservoirs and service basins with a total storage capacity of 1,309,237 million gallons (4,808,950 acre feet). Length of channels was 15,117 miles (irrigation, 4,949 miles, domestic and stock 8,064 miles, drainage and flood protection, 2,104 miles) and of pipe lines 1,242 miles. The quantity of water delivered to water users during 1954-55 was 1,070,433 acre feet. The Commission administered 65 rural districts during 1954-55 (29 irrigation districts, 31 waterworks districts, 4 flood protection districts and 1 drainage district), and the reticulated pipe supplies for domestic and industrial purposes in 130 urban districts. In addition, 127 urban districts were administered by waterworks trusts and 16 by local governing bodies. The population served in these groups of urban districts numbered, respectively, 194,530, 356,470 and 103,810 persons. The table below is a summary of the Commission's finances for operations in districts under its control for the years 1938-39 and 1950-51 to 1954-55.

STATE RIVERS AND WATER SUPPLY COMMISSION, VICTORIA : FINANCES.(a)
(£.)

Year.	Total Loan Capital Expenditure to 30th June.	Receipts.	Payments.				Total.
			Operating Expenses.	Interest on Capital Allotted.	Depreciation.	Debt Redemption.	
1938-39 ..	24,223,037	560,680	476,085	145,105	27,553	4,922	653,665
1950-51 ..	41,318,382	1,592,333	1,810,264	37,950	97,425	1,383	1,947,022
1951-52 ..	51,082,707	1,871,810	2,292,995	47,547	92,573	1,497	2,434,612
1952-53 ..	57,464,776	1,989,289	2,669,419	26,555	90,024	3,284	2,789,282
1953-54 ..	65,143,250	2,412,382	2,717,862	75,101	90,616	5,181	2,888,760
1954-55 ..	73,456,588	2,532,946	2,781,621	95,335	120,475	2,465	2,999,896

(a) Excludes waterworks and river improvement trusts and local governing bodies under the general supervision of the Commission.

The total loan capital expenditure of waterworks and river improvement trusts and local governing bodies to 30th June, 1955, was £9,767,389, making a grand total of £83,223,977 when added to the figure for works under the control of the Commission. The net loan capital after redemption payments of £2,305,836 was £80,918,141.

The financial operations of the State Rivers and Water Supply Commission form part of the Consolidated Revenue Fund, but are included in this section for convenience. The major proportion of the interest payable is borne by the State and is additional to that shown above. The net expenditure borne by the State during 1954-55 was £3,002,178.

3. Queensland.—(i) *Brisbane City Council—to 30th June, 1955. (a) General.* This organization conducts the water supply and sewerage systems of the City of Brisbane. Prior to 1928, water and sewerage activities had been controlled by the Metropolitan Water and Sewerage Board, but were then absorbed by the Brisbane City Council, which also supplies, in bulk, the whole of the water used by the City of Ipswich and the Town of Redcliffe.

(b) *Water Supply.* Water storage facilities comprise the following (available capacities are shown in parentheses):—Somerset Reservoir, 200,000 million gallons (55,000 million gallons); Lake Manchester, 5,806 million gallons (5,725 million gallons); Brisbane River, 543 million gallons (484 million gallons); Pure Water Reservoir, Holt's Hill, 8.3 million gallons (8.3 million gallons); Enoggera Reservoir, 1,000 million gallons (600 million gallons); Gold Creek Reservoir, 407 million gallons (400 million gallons). There are fifteen service reservoirs with a capacity of approximately 41 million gallons. The Somerset reservoir is under the control of Stanley River Works Board and is a dual purpose project with a designed total holding capacity of 200,000 million gallons, 55,000 million gallons to be for water storage and 145,000 million gallons for flood mitigation. Water rating at 30th June, 1955 was 3½d. in the £1 of unimproved capital value for improved properties, and 2d. in the £1 for vacant lands, with a minimum charge of £3 10s. and £2 6s. 8d. respectively. The following table is a summary of operations of the complete Brisbane City Council system (metropolitan area, Ipswich and Redcliffe) for the years 1938-39 and 1950-51 to 1954-55:—

WATER SUPPLY, BRISBANE(a) : SERVICES.

Year.	Services Connected.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for the Year.	Average Daily Consumption.		Length of Trunk and Reticulation Mains.	Number of Meters.
					Per Service.	Per Head of Estimated Population.		
1938-39 ..	81,389	345,903	Mill. gals. 15.9	Mill. gals. 5,791	Gallons. 195	Gallons. 45.9	Miles. 1,169	(b)
1950-51 ..	117,904	464,000	27.9	10,193	237	60.8	1,642	52,691
1951-52 ..	124,992	483,000	32.4	11,860	259	66.2	1,696	52,496
1952-53 ..	131,895	501,000	31.5	11,486	239	61.0	1,760	52,360
1953-54 ..	139,172	520,000	33.9	12,379	244	62.3	1,817	51,976
1954-55 ..	144,459	530,000	34.1	12,458	236	64.3	1,870	51,138

(a) Includes Ipswich and Redcliffe.

(b) Not available.

(c) *Sewerage.* The sewage treatment works are situated at Luggage Point at the entrance to the Brisbane River. An activated sludge system of treatment was originally planned but, since the commencement of pumping operations, a sedimentation plant only has been used. Sewerage rating at 30th June, 1955 was 2½d. in the £1 of unimproved capital value for improved properties, and 2d. in the £1 for vacant lands, with a minimum charge of £3 15s. and £3 5s. respectively. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1938-39 and 1950-51 to 1954-55 :—

SEWERAGE, BRISBANE : SERVICES.

Year.					Premises Connected.	Estimated Population Served.	Total Sewage Pumped for the Year.	Length of Main, Branch, Reticulation etc., Sewers.
							Mill. Galls. (a)	Miles.
1938-39	..	..	..	..	33,200	150,000		484
1950-51	..	..	..	..	44,700	176,000	5,351	608
1951-52	..	..	..	..	46,300	179,000	4,663	615
1952-53	..	..	..	..	47,500	182,000	4,791	630
1953-54	..	..	..	..	48,700	183,000	4,868	647
1954-55	..	..	..	..	50,400	187,000	4,944	665

(a) Not available.

(d) *Finances.* The following table shows particulars of the finances of the water supply and sewerage undertakings of the Brisbane City Council for the years 1938-39 and 1950-51 to 1954-55 :—

WATER SUPPLY AND SEWERAGE, BRISBANE : FINANCES.

(£.)

Service and Year.	Gross Capital Cost to 30th June.	Revenue.	Expenditure.			Surplus (+) or Deficit (-).
			Working Expenses.	Interest Redemption, etc. Charges.	Total.	
Water Supply—						
1938-39 ..	4,849,732	606,244	129,219	280,827	422,366	+ 183,878
1950-51 ..	8,116,654	926,954	383,700	333,210	805,903	+ 121,051
1951-52 ..	8,915,401	1,036,944	494,136	347,000	979,916	+ 57,028
1952-53 ..	9,861,885	1,280,390	587,695	403,349	1,164,278	+ 116,112
1953-54 ..	10,672,306	1,326,644	640,838	434,073	1,237,040	+ 89,604
1954-55 ..	12,248,875	1,296,624	697,625	492,951	1,275,644	+ 20,980
Sewerage—						
1938-39 ..	5,992,936	240,963	52,792	403,386	485,974	- 245,011
1950-51 ..	8,821,671	483,854	105,928	313,308	472,745	+ 11,109
1951-52 ..	9,794,052	499,935	127,417	302,252	467,774	+ 32,161
1952-53 ..	10,863,167	591,584	171,614	330,642	564,704	+ 26,880
1953-54 ..	11,898,902	603,141	163,397	349,692	552,651	+ 50,490
1954-55 ..	12,705,307	578,257	166,609	391,744	628,081	- 49,824

(ii) *Country Towns.* (a) *Water Supply.* In addition to the City of Brisbane, there were, at 30th June, 1954, 118 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils.

(b) *Sewerage Systems.* At 30th June, 1954, there were 13 cities and towns outside the metropolitan area—Bundaberg, Charleville, Cunnamulla, Goondiwindi, Hughenden, Ipswich, Mackay, Maryborough, Quilpie, Rockhampton, Toowoomba, Townsville and Warwick—with sewerage systems. Sewerage systems were in course of construction at Mt. Isa, Dalby, Barcardine and Longreach.

(c) *Finances.* The receipts (other than loan) of water undertakings controlled by the cities and towns referred to above amounted to £1,750,102 in 1953-54. Expenditure amounted to £1,688,672, including £364,248 for debt charges. In addition, loan expenditure amounted to £1,105,034.

Finances of sewerage undertakings are incorporated in council general funds and are not available separately.

4. **South Australia.**—(i) *General.* The water supply and sewerage systems in this State were constructed and are maintained by the Engineering and Water Supply Department under the control of the Minister of Works. The works controlled comprise the Adelaide, Barossa, Baroota Creek, Beetaloo, Bundaleer, Tod River, Warren and other country water districts systems, the Morgan-Whyalla water supply system, the Adelaide metropolitan sewerage system, the Murray River Weirs water conservation, and the Metropolitan Flood Waters Scheme. In 1954-55, construction commenced on the Salisbury-Elizabeth Sewerage Scheme.

(ii) *South Australian Waterworks.* (a) *Services.* The table hereunder shows particulars of the area, capacity, etc. of combined metropolitan and country waterworks for the years 1938-39 and 1951-52 to 1955-56 :—

WATERWORKS, SOUTH AUSTRALIA : SERVICES.

Year.	Assessments.(a)		Area of Districts Supplied. (a)	Capacity of Reservoirs, Tanks, etc.	Length of Mains.	Number of Meters.
	Number.	Annual Value.				
		£	Acres.	Mill. gals.	Miles.	
1938-39.. ..	185,625	6,302,445	11,857,968	23,814	6,384	97,074
1951-52.. ..	227,082	12,202,222	11,974,297	23,984	7,368	114,222
1952-53.. ..	234,269	13,366,875	11,976,503	24,009	7,478	119,349
1953-54.. ..	237,742	14,319,989	11,985,353	24,013	7,555	125,144
1954-55.. ..	239,389	15,307,092	12,100,784	24,014	7,700	134,058
1955-56.. ..	243,809	20,827,954	12,106,795	24,014	7,777	150,317

(a) Excludes Morgan-Whyalla Water Supply—water sold by measure.

(b) *Finances.* Figures for 1938-39 and 1951-52 to 1955-56 are shown in the following table.

WATERWORKS, SOUTH AUSTRALIA : FINANCES.

(£.)

Year.	Invested Capital to 30th June.	Revenue.	Expenditure.			Deficit.
			Working Expenses.	Interest and Debt Redemption.	Total.	
1938-39.. ..	14,649,052	654,688	242,528	651,972	894,500	239,812
1951-52.. ..	25,718,681	1,301,075	1,279,742	747,386	2,027,128	726,053
1952-53.. ..	28,573,826	1,415,713	1,377,212	789,517	2,166,729	751,016
1953-54.. ..	32,156,877	1,505,690	1,424,169	883,876	2,308,045	802,355
1954-55.. ..	37,353,231	1,725,017	1,855,026	1,095,914	2,950,940	1,225,923
1955-56.. ..	41,501,133	2,082,694	1,920,666	1,328,068	3,248,734	1,166,040

(iii) *Adelaide Waterworks.* At 30th June, 1956, the Adelaide waterworks supplied a district of 144,711 acres. The capacity of its five reservoirs was 14,469 million gallons and there were 1,920 miles of mains.

The Mannum-Adelaide pipeline conveys water from the River Murray to Angas Creek and supplements the Metropolitan and Warren system areas and serves country areas en route. Another major project, the construction of a large reservoir on the South Para River, is still under construction but is nearing completion. This reservoir will provide additional storage to serve the lower northern areas of the State and will make some additional provision for the metropolitan area. The capacity of the new reservoir will be about 10,000 million gallons.

Particulars of finances for the years 1938-39 and 1951-52 to 1955-56 are shown below :—

ADELAIDE WATERWORKS : FINANCES.

(£.)

Year.	Invested Capital to 30th June.	Revenue.	Expenditure.			Surplus (+) or Deficit (-).
			Working Expenses.	Interest and Debt Redemption.	Total.	
1938-39	4,676,110	446,459	111,347	202,279	313,626	+ 132,833
1951-52	10,101,923	860,492	507,444	260,752	768,196	+ 92,296
1952-53	11,849,046	908,177	534,074	313,252	847,326	+ 60,851
1953-54	14,438,595	968,575	614,308	377,909	992,217	- 23,642
1954-55	17,922,472	1,078,614	939,317	511,127	1,450,444	- 371,830
1955-56	20,434,323	1,358,896	930,138	646,720	1,576,858	- 217,962

(iv) *Adelaide Metropolitan Sewerage.* The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg and Port Adelaide areas, with drainage areas of 104 square miles in all, includes a sewage farm, and treatment works at Glenelg and Port Adelaide. The total quantity of sewage pumped by the various stations was 5,903 million gallons during 1955-56. Other particulars for 1938-39 and 1951-52 to 1955-56 are shown hereunder :—

ADELAIDE METROPOLITAN SEWERAGE : SUMMARY.

Year.	Length of Sewers.	Number of Con-nexions.	Invested Capital to 30th June.	Revenue.	Expenditure.			Surplus (+) or Deficit (-)
					Working Expenses.	Interest and Debt Redemption.	Total.	
	Miles.		£	£	£	£	£	£
1938-39 ..	923	80,745	3,361,034	268,880	77,023	150,273	227,296	+ 41,584
1951-52 ..	1,163	113,432	5,372,988	515,303	358,002	161,780	519,782	- 4,479
1952-53 ..	1,206	120,510	5,860,255	551,843	399,327	162,015	561,342	- 9,499
1953-54 ..	1,244	126,375	6,325,084	601,253	440,028	179,435	619,463	- 18,210
1954-55 ..	1,292	131,932	6,974,042	641,194	468,969	205,594	674,563	- 33,369
1955-56 ..	1,335	137,995	7,602,416	866,754	577,872	238,748	816,620	+ 50,134

(v) *Country Water Supply.* Water district systems outside Adelaide at 30th June, 1956 comprised an area of 11,962,084 acres, and the capacity of the reservoirs was 9,545 million gallons. These figures exclude the Morgan-Whyalla supply system, which obtains its water from the River Murray. The storage tanks of this system had a capacity of 44 million gallons.

The Uley-Wanilla sub-artesian basin has been utilized to augment the Tod River District supplies. Pumping began in 1947. In 1955-56, nine bores were in operation and 372 million gallons were pumped from the basin to meet the needs of Port Lincoln. At 30th June, 1956, £5,099,202 had been invested in the Tod River District.

Construction work is proceeding on the scheme to reticulate water to Yorke Peninsula. The section of the new 20 inch to 26 inch steel main between Bundaleer Reservoir and Bute is in service.

The following table gives financial information on country waterworks for 1938-39 and 1951-52 to 1955-56 :—

COUNTRY WATERWORKS, SOUTH AUSTRALIA : FINANCES.(a)
(£.)

Year.	Invested Capital to 30th June.	Revenue.	Expenditure.			Deficit.
			Working Expenses.	Interest.	Total.	
1938-39..	10,015,613	207,569	130,523	449,691	580,214	372,645
1951-52..	13,123,855	339,155	727,174	405,334	1,132,508	793,353
1952-53..	14,018,673	407,944	757,727	394,750	1,152,477	744,533
1953-54..	17,718,282	630,466	903,212	505,967	1,409,179	778,713
1954-55..	19,430,759	646,403	915,709	584,787	1,500,496	854,093
1955-56..	21,066,810	861,564	1,128,294	681,348	1,809,642	948,078

(a) Excludes Morgan-Whyalla system.

(vi) *Morgan-Whyalla Water Supply Scheme.* This scheme, which involved the laying of 223 miles of main, was officially opened on 31st March, 1944, the capital invested to 30th June, 1956, being £2,585,869. Particulars of this scheme, where applicable, are included in the tables of the combined waterworks in (ii) above. During 1955-56, the water used from the system between Hanson and Whyalla amounted to 1,553 million gallons. Revenue for the year 1955-56 was £182,398, working expenses, etc., £178,248, interest charges, £83,734 and deficit, £79,584. Corresponding figures for 1954-55 were respectively, £173,880, £155,195, £82,200 and £63,515.

5. **Western Australia.**—(i) *General.* The water supply and sewerage systems of Western Australia are principally under the management of Government Departments, and are divided into the following categories :—(a) Metropolitan Water Supply, Sewerage and Drainage, covering Perth, Fremantle, Claremont, Guildford, Midland Junction and Armadale District ; (b) Country Areas (previously Goldfields) Water Supply ; (c) Water Supply of other towns, etc. ; (d) Agricultural Water Supply ; and (e) Artesian and sub-artesian waters.

(ii) *Metropolitan Water Supply, Sewerage and Drainage.* (a) *General.* The sources of the metropolitan water supply are the Canning Dam, Churchman's Brook, Wongong Brook, Victoria Reservoir, Armadale Pipe Head Dam and Well, and certain bores. The largest reservoir, the Canning Dam, has a capacity of 20,550 million gallons, about 5,000 million gallons more than that of the Mundaring Reservoir to which it is linked by a pipeline.

The sewage treatment works of Perth and suburbs consist of primary sedimentation with separate sludge digestion and discharge of all effluent direct to the ocean. Fremantle treatment works consist of septic tanks with ocean outfall for effluent. There are three treatment works, situated at West Subiaco, Swanbourne and Fremantle.

(b) *Water Supply.* The following table shows particulars of water supply services for 1938-39 and 1950-51 to 1954-55.

METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA : SERVICES.

Year.	Number of Services.	Estimated Population Supplied.	Average Daily Consumption.	Total Consumption for Year.	Average Daily Consumption.		Length of Mains.	Number of Meters.
					Per Service.	Per Head of Estimated Population.		
1938-39 ..	61,467	248,248	Mill. gals. 14.1	Mill. gals. 5,147	Gallons. 229	Gallons. 56.8	Miles. 953	40,014
1950-51 ..	84,926	303,422	28.4	10,354	334	93.5	1,271	52,277
1951-52 ..	90,436	309,854	31.0	11,337	343	100.0	1,327	61,146
1952-53 ..	96,155	316,423	30.7	11,201	319	97.0	1,422	69,262
1953-54 ..	102,093	323,131	34.9	12,743	342	108.0	1,500	73,780
1954-55 ..	108,755	367,429	38.2	13,948	353	105.7	1,597	78,194

Water rating for 1954-55 was 1s. 9d. in the £1 on annual valuation.

(c) *Sewerage and Drainage.* Some particulars of the metropolitan sewerage and drainage services for 1938-39 and 1950-51 to 1954-55 are shown below:—

METROPOLITAN SEWERAGE AND DRAINAGE, WESTERN AUSTRALIA : SERVICES.

Year.	Houses Connected.	Estimated Population Served.	Sewage Pumped for the Year.(a)	Length of Sewers.	Length of Stormwater Drains.
			Mill. gals.	Miles.	Miles.
1938-39	36,652	162,457	1,030	444	31
1950-51	50,480	212,016	3,809	605	34
1951-52	52,171	224,000	3,080	626	34
1952-53	54,467	229,700	3,333	648	34
1953-54	56,526	238,400	3,372	654	34
1954-55	58,543	232,000	3,214	675	34

(a) Aggregate of quantities pumped by the various stations.

Sewerage rating for 1954-55 was 1s. 10d. in the £1 on annual valuation, while storm-water drainage rating was 5d.

(d) *Finances.* The following table shows particulars of the finances of the Western Australian Metropolitan Water Supply, Sewerage and Drainage Department for the years 1938-39 and 1950-51 to 1954-55:—

METROPOLITAN WATER SUPPLY AND SEWERAGE AND DRAINAGE, WESTERN AUSTRALIA : FINANCES.

(£.)

Service and Year.	Capital Cost to 30th June.	Revenue.	Expenditure.			Surplus(+) or Deficit(-).
			Working Expenses.	Interest and Debt Redemption.	Total.	
Water Supply—						
1938-39 ..	4,898,167	285,313	50,975	228,527	279,502	+ 5,811
1950-51 ..	6,771,509	488,396	228,442	243,807	472,249	+ 16,147
1951-52 ..	7,665,863	543,872	288,525	284,820	573,345	- 29,473
1952-53 ..	8,817,351	618,603	364,638	324,107	688,745	- 70,142
1953-54 ..	9,874,822	811,500	408,714	380,729	789,443	+ 22,057
1954-55 ..	11,255,210	946,922	498,254	428,169	926,423	+ 20,499
Sewerage and Drainage—						
1938-39 ..	3,497,938	174,950	30,630	149,714	180,344	- 5,394
1950-51 ..	4,884,224	288,598	119,125	206,701	325,826	- 37,228
1951-52 ..	5,169,227	339,917	156,507	238,599	395,106	- 55,189
1952-53 ..	5,449,248	402,808	182,184	252,256	434,440	- 31,632
1953-54 ..	5,749,506	542,476	235,826	263,713	499,539	+ 42,937
1954-55 ..	6,170,669	601,802	254,062	281,590	535,652	+ 66,150

(iii) *Country Areas Water Supply (Previously Goldfields Water Supply)*. The source of supply for Kalgoorlie, Coolgardie and adjacent goldfields, as well as for the towns and districts on or near the pipeline, is the Mundaring Reservoir, whose capacity is 15,100 million gallons. This scheme is linked by pipeline with the Canning Dam.

Work is also proceeding on the comprehensively reticulated water scheme at a revised estimated cost of approximately £10,000,000 to serve an area of about 4,500,000 acres of farm lands and some 23 agricultural towns, including the principal towns on the Great Southern Railway. The supply to the Eastern Goldfields will be increased to permit expansion of the gold-mining industry, the already increased capacity of the Mundaring Reservoir being part of this scheme. It is also planned to increase the storage capacity of the Wellington Dam to 38,000 million gallons. The maximum amount of financial assistance to be provided by the Commonwealth Government is £4,000,000. Expenditure on this work to 30th June, 1955 totalled £3,216,951.

The following table shows details of the Country Areas Water Supply for 1938–39 and 1950–51 to 1954–55 :—

COUNTRY AREAS WATER SUPPLY(a), WESTERN AUSTRALIA : SUMMARY.

Year.	Number of Services.	Total Con-	Length of	Number of Meters.	Capital Cost.	Revenue.	Expendi- ture.(b)	Surplus
		sumption.	Water Mains.					(+) or Deficit (-).
		Mill. gals.	Miles.		£	£	£	£
1938-39 ..	13,670	1,735	1,720	10,872	5,527,890	331,457	298,531	+ 32,926
1950-51 ..	16,229	2,162	1,793	14,180	7,464,331	359,468	673,318	- 313,850
1951-52 ..	16,598	2,314	1,802	14,640	7,916,564	366,755	806,398	- 439,643
1952-53 ..	17,124	2,374	1,810	15,289	8,314,816	398,057	1,010,036	- 611,979
1953-54 ..	17,375	2,565	1,818	15,500	8,770,042	432,502	1,071,597	- 639,095
1954-55 ..	18,034	2,536	1,850	16,045	9,417,014	445,650	1,000,756	- 555,106

(a) Previously Goldfields Water Supply.

(b) Includes interest and debt redemption.

(iv) *Water Supply of Other Towns, etc.* (a) *Controlled by Public Works Department*. During 1954–55, water supplied to other towns and districts, excluding minor water supplies amounted to 906 million gallons, including service to adjacent mines, 21 million gallons, and railways, 100 million gallons. There were in all 17,118 services connected.

(b) *Controlled by Commonwealth and State Government Railways*. Consumption for the year ended 30th June, 1955 was 261 million gallons. In addition, 370 million gallons were obtained from other sources, mainly the Country Areas Water Supply and the Metropolitan Water Supply.

(c) *Water Boards not Controlled by Government*. During 1954–55, approximately 435 million gallons of water were supplied to an estimated population of 18,152.

(v) *Agricultural Water Supply*. From 1st July, 1904 to 30th June, 1955, 585 tanks were built, 1,159 wells sunk, and 5,617 bores (including artesian) put down. Of the bores put down, 1,594 yield fresh or stock water.

(vi) *Artesian and Sub-artesian Waters*. Up to 30th June, 1955 the total number of bores put down in search of artesian or sub-artesian water (inclusive of operations by Defence Services) was 341, ranging in depth from 21 to 4,006 feet. Water (fresh or stock) was struck in 291 bores, 175 of which were artesian and 116 sub-artesian.

6. *Tasmania*.—(i) *Waterworks*. At the end of 1955–56, there were 64 municipal waterworks in Tasmania. The capacity of the reservoirs was 887 million gallons, the estimated population served was 227,000, the number of tenements served was 56,880. In addition, two regional schemes operated by the State Government were serving an estimated population of 18,000 in 4,428 tenements.

(ii) *Sewerage*. At the end of 1955–56, there were 11 municipal sewerage schemes in operation in Tasmania. They served an estimated population of 147,000 and the number of tenements served was 36,673.

§ 6. Harbour Boards and Trusts.

NOTE.—The number and net tonnage of all vessels which entered the major ports in each State during the years 1954–55 and 1955–56 are shown in Chapter XI.—Transport and Communication, A. §5. Shipping at Principal Ports. Particulars of oversea and interstate cargo discharged and shipped during 1955–56 are shown in A. §6 of the same chapter.

1. *New South Wales.*—(i) *Maritime Services Board of New South Wales.* (a) *General.* The Maritime Services Board of New South Wales is a corporate body of five Commissioners comprising three full-time members and two part-time members representing shipping and other interests. The Board was constituted on 1st February, 1936, under the Maritime Services Act 1935, to co-ordinate the port and navigation services of the State, which had previously been administered by the Sydney Harbour Trust and by the State Department of Navigation.

The Board exercises general control over intra-state shipping, including the survey and certification of vessels, the licensing of harbour craft, and the examination and issue of certificates to officers. It is responsible for the provision of pilotage services, lights, beacons, buoys and other port facilities, imposes and collects rates and charges on goods and vessels, and is vested with the general control and management of the navigable waters and ports within the State.

At the Port of Sydney, the Board is also responsible for the provision of adequate wharfage and channels, and carries out all construction, maintenance and dredging work. At other ports of New South Wales, such work is undertaken by the Department of Public Works.

(b) *Port of Sydney.* The entrance to Sydney Harbour, the principal port of New South Wales, is nearly a mile wide, and the depth of its navigable channel is not less than 80 feet. Between the entrance, known as "The Heads", and the Harbour proper, a distance of 4 miles, there are two separate channels, each 700 feet wide, the Western Channel not less than 42 feet deep (low water ordinary spring tides) and the Eastern Channel 41 feet deep. The foreshores, which have been reduced by reclamations, are 152 miles in length and the total area of the port is 13,600 acres, or 21 square miles, of which about one-half has a depth of 30 feet or more at low water ordinary spring tide. The mean range of tides is 3 feet 6 inches.

The wharves are situated in close proximity to the business centre of the city, about four or five miles from the Heads. At present, there are 6 dolphin berths each 550 feet long, and 122 effective commercial cargo berths with a total length of 49,948 feet controlled by the Board. Accommodation for harbour craft amounts to 4,835 feet while the length of other berths including oil and private wharves totals 25,463 feet. Depth of water at wharves is up to 40 feet. Special facilities for the storage and handling of staple products such as wheat, wool, etc., are provided and modern plant has been installed for replenishing ships' bunkers with oil or coal.

Docking facilities are available for the largest vessel afloat. The Captain Cook Graving Dock, opened in March, 1945, ranks amongst the largest graving docks in the world being 1,133 feet by 147 feet 7½ inches with a depth of 45 feet 2 inches over the sill at high water. There are also several smaller dry docks and floating docks in the port.

The following table shows particulars of the finances of the Board in respect of the Port of Sydney for 1938–39 and 1950–51 to 1954–55 :—

MARITIME SERVICES BOARD : FINANCES OF THE PORT OF SYDNEY.
(£.)

Year.	Total Capital Debt at 30th June.	Revenue.			Expenditure.			Surplus (+) or Deficit (—).
		Wharfage and Transhipment Rates.	Tonnage Rates and Berthing Charges.	Total.	Administration and Maintenance.	Interest, Debt Redemption, Exchange, etc.	Total. (a)	
1938–39	11,276,399	773,501	38,180	1,155,627	380,120	536,781	916,901	+ 238,726
1950–51	11,779,317	1,032,685	333,902	1,955,073	1,155,004	528,928	1,683,932	+ 271,141
1951–52	12,194,585	1,107,933	334,530	2,354,154	1,455,711	533,401	2,289,112	+ 65,042
1952–53	12,562,700	971,553	254,637	2,021,121	1,529,050	546,590	2,075,640	– 54,519
1953–54	12,799,104	1,482,492	333,320	2,471,540	1,517,811	550,654	2,318,465	+ 153,075
1954–55	13,408,326	1,814,226	515,480	3,093,315	1,735,504	593,478	2,978,982	+ 114,333

(a) Excludes capital expenditure but includes transfers to the Renewals Fund Reserve Account : 1951–52, £200,000 ; 1953–54, £250,000 ; and 1954–55, £650,000.

Capital expenditure for each of the years 1938–39 and 1950–51 to 1954–55 was £28,576, £384,911, £495,443, £465,764, £468,010 and £583,558 respectively. Expenditure on renewals and replacements from the Renewals Fund Reserve Account was : 1950–51, £196,102 ; 1951–52, £291,454 ; 1952–53, £299,286 ; 1953–54, £317,493 and 1954–55, £306,542.

(c) *Port of Newcastle.* The Maritime Services Board of New South Wales is the port authority but other government bodies are responsible for certain functions and activities of a maritime character at Newcastle. These include—

- (i) The Department of Public Works, which is the constructing, dredging and maintenance authority at Newcastle as well as at other New South Wales ports except Sydney ;
- (ii) The Department of Railways, which is responsible for the control of wharfrage and shipping arrangements in connexion with the coal industry and the provision and maintenance of appliances necessary for the transport and shipment of coal.

An Advisory Committee consisting of eight members, appointed by the Governor, assists the Board in matters associated with the operation of the port. In regard to volume of trade, Newcastle ranks second in importance in New South Wales. It is primarily a coal-loading port, and the proximity to the coal fields has led to the establishment of important industries, including iron and steel works, in the district. Facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber.

The area used by shipping is about 570 acres, excluding the entrance to the harbour and the inner basin, which together cover an area of 162 acres. The width of the harbour at the entrance is 1,200 feet, and the navigable channel, with a depth of 25 feet 6 inches at low water, is 350 feet wide. Wharfrage accommodation amounts to 16,100 feet, the Maritime Services Board controlling 6,500 feet and the Railways Department 7,000 feet while 2,600 feet is privately owned. There are also a number of dolphin berths available for tie-up purposes. A floating dock of 15,000 tons capacity is available at the port.

(d) *Port Kembla.* As from 3rd May, 1948, the Maritime Services Board assumed the administration and navigational control of Port Kembla, which had previously been administered by the New South Wales Department of Public Works. The Department, however, continues to be the constructing authority in respect of works, dredging and maintenance. An Advisory Committee consisting of eight members appointed by the Governor has been formed to assist the Board in the operation of the Port. In respect of volume of trade, Port Kembla ranks third in the ports of New South Wales. It has an area of approximately 330 acres, with depths ranging from 20 to 50 feet (low water ordinary spring tide), and wharfrage accommodation totalling 4,800 feet has been provided for large ocean-going vessels. No cargo sheds are available as the nature of trade at the port does not call for the provision of sheltered storage accommodation at the berths. It is the port of the southern coalfields and for the expanding industrial area in and about Wollongong. The developmental programme for Port Kembla includes the construction of an inner harbour to provide wharfrage for the steelworks in addition to general cargo berths.

(e) *Botany Bay.* The Maritime Services Board of New South Wales is the administrative and controlling authority. The port is primarily a discharging centre for the oil refinery at Kurnell and two berths are available as well as tanker mooring buoys. The entrance to the Bay is approximately $1\frac{1}{2}$ miles wide, with a minimum depth of about 36 feet.

(f) *Other Ports.* In addition to the ports of Sydney, Newcastle, Port Kembla and Botany Bay, the Board controls 28 outports along the coastline of 609 miles. The shipping trade of these outports is relatively small.

(ii) *Port Charges.* The port charges payable in respect of shipping and ships' cargoes in New South Wales are imposed by the Commonwealth Government in terms of the Light-houses Act and the Federal Navigation Act, and by the State authorities under the Navigation

Act of New South Wales, the Harbour and Tonnage Rates Act, and the Sydney Harbour Trust Act. Since 1st February, 1936, the State enactments have been administered by the Maritime Services Board. The gross collections by the State authorities amounted to £4,339,154 in 1954-55. These figures include the Port of Sydney revenue (*see table above*) and State navigation service collections (£1,245,839 in 1954-55). Commonwealth Government revenue from light dues and navigation receipts, for the whole of Australia, amounted to £249,775 in 1954-55.

2. Victoria.—(i) *Melbourne Harbour Trust. (a) General.* Information regarding the origin and constitution of this Trust, which controls the Port of Melbourne, appears in Official Year Book No. 12, p. 970 *et seq.* The membership of the Board of the Melbourne Harbor Trust Commissioners was increased to five during 1954 by the appointment of a further part-time Commissioner to represent waterside workers' interests. At 31st December, 1955, the sheds available for wharfage accommodation had a length of 21,766 feet, covering an area of 1,569,016 square feet. The area of water in the bay and River Yarra under the control of the Trust is approximately 5,327 acres and the total length of wharves, piers and jetties in the port is 62,703 feet, giving an area of over 58 acres of wharfage, and 58,161 feet of effective berthing space. During 1955, work was continued on the new berths at Appleton Dock (ultimately to have eighteen berths), Victoria Docks, South Wharf and Williamstown. The depth of water (low water ordinary spring tide) from the main channels to the principal wharves is about 31 to 34 feet, the maximum being about 40 feet.

(b) *Finances.* The following table shows particulars of the financial operations of the Trust during the years 1939 and 1951 to 1955.

MELBOURNE HARBOR TRUST : FINANCES.

(£.)

Year.	Gross Loan Indebtedness at 31st December.	Revenue.		Expenditure.				Surplus (+) or Deficit (-).
		Wharfage and Tonnage Rates.	Total.	Administration and Maintenance.	Interest, Debt Redemption, Exchange, etc.	Depreciation, Renewals and Insurance Account.	Total. (a)	
1939 ..	4,018,527	689,100	843,899	282,533	270,650	129,160	837,577	+ 6,322
1951 ..	5,883,857	1,493,423	2,129,432	1,036,842	235,881	175,263	1,768,105	+ 361,327
1952 ..	7,914,146	1,256,581	1,941,252	1,204,863	292,485	179,047	1,947,085	- 5,833
1953 ..	9,581,933	1,423,345	2,052,272	1,230,195	381,914	98,182	2,013,554	+ 38,718
1954 ..	9,641,361	1,800,811	2,593,347	1,232,574	418,818	479,393	2,509,947	+ 83,400
1955 ..	9,978,842	2,120,780	3,019,048	1,475,467	446,348	532,372	2,906,406	+ 112,642

(a) Includes statutory payments to Consolidated Revenue and Geelong Harbor Trust :—1939, £155,234 ; 1951, £320,119 ; 1952, £270,690 ; 1953, £303,263 ; 1954, £379,162 ; 1955, £452,219. Excludes capital expenditure :—1939, £128,567 ; 1951, £2,058,921 ; 1952, £2,246,097 ; 1953, £1,255,613 ; 1954, £1,255,625 ; 1955, £1,509,665.

(ii) *Geelong Harbor Trust.* The Geelong Harbor Trust which was constituted in 1905 was reconstituted in 1934 under the provisions of the Melbourne and Geelong Harbor Trusts Act 1934. The Trust is under the control of three Commissioners appointed by the Governor-in-Council. The port dredging programme was nearing completion at the end of 1955 and will provide a minimum depth of water throughout approaches and at all berths of 32 feet (mean low water spring tides).

Revenue for the year 1955 was £746,600, and revenue expenditure was £423,648. The value of the Trust's fixed assets less depreciation was £3,629,184 and £4,270,378 at 31st December, 1954 and 1955 respectively. Loans outstanding at the end of 1955 amounted to £2,993,097.

(iii) *Other Ports.* Apart from Melbourne and Geelong, Portland is the only Victorian port of other than minor importance.

3. Queensland.—(i) *General.* The ports of Queensland, except Brisbane and certain minor ports, are administered by Harbour Boards with members representing the towns and districts served by the ports. Brisbane and the minor ports are controlled by the State Treasury through the Department of Harbours and Marine, which supervises the engineering activities of the other ports.

(ii) *Brisbane.* Brisbane accommodates comfortably, in its dredged and improved river, the largest vessels in the Australian trade. The main centres for shipping, although further downstream than formerly, because of the increasing size of vessels, are still within easy access of the city. The maximum depths (low water ordinary spring tide) of the shipping channel decrease from 32 feet in the North-West channel to 20 feet in the Bulimba Reach to Victoria Bridge section. Depths at wharves vary between 23 and 33 feet. Adequate dry-docking facilities are available. The finances of Brisbane Harbour for the years 1938-39 and 1950-51 to 1954-55 are shown below :—

BRISBANE HARBOUR : FINANCES.
(£'000.)

Year.	Loan Indebtedness at 30th June.	Receipts.		Payments.	
		Harbour Dues.	Total.	Working Expenses.	Total (including Interest and Redemption).
1938-39	1,179	165	173	36	112
1950-51	1,572	221	253	237	329
1951-52	1,862	276	326	348	463
1952-53	2,168	318	393	426	558
1953-54	2,528	603	753	460	611
1954-55	2,633	685	853	456	693

In addition to Brisbane Harbour, the Department of Harbours and Marine also controls the Brisbane Dry Dock, the Cairncross Dock, the Brisbane River, and ten smaller harbours not administered by harbour boards.

(iii) *Harbour Boards.* Harbour boards control the ports of Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton and Townsville. After 1st January 1953, the harbour boards adopted the financial year ended 30th June for accounting purposes instead of the calendar year as previously. Finances for each port for the year ended 30th June, 1955 are shown below, together with a summary for the years 1939 and 1950 to 1952 and for the period of eighteen months ended 30th June, 1954.

HARBOUR BOARDS, QUEENSLAND : FINANCES.
(£.)

Harbour Board.	Loan Indebtedness at 30th June. (a)	Revenue.		Expenditure (excluding Loan).		Surplus (+) or Deficit (-).
		Wharfage and Harbour Dues.	Total.	Working Expenses.	Total (including Interest and Redemption).	
Bowen	351,228	51,395	58,610	14,088	42,952	+ 15,658
Bundaberg	43,159	3,700	7,556	4,741	6,462	+ 1,094
Cairns	230,779	195,179	300,908	232,149	285,477	+ 15,431
Gladstone	451,330	31,020	164,605	8,272	116,276	+ 48,329
Mackay	764,001	186,950	202,438	32,620	204,674	- 2,236
Rockhampton	530,332	62,303	83,618	55,299	90,286	- 6,668
Townsville	436,698	235,957	290,878	183,372	250,477	+ 40,401
Total, 1954-55 ..	2,807,527	766,504	1,108,613	530,541	996,604	+ 112,009
.. 1954(b)	2,713,679	955,464	1,413,894	789,346	1,167,936	+ 245,958
.. 1952	2,059,080	455,677	713,312	440,784	696,843	+ 16,469
.. 1951	1,786,774	402,903	599,505	370,040	534,095	+ 65,410
.. 1950	1,611,241	378,949	510,719	284,896	408,561	+ 102,158
.. 1939	1,548,144	249,510	401,439	139,752	343,083	+ 58,356

(a) Years 1939 and 1950 to 1952, 31st December.

(b) Eighteen months ended 30th June, 1954.

4. *South Australia.—The South Australian Harbors Board.* All South Australian harbours are controlled by the South Australian Harbors Board, which consists of three Commissioners appointed by the Governor for a period of five years and eligible for re-appointment. The Board is responsible to the Minister of Marine for the discharge of its duties and functions. The most important ports are the five deep sea ports of Port Adelaide, Port Pirie, Wallaroo, Port Lincoln and Thevenard. At several ports, the wharves or jetties are privately controlled, the principal of these being Whyalla (controlled by the Broken Hill Pty. Co. Ltd. under a Private Act of Parliament) and Ardrossan where the Broken Hill Pty. Co. Ltd. has installed a bulk loading plant for handling dolomite, grain and salt. Stenhouse Bay, Port Augusta and Rapid Bay comprise the other private ports with interstate or oversea trade. Maximum depths of water (low water ordinary spring tide) at the wharves of the main ports range from 20 to 24 feet at Port Pirie to 35 feet at Port Adelaide (Outer Harbour). The following table shows the finances of the Board for 1938–39 and 1951–52 to 1955–56:—

THE SOUTH AUSTRALIAN HARBORS BOARD : FINANCES.

(£.)

Year.	Capital at 30th June, (a)	Revenue.	Expenditure from Revenue.				Surplus(+) or Deficit(—).
			Working Expenses.	Interest.	Debt Redemption.	Total.	
1938–39 ..	8,026,441	664,915	205,848	326,719	50,000	582,567	+ 82,348
1951–52 ..	9,581,786	1,336,504	1,039,801	280,872	..	1,320,673	+ 15,831
1952–53 ..	10,047,582	1,240,679	1,083,322	286,456	..	1,369,778	– 129,099
1953–54 ..	10,782,702	1,382,276	1,280,709	312,333	..	1,593,042	– 210,766
1954–55 ..	11,604,213	1,842,796	1,315,349	352,005	..	1,667,354	+ 175,442
1955–56 ..	12,366,653	1,920,340	1,451,296	404,188	..	1,855,484	+ 64,856

(a) State Treasurer's Funds and Reserve employed.

5. *Western Australia.—(i) Fremantle Harbour Trust.* Fremantle Harbour is controlled by a board of five Commissioners appointed by the Governor-in-Council. Maximum depth of water (low water ordinary spring tide) at the entrance to the harbour is 36 feet, and at the wharves 33 feet. The length of wharf berth accommodation is 10,495 feet.

In January, 1955, the channels, which were dredged through Success and *Parmelia* Banks in the southern portion of the Fremantle Outer Harbour, were officially opened and berthage facilities became available to the oil refinery and steel rolling mill at Kwinana.

Gross earnings for the years 1954–55 and 1955–56 amounted to £2,214,454 and £2,056,141 respectively, working expenses to £1,772,386 and £1,838,650, interest £164,544 and £174,280, debt redemption £48,167 and £51,723 and renewals fund £2,000 in each year. There were also special loan repayments from revenue amounting to £236,708 and £155,848. The total amount debited to loan capital account at 30th June, 1955 was £4,357,010 and at 30th June, 1956, £4,655,975.

(ii) *Bunbury Harbour Board.* The Bunbury Harbour Board consists of five members appointed by the Government. The depth of water at the entrance to the harbour and at the wharf is 27 feet (low water ordinary spring tide). Berthage accommodation is 3,700 feet. Gross earnings in 1954–55 and 1955–56 were £28,722 and £33,955, respectively, working expenses £73,747 and £45,978, and interest was £29,084 in each year. The total amounts debited to loan capital account at 30th June, 1955 and 1956 were £1,402,320 and £1,458,788 respectively.

(iii) *Other Ports.* Only the ports of Fremantle, Bunbury and Albany in Western Australia are under the control of trusts, the remainder are Government operated. Of these, Yampi, Carnarvon, Geraldton and Onslow have the largest amount of shipping movement.

6. *Tasmania.*—There are eight marine boards and two harbour trusts in Tasmania. The marine boards control the ports of Hobart, Launceston, Stanley (Circular Head), Burnie and Wynyard (Table Cape), Devonport, Strahan, Currie (King Island) and White-mark (Flinders Island) and the harbour trusts those of Smithton and Leven. Aggregate receipts of revenue accounts of all these authorities during the year 1954–55 were £929,321,

and expenditures £822,221 including loan charges £137,460. The total receipts of the Hobart Marine Board during 1954–55 were £397,809, loan charges amounted to £32,869 and total expenditure to £406,724. Launceston Marine Board receipts during 1954–55 amounted to £243,141, loan charges to £22,716 and total expenditure to £187,881. Loan indebtedness of all marine boards and trusts at 30th June, 1955 was £2,391,112, of which £767,068 was in respect of Hobart and £267,351 in respect of Launceston.

Hobart, Launceston, Burnie and Devonport are the principal ports of Tasmania. In addition to their interstate and intra-state traffic, there is also considerable oversea shipping. Depths of water at wharves vary, in general between 16 and 34 feet (low water ordinary spring tide), but at Hobart there is a depth of water of from 30 to 52 feet.

§ 7. Fire Brigades.

1. *New South Wales.*—(i) *General.* A Board of Fire Commissioners, consisting of five members (one each representing the State Government, President; Insurance companies; local government authorities. volunteer firemen and permanent firemen) operates under the Fire Brigades Act 1909–1956, and 154 fire districts had been constituted at the end of 1955. Up to the end of 1949, the cost of maintenance of fire brigades was borne in proportions of one quarter, one quarter, and one half respectively by the Government, the municipalities, and the insurance companies concerned, the expenditure so regulated that the proportion payable by the councils in a fire district should not, except in special circumstances, exceed the amount obtainable from $\frac{1}{4}$ d. in the £1 rate on the unimproved capital value of rateable land in the fire district. In June, 1949, legislation was introduced (i) increasing the limit of the Board's borrowing power from £250,000 to £500,000, (ii) providing for the varying of the maximum rate that may be levied by councils and (iii) altering the basis of contributions so that from 1st January, 1950, local councils and the Government will each pay one-eighth and the insurance companies three-quarters.

Other legislation, introduced in September, 1949, to improve and modernize the law dealing with the prevention of bush fires and to build up the organization of the bush fire-fighting services, provided for the establishment of Fire Regions and a Bush Fire Fighting Fund to be financed from contributions by the Government, councils and insurance companies in the proportion of one-quarter, one-quarter and one-half, respectively. The contribution of any council shall not exceed one-twentieth of a penny in the £1 on the unimproved capital value of rateable land in the area of the council not being land within a fire district constituted under the Fire Brigades Act 1909–1956.

(ii) *Board of Fire Commissioners of New South Wales.* At 31st December, 1955, the authorized strength of the Fire Brigade throughout the fire districts of New South Wales was 360 officers and 868 permanent and 2,320 volunteer firemen. Corresponding figures for the Sydney Fire District were 299, 822 and 343. The revenue for the year 1955 was £1,850,599, made up as follows:—From the Government, £228,099, municipalities and shires, £228,099; fire insurance companies and firms, £1,368,594; and from other sources, £25,807. The disbursements for the year were £1,889,966.

2. *Victoria.*—(i) *General.* The Fire Brigades Act of 1928 provided for a Metropolitan Fire Brigades Board and a Country Fire Brigades Board each consisting of nine members. In December, 1944, the latter Board was superseded by the Country Fire Authority under an Act of that title, and the number of members was increased to ten. The number of members of the Metropolitan Fire Brigades Board was increased in December, 1954 from nine to ten to include an employees' representative.

(ii) *Metropolitan Fire Brigades Board.* Since 1st October, 1952, the Metropolitan Fire Brigades Board has received contributions from the municipalities and the insurance companies in the proportion of one-third and two-thirds respectively. Prior to 1st October, 1952, the Board received contributions in equal proportions from the Treasury, the municipalities and the insurance companies. On 30th June, 1955, the Board had under its control 44 stations, 684 permanent staff, 65 special service and clerical, etc., staff, and 15 part-time firemen. The total receipts for 1954–55 were £1,076,731 comprising contributions, £865,857, receipts for services, £113,709, and interest and sundries, £97,165. The expenditure was £1,060,540.

(iii) *Country Fire Authority.* This authority, constituted in 1944, is responsible for the prevention and suppression of fires in the "country area of Victoria", which embraces the whole of the State outside the metropolitan fire district, excluding State forests and certain crown lands. The country area has been divided into 24 fire control regions, three of which (Ballarat, Bendigo and Geelong) are wholly urban and the remainder mixed urban and rural. The Country Fire Authority has received contributions in the proportion of two-thirds from insurance companies and one-third from the Treasury as from 1st January, 1954. Prior to that date the Treasury contributed two-thirds while the insurance companies contributed one-third. At 30th June, 1955, the Act applied to 155 insurance companies, 198 urban and 1,010 rural fire brigades. The effective registered strength of the brigades was 93,788 members.

The receipts for the year 1954-55 amounted to £362,718. Total expenditure other than loan amounted to £356,741.

3. *Queensland.*—(i) *General.* The Acts of 1920-1931 made provision for the retention of existing fire districts, and for the constitution of new districts. For each district, there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade is proportioned as follows:—The Treasury two-sevenths, insurance companies three-sevenths, and local authorities two-sevenths. All volunteer fire brigades in a district must be registered.

(ii) *Fire Brigades Boards.* At 30th June, 1954, the latest year for which figures are available, there were 71 Fire Brigades Boards. The total number of stations was 121, and full-time staff numbered 466, including 15 administrative, 83 officers and 368 firemen. Workshop staff numbered 17. Part-time staff numbered 605, including 70 administrative, 99 officers and 436 firemen. Volunteers numbered 392. The total revenue for the year 1953-54 was £584,508 received mainly from the following sources—Government £156,114, local authorities £155,560, insurance companies £234,244 and loans (Government and other) £94,672. The total expenditure for the year was £555,439 the chief items being salaries and wages £406,161 and interest and redemption of loans £27,244.

4. *South Australia.*—The Fire Brigades Act 1936-1944 provides for a board of five members, and the expenses and maintenance of brigades are defrayed in the proportion of two-ninths by the Treasury (subject to certain limits when the contribution exceeds £10,000), five-ninths by insurance companies, and two-ninths by the municipalities concerned. At 30th June, 1955, there were altogether 35 fire brigade stations, of which 12 were metropolitan and 23 country.

The authorized strength of the permanent staff was 371, including 264 officers and men and 85 country auxiliary firemen. The total revenue for the year 1954-55 was £298,188 made up as follows:—insurance companies £179,627, Treasury £46,710, and municipalities £71,851. The Treasury contribution includes an additional grant of £34,704.

5. *Western Australia.*—In 1942, certain municipal and road board districts were constituted fire districts under the control of the Western Australian Fire Brigades Board. There were 31 fire districts at 30th September, 1955. The contribution to the Board is made in the proportion of two-ninths from the Government, two-ninths from local government authorities, and five-ninths from insurance companies. The number of local government authorities and insurance companies who contributed numbered 55 and 134 respectively. The brigades throughout the State controlled by the Western Australian Fire Brigades Board at 30th September, 1955 numbered 49, with a staff of 1,393 including 239 permanent officers and firemen and 1,125 volunteer brigade officers and firemen. The revenue for the year ended 30th September, 1955, was £306,350 and the expenditure £308,090.

Under the Bush Fires Act, a Bush Fires Board (appointed April 1955 and superseding the Rural Fires Prevention Advisory Committee) consisting of ten members, five of whom are nominated by the Road Board Association, was set up to advise the Minister for Lands on bush fire control. The Act also provides for the registration of bush fire control officers, who numbered 1,160 at 30th June, 1955 and the establishment of bush fire brigades, the number of which was 610 at 30th June, 1955.

6. *Tasmania.*—The Fire Brigades Act 1945 provided for the creation of the Fire Brigades Commission of Tasmania to co-ordinate the activities of existing fire brigades boards, while leaving the responsibility for individual control and management with the boards. The Commission consists of five members nominated or elected by the fire brigades boards and one member nominated by the Minister. Contributions towards the cost of operations are on the basis of one-third each from the Treasury, the municipalities, and the insurance companies concerned. The cost for the year 1954–55 amounted to £99,487. There were at 30th June, 1955, 23 brigades controlling 31 stations and their aggregate staffs numbered 422, including 77 permanent officers and 335 part-time firemen, including officers.

CHAPTER XX.

PRIVATE FINANCE.

A. CURRENCY.

§ 1. General.

The Australian monetary system is based on the British system, of which the unit is the pound (£) divided into 20 shillings (s.) each of 12 pence (d.). When the Australian currency was introduced in 1909 the Australian pound was specified as equivalent to 123.27447 grains of gold $\frac{11}{18}$ ths fine or 113.002 grains of fine gold and, until the depression in 1930, was identical with the pound sterling. There was a gradual depreciation of the Australian pound in terms of sterling from the beginning of 1930 until 3rd December, 1931, when it was stabilized at the rate of £125 Australian = £100 sterling. This relationship has been maintained until the present time. Following the depreciation, no action was taken to define the value of the Australian pound in terms of gold until 5th August, 1947, when the Australian Government advised the International Monetary Fund, in terms of the membership agreement, that the par value of the Australian pound was 2.86507 grammes (44.2148 grains) of fine gold. From 19th September, 1949 this was reduced to 1.99062 grammes (30.720 grains) of fine gold.

When the Commonwealth was established in 1901, the currency in Australia consisted of United Kingdom gold, silver and bronze coins, notes issued by the banks, and Queensland Treasury notes. Queensland Treasury notes were in circulation in Queensland only, having superseded bank notes in that State after the 1893 crisis. Under the Commonwealth Constitution, the control of currency, coinage and legal tender and the issue of paper money was vested in the Commonwealth. The Commonwealth assumed these powers by enacting the Coinage Act 1909 and the Australian Notes Act 1910.

Imperial gold coins of the specified weight and fineness and Australian notes are legal tender in Australia for any amount. Australian silver coins are legal tender for any amount not exceeding forty shillings and Australian bronze coins are legal tender for any amount not exceeding one shilling.

§ 2. Coinage.

1. **Coins in Circulation.**—Brief historical notes relating to the Australian Coinage are given in Official Year Book No. 37, pages 557 and 558. For weight, metal, composition, etc., of Australian coins in circulation see Official Year Book No. 39, page 697.

The silver coins issued prior to July, 1947, have a millesimal fineness of 925 (thirty-seven fortieths silver and three fortieths copper) and those issued since 1st July, 1947 (dated 1946 and later) have a millesimal fineness of 500 (one-half silver and one-half other metals).

From 1910 to 1916, Australian coins were minted in England by the Royal Mint, London, and the Mint, Birmingham Ltd., and in 1916 and 1917 by the Indian Mints. The minting of Australian coins was undertaken by the Australian Mints in 1916 and coins have been minted at the Melbourne branch of the Royal Mint from 1916 to the present time, at the Sydney branch from 1919 until that Mint closed in 1926 and at the Perth branch in 1922 and since 1940.

During the 1939–45 War, the two Australian mints were unable to meet the demand for Australian coins and some coins were minted in the United States of America and India. In 1951–52 and 1952–53, some coins were minted at the Royal Mint, London, to meet the heavy demand for coins. Details of Australian coins obtained from each mint to 30th June, 1956, are as follows :—Melbourne, £38,910,000 ; Perth, £1,285,000 ; Sydney, £488,000 ; United Kingdom Mints, £3,016,000 ; United States Mints, £6,000,000 ; Indian Mints, £169,000 ; Total, £49,868,000.

2. **Issues of Australian Coins.**—The net issues of Australian silver and bronze coin from 1910 to 30th June, 1956 were :—Crown (5s.), £276,000 ; Florin (2s.), £17,656,000 ; Shilling (1s.), £6,981,000 ; Sixpence (6d.), £4,588,000 ; Threepence (3d.), £5,221,000 ; Total silver coin, £34,669,000 ; Penny (1d.), £2,192,000 ; Half-penny (½d.), £692,000 ; Total bronze coin, £2,884,000. Except in the total no allowance has been made for £53,000 worth of damaged silver coin, for which denominations are not available, withdrawn since 1910.

3. **Profits on Coinage of Silver and Bronze.**—Australian silver and bronze coins are token coins and, as the face value of the coins is greater than the value of the bullion they contain, a profit is made from their issue. This profit forms part of the Commonwealth Consolidated Revenue. In the following table, details are given of the value of coins issued, the cost of bullion, the cost of minting and sundry expenses connected with the issue, and the profits made on the issue of coins during the years 1938–39 and 1951–52 to 1955–56.

AUSTRALIAN SILVER AND BRONZE COINS : PROFITS FROM ISSUE.

(£.)

Year.	Coin Issued.	Cost of Bullion.	Gross Profit.	Cost of Minting and Sundry Charges.	Net Profit.
SILVER COIN.					
1938–39	219,600	81,314	138,286	18,459	119,827
1951–52	3,003,600	1,663,384	1,340,216	316,970	1,023,246
1952–53	1,709,600	971,471	738,129	180,608	557,521
1953–54	2,469,400	1,381,027	1,088,373	233,151	855,222
1954–55	2,127,800	1,187,041	940,759	172,552	768,207
1955–56	915,900	514,848	401,052	95,770	305,282
BRONZE COIN.					
1938–39	41,800	7,838	33,962	26,025	7,937
1951–52	249,639	125,514	124,125	251,991	— 127,866
1952–53	327,620	413,263	— 85,643	161,640	— 247,283
1953–54	61,368	71,421	— 10,053	94,963	— 105,016
1954–55	14,616	12,665	1,951	45,590	— 43,639
1955–56	174,889	163,393	11,496	117,347	— 105,851
TOTAL.					
1938–39	261,400	89,152	172,248	44,484	127,764
1951–52	3,253,239	1,788,898	1,464,341	568,961	895,380
1952–53	2,037,220	1,384,734	652,486	342,248	310,238
1953–54	2,530,768	1,452,448	1,078,320	328,114	750,206
1954–55	2,142,416	1,199,706	942,710	218,142	724,568
1955–56	1,090,789	678,241	412,548	213,117	199,431

NOTE.—Minus sign (—) denotes a loss.

4. **Australian Mints.**—(i) *General.* Soon after the discovery of gold in Australia, a branch of the Royal Mint was established in Sydney. The formal opening took place on 14th May, 1855. The Melbourne branch was opened on 12th June, 1872, and the Perth Branch on 20th June, 1899. The States of New South Wales, Victoria and Western Australia provided an annual endowment in return for which the mint receipts were paid to the respective State Treasuries. Owing to losses incurred in its operations, the Sydney branch was closed at the end of 1926.

Since their establishment, the Australian branches of the Royal Mint have been primarily concerned with the refining of gold, minting of Imperial gold coins and the production of bars and ingots of gold bullion for export. The minting of Imperial gold coins was discontinued in September, 1931. In 1916, the Melbourne branch took over the minting of Australian silver and bronze coins from the Royal Mint, London. Australian coins were also minted at the Sydney Mint from 1919 to 1926 and at the Perth Mint in 1922 and from 1940 to the present time. The Melbourne branch has also minted token coins for the Territory of New Guinea and for New Zealand.

(ii) *Gold Receipts and Issues.* (a) *Receipts.* The receipts of gold at Australian mints during 1955 amounted to 984,369 fine ounces (Melbourne, 147,602 fine ounces ; Perth, 836,767 fine ounces).

(b) *Issues.* The Australian mints issue gold bullion for the use of local manufacturers (jewellers, dentists, etc.) and for export. Since September, 1931, when the United Kingdom departed from the gold standard, the minting and issue of gold coins by Australian mints has ceased. Australian exports of gold are mainly in the form of 400-oz. ingots, but in earlier years a considerable amount of gold was shipped to India in 10-oz. bars. Since early in the 1939-45 War, all gold has been acquired by the Commonwealth Bank and the export and use of gold has been subject to regulation by the Commonwealth Government. From December, 1951, export of a proportion of newly-mined gold for sale on premium markets overseas was permitted (see para. 5 below). The issues from Australian mints during 1955 amounted to 986,857 fine ounces (Melbourne, 149,381 fine ounces, Perth, 837,476 fine ounces).

5. *Price of Gold.*—The following table shows the average prices of gold and the average value of the sovereign in London and Australia for the years 1938-39 and 1951-52 to 1955-56. The average price of gold in Australia is based on the Commonwealth Bank's buying price for gold lodged with the mints.

PRICE OF GOLD : LONDON AND AUSTRALIA.

Period.	London.		Australia.		
	Average price per fine oz.	Average value of Sovereign.	Average price per fine oz.	Sovereign.	
				Average value.	Equivalent to a premium of—
	£stg. s. d.	£stg. s. d.	£A. s. d.	£A. s. d.	%
1938-39..	7 6 9	1 14 7	9 2 9	2 3 0	115.0
1951-52..	12 8 0	2 18 5	15 9 10	3 12 0	260.0
1952-53..	12 8 0	2 18 5	15 9 10	3 12 0	260.0
1953-54..	12 8 3	2 18 5	15 10 4	3 12 1	260.4
1954-55..	12 10 0	2 18 10	15 12 6	3 12 6	267.8
1955-56..	12 10 0	2 18 10	15 12 6	3 12 6	267.8

In December, 1951, arrangements were made whereby producers could sell a proportion of newly-mined gold for industrial purposes on oversea premium markets. Under the arrangements, gold is acquired by the Commonwealth Bank in the usual manner and sold, at the Bank's buying price, to an association representing gold producers participating in the scheme. The association pays the Bank's handling charges and the costs of preparation of the gold and makes arrangements for export and sale. The gold can be sold only against payment in United States dollars. Profits earned by the association after meeting administrative expenses are distributed to members in proportion to the quantity of gold delivered to the Commonwealth Bank. Until August, 1952, when permission was given for the export of fine gold, gold exported under this arrangement was not to exceed a fineness of 22 carats ($\frac{11}{12}$ ths.).

The average prices per fine ounce in Australian currency (f.o.b.) obtained for gold exported under this scheme for each of the months during 1955-56 for which there were sales were:—July, £15 13s. 1d.; August and September, £15 13s. 2d.; October, £15 12s. 11d.

§ 3. Notes.

1. *General.*—Brief historical notes relating to the circulation and issue of notes in Australia are given in Official Year Book No. 37, pages 561 and 562. The issue of notes intended for circulation as money other than by the Commonwealth Bank is prohibited.

2. *The Australian Note Issue.*—(i) *General.* Notes in circulation in Australia are issued by the Commonwealth Bank through the Note Issue Department. The Bank is authorized to issue Australian notes in denominations of 5s., 10s., £1, £5, £10 and any multiple of £10. The Commonwealth Bank is not required to hold a specific reserve in gold against the note issue, but the assets of the Note Issue Department must be held or invested in gold, on deposit with any bank, or in securities of the Government of the United Kingdom, the Commonwealth or a State. All profits of the Note Issue Department, with the exception of an amount not exceeding £500,000 each year which may be used as capital for the Commonwealth Trading Bank, or the special departments of the Commonwealth Bank, are paid to the Commonwealth Consolidated Revenue Fund.

Australian notes are legal tender to any amount within Australia and have been issued in denominations of 10s., £1, £5, £10, £20, £50, £100 and £1,000. Notes of denominations higher than £10, however, have not been issued to the public since 1945.

(ii) *Australian Notes in Circulation.* Particulars of the average values of notes in circulation for the years 1938-39 and 1951-52 to 1955-56 are given in the following table :—

AUSTRALIAN NOTE ISSUE.
(£'000.)

Denomination.	Average of monthly statements for year—					
	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
10s.	4,141	9,454	9,738	9,936	10,175	10,496
£1	21,124	69,399	68,286	69,038	69,646	70,564
£5	11,718	132,432	152,679	168,032	176,383	180,565
£10	5,126	83,131	88,257	91,911	101,443	113,809
£20	111	7	6	6	6	4
£50	1,259	59	55	51	49	46
£100	2,238	63	60	57	55	50
£1,000	2,855	572	649	683	799	802
<i>Held by Banks</i>	15,454	37,745	36,400	38,996	40,880	42,909
<i>Held by Public</i>	33,118	257,372	283,330	300,718	317,676	333,427
Total	48,572	295,117	319,730	339,714	358,556	376,336

(iii) *Commonwealth Bank—Note Issue Department.* The following statement shows particulars of liabilities and assets of the Note Issue Department of the Commonwealth Bank as at 30th June, 1955 and 1956.

NOTE ISSUE DEPARTMENT : LIABILITIES AND ASSETS, 30th JUNE.
(£'000.)

Liabilities.	1955.	1956.	Assets.	1955.	1956.
Notes on Issue(a) ..	362,753	371,969	Gold and Balances held abroad (including money at short call)	120,926	120,831
Special Reserve— Premium on gold sold	4,755	4,755	Government Securities (including Commonwealth Treasury Bills)	250,041	259,368
Other Liabilities(a) ..	3,531	3,525	Other Assets	72	50
Total Liabilities	371,039	380,249	Total Assets	371,039	380,249

(a) Notes of a denomination not exceeding one pound which have been on issue for more than twenty years, and notes of a denomination exceeding one pound which have been on issue for more than 40 years are not included in the item "Notes on Issue" but are included in the item "Other Liabilities".

In 1955-56, the net profits of the Note Issue Department amounted to £8,365,937 of which £7,865,937 was paid to the Commonwealth Treasury and £500,000 to the Capital Accounts of sections of the Commonwealth Bank and the Commonwealth Trading Bank as follows :—Mortgage Bank Department £143,000, Rural Credits Department £71,000, Industrial Finance Department £143,000, and the Commonwealth Trading Bank £143,000. For the basis of distribution of the net profits of the Note Issue Department, see page 708.

B. BANKING.

§ 1. Cheque-Paying Banks.

1. *Banking Legislation.*—(i) *Commonwealth Legislation.* Under Section 51 of the Commonwealth Constitution, the Commonwealth Parliament has power to legislate with respect to "Banking, other than State banking ; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money". The principal Commonwealth Acts at present in force relating to Banking are—

- (a) The Commonwealth Bank Act 1945-1953 which provides for the constitution and management of the Commonwealth Bank, Commonwealth Trading Bank and Commonwealth Savings Bank and the management of the Australian note issue ; and

- (b) The Banking Act 1945-1953, which provides for the regulation of banking and for the protection of the currency and the public credit of the Commonwealth.

The Banking Act 1945 was assented to on 3rd August, 1945, and came into operation on 21st August, 1945. It applies to all banks, except State banks, operating in Australia or Territories of the Commonwealth. The objects of the Act are :—(a) To provide a legal framework, uniform throughout Australia, for regulating the banking system ; (b) to safeguard depositors of the banks from loss ; (c) to provide for the co-ordination of banking policy under the direction of the Commonwealth Bank ; (d) to control the volume of credit in circulation and bank interest rates ; (e) to mobilize and to provide machinery for the control of the foreign exchange and gold resources of the Australian economy. A summary of the main provisions of the Act is given in Official Year Book No. 37, page 565.

The Banking Act 1953, assented to on 1st April, 1953, amended the Banking Act 1945. Details of the main amendments are given in Official Year Book No. 40, page 616.

(ii) *State Legislation.* State banking legislation relates to the incorporation of banks and the constitution and management of State banks. The Acts under which the various banks are incorporated differ. While some of the older banks were incorporated by special Act or Charter, e.g., the Bank of New South Wales by Act of Council 1817, The Bank of Adelaide by Act of the South Australian Parliament, and the Bank of New Zealand by Act of the General Assembly of New Zealand, most of the banks are incorporated under a Companies Act of the States or the United Kingdom. This is also the case with those banks which were reconstructed after the crisis of 1893. State banks, constituted under State Acts, transacting general banking business are The Rural Bank of New South Wales, the State Bank of South Australia and The Rural and Industries Bank of Western Australia.

2. **Royal Commission on Monetary and Banking Systems.**—A Royal Commission was appointed by the Commonwealth Government in November, 1935, to inquire into the monetary and banking systems in operation in Australia and to report whether any, and if so what, alterations were desirable in the interest of the people of Australia as a whole, and the manner in which any such alterations should be effected. The Commission presented its report on 15th July, 1937, and a summary of the recommendations appears in Official Year Book No. 31, page 1010.

3. **Presentation of Banking Statistics.**—Because of the different purposes they serve in the Australian financial system, Australian banks have been divided for statistical purposes into four groups and a separate series is presented for each. These groups are :—

- (a) *The Commonwealth Bank.* This is the Central Bank. It also provides special banking facilities through the Rural Credits, Mortgage Bank and Industrial Finance Departments. It transacted general banking business through a General Banking Division up to 3rd December, 1953, when that business was transferred to the Commonwealth Trading Bank of Australia. Statistics of the Central Banking Business (including the Note Issue Department), and Rural Credits, Mortgage Bank and Industrial Finance Departments are presented in separate series.
- (b) *The Commonwealth Trading Bank of Australia.* This bank commenced operations on 3rd December, 1953. On that date, under the provisions of the Commonwealth Bank Act, 1953, it took over the business of the General Banking Division of the Commonwealth Bank. The statistics presented in the Commonwealth Trading Bank series include averages for the General Banking Division of the Commonwealth Bank up to 3rd December, 1953.

- (c) *Private Trading Banks.* This group was formerly known as the Nine Trading Banks but the number of banks included has been reduced to seven by amalgamations. With the Commonwealth Trading Bank, these banks provide the major part of the general banking facilities in Australia. The banks included in this group are—the Bank of New South Wales, The Commercial Banking Company of Sydney Ltd., The National Bank of Australasia Ltd. (which has absorbed the Queensland National Bank Ltd., and The Ballarat Banking Co. Ltd.), The Commercial Bank of Australia Ltd., The Bank of Adelaide, the Australia and New Zealand Bank Ltd. (an amalgamation of The Bank of Australasia Ltd. and The Union Bank of Australia Ltd.), and The English, Scottish and Australian Bank Ltd.
- (d) *Other Banks.* This group consists of (i) three State Government Banks—The Rural Bank of New South Wales, the State Bank of South Australia and The Rural and Industries Bank of Western Australia, which, in their general banking business, specialize mainly in financing rural industries, (ii) one joint stock bank—The Brisbane Permanent Building and Banking Co. Ltd., which has specialized business in one district only, and (iii) branches of three oversea banks—the Bank of New Zealand, Comptoir National d'Escompte de Paris and the Bank of China, which transact limited business in Australia and are mainly concerned with financing trade, etc., between Australia and oversea countries.

In addition to the series mentioned above, a series for all cheque-paying banks is presented. This series covers the Commonwealth Trading Bank, the Private Trading Banks and the other cheque-paying banks included in the fourth group.

Unless otherwise stated, the statistics presented are averages of weekly returns. Averages of liabilities and assets are the averages of the liabilities and assets of the banks on the several weekly balance days during the period concerned. Averages of bank clearings and debits to customers' accounts are the averages of transactions for weeks ended on the balance days during the period.

4. **Banks Transacting Business in Australia.**—(i) *Number of Branches.* At 30th June, 1956, the 15 banks operating in Australia transacted all classes of banking business at 3,415 branches and 1,305 agencies. The Commonwealth Trading Bank and the Private Trading Banks have branches throughout the Commonwealth. The Rural Bank of New South Wales, the State Bank of South Australia and The Rural and Industries Bank of Western Australia, being State Government banks specializing mainly in financing rural industries, have branches only in their respective States. The Brisbane Permanent Building and Banking Co. Ltd., transacts business in Brisbane only. The remaining three banks are branches of oversea banks.

CHEQUE-PAYING BANKS : NUMBER OF BRANCHES^(a) AT 30th JUNE, 1956.

Banks.	New South Wales.	Vic-toria.	Q'land.	South Aust.	West. Aust.	Tas-mania.	Nor. Terr.	Aust. Cap. Terr.	Total.
Commonwealth Trading Bank of Australia ..	271	71	72	20	46	8	2	2	492
Private Trading Banks ..	900	818	447	265	231	65	9	9	2,744
Other Cheque-paying Banks	111	2	1	30	35	..	..	..	179
All Cheque-paying Banks—									
Metropolitan areas ..	495	406	113	111	123	16	..	..	1,264
Elsewhere	787	485	407	204	189	57	11	11	2,151
Total	1,282	891	520	315	312	73	11	11	3,415

(a) Includes Head Offices. Excludes 1,305 agencies.

(ii) *Capital Resources, Profits and Dividends.* The paid-up capital of cheque-paying banks (excluding the three oversea banks, the Bank of New Zealand, the Bank of China and the Comptoir National d'Escompte de Paris), together with their reserve funds, their profits and the amount of their last dividends, are shown in the following table. The information relates to the balance-sheet last preceding 31st October, 1955. All amounts are expressed in Australian currency.

CHEQUE-PAYING BANKS : CAPITAL RESOURCES, PROFITS AND DIVIDENDS,
1954-55.

(£'000.)

Bank.	Paid-up Capital. (a)	Re- serve Funds.	Balance of Profit and Loss Account. (b)	Total Share- holders' Funds. (c)	Reserve Liability of Share- holders. (d)	Net Profit for year. (e)	Net Divi- dends. (f)
<i>Commonwealth Trading Bank of Australia</i>	5,143	2,160	..	7,303	..	734	..
<i>Private Trading Banks—</i>							
Australia and New Zealand Bank Ltd.	12,801	8,119	2,089	23,009	10,667	1,056	883
The Bank of Adelaide	1,750	1,750	165	3,665	1,750	219	175
Bank of New South Wales	13,170	10,250	1,324	24,744	13,170	1,894	1,185
The Commercial Bank of Aus- tralia Ltd.	5,170	3,100	402	8,672	..	554	390
The Commercial Banking Co. of Sydney Ltd.	6,000	5,000	447	11,447	6,000	627	508
The English, Scottish and Aus- tralian Bank Ltd.	3,765	3,765	755	8,285	2,510	395	253
The National Bank of Australasia Ltd.	10,089	7,500	958	18,547	2,700	889	757
The Queensland National Bank Ltd. (in vol. liq.) (g) .. .. .	..	..	130	130	..	..	..
The Ballarat Banking Co. Ltd. (in vol. liq.) (g)	159	166	16	341	141	15	6
<i>Total Private Trading Banks</i>	<i>52,904</i>	<i>39,650</i>	<i>6,286</i>	<i>98,840</i>	<i>36,938</i>	<i>5,649</i>	<i>4,157</i>
<i>Other Cheque-paying Banks—</i>							
The Brisbane Permanent Building and Banking Co. Ltd.	1,000	275	67	1,342	..	85	80
The Rural Bank of New South Wales	16,899	9,593	..	26,492	..	107	..
State Bank of South Australia	3,942	1,121	..	5,063	..	101	..
The Rural and Industries Bank of Western Australia	8,522	194	..	8,716	..	26	..
<i>Total Other Cheque-paying Banks</i>	<i>30,363</i>	<i>11,183</i>	<i>67</i>	<i>41,613</i>	<i>..</i>	<i>319</i>	<i>80</i>
Grand Total	88,410	52,993	6,353	147,756	36,938	6,702	4,237

(a) For the Commonwealth Trading Bank, the amount shown in this column is the amount specified as capital in the Commonwealth Bank Act 1945-1953. This amount was appropriated out of Reserve Funds built up from profits of the Commonwealth Bank. For the State Bank of South Australia and The Rural and Industries Bank of Western Australia, the amounts shown in this column are capital funds provided by the respective State Governments. Capital of The Rural Bank of New South Wales consists of Inscribed Stock and Debentures issued by the Bank for capital purposes. (b) Includes dividends declared but not paid at date of balance-sheet. (c) For the Commonwealth Trading Bank and the State Banks, the amount shown in this column is total capital and reserves. (See footnote (a).) (d) Includes uncalled capital. (e) For the State Government Banks, the net profit is the profit after writing off bank premises and payment of interest on capital. For the other Banks, the net profit is the profit before writing off bank premises. (f) Dividends paid and payable out of profits earned during 1954-55. (g) These banks are in process of liquidation consequent upon the amalgamation of their business with The National Bank of Australasia Ltd.

5. Commonwealth Bank of Australia.—(i) *General.* An account of the progress and development of the Commonwealth Bank is given in earlier issues of the Official Year Book (see No. 37, pages 570 to 573). The general functions of the Bank are set out in section 8 of the Commonwealth Bank Act 1945-1953 which states—

“ 8. It shall be the duty of the Commonwealth Bank, within the limits of its powers, to pursue a monetary and banking policy directed to the greatest advantage of the people of Australia, and to exercise its powers under this Act and the Banking Act 1945 in such a manner as, in the opinion of the Bank, will best contribute to :—

(a) the stability of the currency of Australia ; (b) the maintenance of full employment in Australia ; and (c) the economic prosperity and welfare of the people of Australia.”

In addition to its functions as a Central Bank, the Bank controls the Australian note issue through a Note Issue Department and provides special services through the Rural Credits Department, Mortgage Bank Department and Industrial Finance Department. The Commonwealth Bank also provided general banking facilities through the General Banking Division up to 3rd December, 1953. In accordance with the provisions of the Commonwealth Bank Act, 1953, the Commonwealth Trading Bank, on that date, took over the business of the General Banking Division of the Commonwealth Bank. The Commonwealth Savings Bank, a separate institution providing for small depositors, is controlled by the Commonwealth Bank Board and is operated in conjunction with the Commonwealth Trading Bank.

(ii) *Management.* Under the Commonwealth Bank Act 1911, the Bank was managed by a Governor. From 1924 to August, 1945, it was controlled by a Board of Directors. Under the Commonwealth Bank Act 1945, control was vested in a Governor, assisted by an Advisory Council. Since 21st August, 1951, under the Commonwealth Bank Act 1951, the policy of the Commonwealth Bank and the Commonwealth Savings Bank has been determined by the Commonwealth Bank Board consisting of the Governor (Chairman), the Deputy Governor, the Secretary of the Department of the Treasury and seven other members appointed by the Governor-General. The Bank is managed by the Governor who acts in accordance with the policy of the Bank and with any directions of the Board. The Board is required to inform the Government of the monetary and banking policy of the Bank. In the event of a disagreement between the Government and the Board as to whether the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia, the Governor-General, acting with the advice of the Executive Council, may determine the policy to be adopted by the Bank. The Commonwealth Trading Bank is managed by a General Manager under the Governor of the Commonwealth Bank and its policy is determined by the Commonwealth Bank Board.

(iii) *Central Banking Business.* Under the powers it possessed under the Commonwealth Bank Act 1911–1943, and under its war-time powers under the National Security Regulations, the Commonwealth Bank had gradually assumed the functions of a Central Bank. Part III. of the Commonwealth Bank Act 1945 formally constituted the Commonwealth Bank as a Central Bank and granted the Bank the necessary powers to carry on the business of a Central Bank. The capital for the Central Banking Business is £4,000,000 and such other sums as are transferred from the Reserve Fund. Since 1951, the profits of the Commonwealth Bank have been distributed as follows:—(a) One-half to the National Debt Sinking Fund; (b) for a period of five years, an amount not exceeding £500,000 per annum may be paid to the capital of the several departments of the Bank and the Commonwealth Trading Bank, this amount to be distributed as follows:—Commonwealth Trading Bank, Mortgage Bank Department, and Industrial Finance Department each two-sevenths and the Rural Credits Department one-seventh; and (c) the balance to be paid to the Commonwealth Bank Reserve Fund.

(iv) *Note Issue Department.* This Department was established in 1920 when the control of the Australian note issue was transferred from the Commonwealth Treasury to the Commonwealth Bank. The Bank may, through this department, issue, re-issue and cancel Australian notes. Until 30th June, 1951, all profits of this Department, with the exception of £2,000,000 paid to the Capital Account of the Rural Credits Department and £1,200,000 paid to the Capital Account of the Mortgage Bank Department, were paid to the Commonwealth Consolidated Revenue Fund. In 1951, provision was made for an amount, not exceeding £500,000 per annum for five years, to be paid to the Capital Accounts of the Commonwealth Trading Bank and the Rural Credits, Industrial Finance and Mortgage Bank Departments of the Commonwealth Bank. This amount is payable only if a similar amount is paid from the profits of the Central Banking Business and is to be distributed to the various sections in the same proportions as the amount payable from the profits of the Central Banking Business. The balance of the profits is to be paid to the Commonwealth Consolidated Revenue Fund.

(v) *General Banking Division.* Under the Commonwealth Bank Act 1911–1943, no provision was made for the separation of the general banking business of the bank from its central banking business. Under the Commonwealth Bank Act 1945, the General Banking Division was set up to carry on the general banking business of the Bank and the accounts and transactions of this division were kept separate and distinct from the other accounts of the Bank. The capital of the General Banking Division was £4,000,000, and

such other sums as were transferred from the General Banking Division Reserve Fund, or from the profits of the Central Banking Business and the Note Issue Department. Transfers from these two sources increased the total capital to £4,572,000 at 30th June, 1953. The profits of the General Banking Division were distributed as follows:—(a) one-half was credited to the General Banking Division Reserve Fund, and (b) one-half was paid to the National Debt Sinking Fund. Under the Commonwealth Bank Act 1953, the business of the General Banking Division was transferred to the Commonwealth Trading Bank on 3rd December, 1953. See also para. 6 below—Commonwealth Trading Bank of Australia.

(vi) *Rural Credits Department.* The Rural Credits Department was established in 1925 for the purpose of making short-term credit available for the orderly marketing of primary produce. The Bank may, through this department, make advances, upon the security of primary produce placed under the legal control of the Bank or other security associated with the production or marketing of primary produce, to co-operative associations or marketing boards formed under the laws of the Commonwealth or of a State or Territory of the Commonwealth or other bodies specified by proclamation. The period of the advance shall not be more than one year. The capital of the Rural Credits Department is £2,000,000 and such amounts as are transferred from the profits of the Central Banking Business and the Note Issue Department. Transfers from these two sources have increased the total capital to £2,714,000 at 30th June, 1956. Profits are distributed as follows:—(a) one-half is credited to the Rural Credits Department Reserve Fund, and (b) one-half is credited to the Rural Credits Department Development Fund for the promotion of primary production.

(vii) *Mortgage Bank Department.* The Mortgage Bank Department was established in 1943 for the purpose of making long-term loans to primary producers. Through this department, the Bank may make a loan to any person engaged in farming, agricultural, horticultural, pastoral or grazing operations or other form of primary production, upon the security of a mortgage to the Bank of an estate or interest in land in the Commonwealth owned by the borrower. The term of the loan shall not be less than five years nor more than forty-one years. The capital of the Department is £4,000,000 plus any amount transferred from the profits of the Central Banking Business and the Note Issue Department. Transfers from these two sources have increased the total capital to £5,428,000 at 30th June, 1956. Profits are credited to the Mortgage Bank Department Reserve Fund.

(viii) *Industrial Finance Department.* The functions of the Industrial Finance Department, established in January, 1946, are:—(a) to provide finance for the establishment and development of industrial undertakings; (b) to assist in the establishment and development of industrial undertakings; and (c) to provide advice on the operations of industrial undertakings with a view to promoting the efficient organization and conduct thereof. To exercise these functions the Bank may, through the Industrial Finance Department, lend money and purchase and sell shares or securities in an industrial undertaking. The capital of this department is £4,000,000 plus any amount transferred from the profits of the Central Banking Business and the Note Issue Department. Transfers from these two sources have increased the total capital to £5,429,000 at 30th June, 1956. The Treasurer, the Bank and the Savings Bank may advance money to the Industrial Finance Department. The amount that may be advanced by the Bank is limited to £1,000,000. The profits of the Department are credited to the Industrial Finance Department Reserve Fund.

(ix) *Housing Loans.* Provision is made for the Bank, through the Commonwealth Trading Bank, to make loans to individuals or building societies for the erection or purchase of homes or for the discharge of mortgages on homes. These loans must be made at the lowest possible rate of interest. Loans to individuals are to be on *crédit foncier* terms, to be secured by first mortgage on an estate or interest in land owned by the borrower and to be repaid in periods of not less than five years nor more than 35 years. Loans to building societies are to be made on such security and on such terms and conditions as the Bank determines.

(x) *Liabilities and Assets—All Departments.* Liabilities and assets of each Department of the Commonwealth Bank at 30th June, 1956, are shown in the following table. The

Commonwealth Trading Bank and the Commonwealth Savings Bank, which are operated as separate institutions, are not included (*see* § 1, para. 6 (ii) and § 2, para. 7 (ii) following):—

COMMONWEALTH BANK OF AUSTRALIA: LIABILITIES AND ASSETS,
30th JUNE, 1956.
(£'000.)

Item.	Central Banking Business.	Note Issue Depart- ment.	Rural Credits Depart- ment.	Mortgage Bank Depart- ment.	Industrial Finance Depart- ment.	Total.(a)
LIABILITIES.						
Capital	4,000	..	2,714	5,428	5,429	17,571
Reserve Funds	9,350	..	1,027	519	2,530	13,426
Special Reserve—Premium on gold sold .. .. .	..	4,755	..	..	..	4,755
Development Fund .. .. .	..	..	173	..	..	173
Notes on issue .. .. .	..	371,969	..	..	..	371,969
Deposits, bills payable and other liabilities—						
Special Accounts of Trading Banks	255,399	..	..	..	..	255,399
Other deposits of Trading Banks	36,321	..	..	..	..	36,321
Other (including provision for contingencies)	222,648	3,525	78,030	674	22,007	326,884
<i>Total Liabilities</i>	<i>527,718</i>	<i>380,249</i>	<i>81,944</i>	<i>6,621</i>	<i>29,966</i>	<i>950,167</i>
ASSETS.						
Gold and balances held abroad (including money at short call)	153,557	120,831	..	..	..	274,388
Australian notes and coin and cash balances	2,648	..	..	50	497	3,195
Cheques and bills of other banks	16,105	..	..	..	..	16,105
Commonwealth Government securities (including Commonwealth Treasury Bills)	217,257	259,368	..	1,145	3,247	481,017
Securities of other Governments, and of local and semi-governmental authorities	33,568	..	..	..	..	33,568
Bills receivable and remittances in transit	7,310	..	..	..	..	7,310
Bank premises at cost less amounts written off	590	..	..	..	..	590
Loans, advances, bills discounted, and other assets (after deducting debts considered bad or doubtful)	96,683	50	81,944	5,426	26,222	210,325
<i>Total Assets</i>	<i>527,718</i>	<i>380,249</i>	<i>81,944</i>	<i>6,621</i>	<i>29,966</i>	<i>950,167</i>

(a) Inter-departmental accounts totalling £76,331,000 have been offset in the combined figures.

(xi) *Profits.* Net profits of the various Departments of the Commonwealth Bank for the years ended 30th June, 1939 and 1952 to 1956, were as follows:—

COMMONWEALTH BANK OF AUSTRALIA: NET PROFITS.
(£'000.)

Year ended 30th June—	General Bank Depart- ment.	Central Banking Business. (a)	Note Issue Depart- ment.	General Banking Division. (a) (b)	Rural Credits Depart- ment.	Mortgage Bank Depart- ment. (c)	Indus- trial Finance Depart- ment. (d)	Total.
1939	356	..	767	..	32	..	..	1,155
1952	2,274	3,881	352	97	49	290	6,943
1953	2,892	5,361	457	160	52	292	9,214
1954	3,918	6,207	..	171	59	346	10,701
1955	4,518	6,017	..	192	65	398	11,190
1956	6,561	8,366	..	220	75	416	15,638

(a) Created 21st August, 1945. Previously combined under General Bank Department. (b) From 3rd December, 1953 business transferred to Commonwealth Trading Bank. (c) Commenced business 27th September, 1943. (d) Commenced business 2nd January, 1946.

The distribution of these profits for the years ended 30th June, 1952 to 1956 is given in the following table :—

COMMONWEALTH BANK OF AUSTRALIA : DISTRIBUTION OF PROFITS.
(£'000.)

To—	1952.	1953.	1954.	1955.	1956.
National Debt Sinking Fund	1,313	1,675	1,959	2,259	3,280
Commonwealth Consolidated Revenue Fund	3,381	4,861	5,707	5,517	7,866
Commonwealth Trading Bank Capital Account .. .. .	..	..	285	286	286
Commonwealth Bank Reserve Fund	637	946	1,459	1,759	2,780
General Banking Division—					
Capital Account	286	286	..	..	..
Reserve Fund	176	229	..	..	..
Rural Credits Department—					
Capital Account	143	143	143	142	143
Reserve Fund	48	80	85	96	110
Development Fund	48	80	86	96	110
Mortgage Bank Department—					
Capital Account	285	286	286	286	286
Reserve Fund	50	51	59	65	75
Industrial Finance Department—					
Capital Account	286	285	286	286	286
Reserve Fund	290	292	346	398	416
Total	6,943	9,214	10,701	11,190	15,638

(xii) *Central Banking Business—Average Liabilities and Assets.* The average liabilities and assets of the Central Banking Business and Note Issue Department of the Commonwealth Bank for the years ended June, 1952 to 1956, are shown in the two tables which follow.

COMMONWEALTH BANK OF AUSTRALIA : CENTRAL BANKING BUSINESS
(INCLUDING NOTE ISSUE DEPARTMENT)—AVERAGE LIABILITIES.
(£'000.)

Year ended June—	Capital and Reserve Funds.	Notes on Issue.	Special Accounts of Trading Banks.	Other Deposits of Trading Banks.	Other Liabilities.	Total Liabilities.
1952	10,450	293,639	468,800	31,112	270,937	1,074,938
1953	11,023	318,192	212,890	45,447	(a)287,361	874,913
1954	11,906	338,223	306,820	41,731	(a)283,397	982,077
1955	13,279	357,023	306,286	36,795	243,468	956,851
1956	14,945	374,096	272,841	35,630	208,717	906,229

(a) Includes special deposit of General Banking Division 1952–53, £21,731,000 ; 1953–54, £14,265,000.

COMMONWEALTH BANK OF AUSTRALIA : CENTRAL BANKING BUSINESS
(INCLUDING NOTE ISSUE DEPARTMENT)—AVERAGE ASSETS.
(£'000.)

Year ended June—	Gold and Balances held Abroad.	Australian Coin.	Cheques and Bills of other Banks.	Government and other Securities (including Commonwealth Treasury Bills.)	Bills Receivable and Remittances in Transit.	Other Assets.	Total Assets.
1952	470,644	2,164	6,321	503,089	85	92,635	1,074,938
1953	363,576	2,538	6,595	434,771	130	67,303	874,913
1954	512,615	2,105	6,895	407,979	2,514	49,969	982,077
1955	415,896	2,380	7,009	459,839	3,488	68,239	956,851
1956	298,885	2,364	6,505	515,716	3,746	79,013	906,229

6. **Commonwealth Trading Bank of Australia.**—(i) *General.* The Commonwealth Trading Bank was established by the Commonwealth Bank Act, 1953, and on 3rd December, 1953, took over the business of the General Banking Division of the Commonwealth Bank. The Commonwealth Trading Bank is a body corporate with its own General Manager who is appointed by the Governor-General on the recommendation of the Commonwealth Bank Board for a term of seven years. The General Manager, under the Governor of the Commonwealth Bank, is responsible for the administration of the Commonwealth Trading Bank in accordance with policy determined by the Commonwealth Bank Board. Under the Banking Act 1945–1953, the Commonwealth Trading Bank is subject to the same central banking controls as the private trading banks and is required to maintain a Special Account with the Commonwealth Bank on the same basis as those of the private trading banks. The capital of the Commonwealth Trading Bank is the total of the capital of the General Banking Division of the Commonwealth Bank immediately before 3rd December, 1953, and such other sums as are transferred from the Commonwealth Trading Bank Reserve Fund, or from the profits of the Central Banking Business and the Note Issue Department of the Commonwealth Bank. The net profits of the Commonwealth Trading Bank are divided as follows :—(a) one-half placed to the credit of the Commonwealth Trading Bank Reserve Fund, and (b) one-half paid into the National Debt Sinking Fund.

(ii) *Liabilities and Assets.* The liabilities and assets of the Commonwealth Trading Bank at 30th June, 1955 and 1956, are shown in the following table:—

COMMONWEALTH TRADING BANK OF AUSTRALIA: LIABILITIES AND ASSETS, 30th JUNE.
(£'000.)

Liabilities.	1955.	1956.	Assets.	1955.	1956.
Capital	5,143	5,429	Coin, bullion, notes and cash at bankers ..	14,498	13,919
Reserve Fund ..	2,160	2,435	Money at short call in London	1,800	1,875
Deposits, bills payable and other liabilities (including provision for contingencies) ..	225,493	221,713	Special Account with Commonwealth Bank	33,850	31,150
Balances due to other banks	454	481	Cheques and bills of other banks and balances with and due from other banks	2,313	2,161
			Treasury bills ..	7,500	7,000
			Public securities of Australian Governments	40,019	35,720
			Bills receivable and remittances in transit	27,138	25,376
			Bank premises (at cost less amounts written off)	3,506	3,831
			Loans, advances and bills discounted (after deducting provision for debts considered bad or doubtful) ..	99,961	105,217
			Other assets ..	2,665	3,809
Total	233,250	230,058	Total	233,250	230,058

(iii) *Average Liabilities and Assets within Australia.* The average liabilities and assets within Australia of the General Banking Division of the Commonwealth Bank for the years ended 30th June, 1952 and 1953, and of the Commonwealth Trading Bank for the years ended 30th June, 1954 to 1956, are shown in the tables below.

COMMONWEALTH TRADING BANK OF AUSTRALIA(a)—AVERAGE LIABILITIES WITHIN AUSTRALIA.(b)
(£'000.)

Year ended June—	Deposits.			Balances due to other Banks.	Bills payable and all other Liabilities to the Public.	Total Liabilities.
	Not Bearing Interest.	Bearing Interest.	Total.			
1952	90,595	20,093	110,688	2,644	8,524	121,856
1953	96,664	22,817	119,481	3,820	8,569	131,870
1954	120,885	35,352	156,237	2,034	11,766	170,037
1955	130,909	43,549	174,458	309	16,148	190,915
1956	135,617	46,243	181,860	314	17,496	199,670

(a) General Banking Division of Commonwealth Bank prior to 3rd December, 1953. (b) Includes Territories of Papua and New Guinea.

COMMONWEALTH TRADING BANK OF AUSTRALIA(a)—AVERAGE ASSETS WITHIN AUSTRALIA.(b)
(£'000.)

Year ended June—	Cash and Cash Balances.	Special Account with Commonwealth Bank.	Balances with other Banks. (c)	Australian Public Securities.		Other Securities.	Loans, Advances, and Bills Discounted.	All other Assets.	Total Assets.
				Treasury Bills.	Other.				
1952	6,581	.. .. .	994	26,392	13,274	2	76,407	3,230	126,880
1953	8,784	(d)21,731	1,600	17,239	25,840	92	59,492	3,984	138,762
1954	11,000	(e)34,800	787	23,404	29,924	1,284	69,204	4,360	174,763
1955	10,456	36,061	870	12,260	38,165	1,606	89,138	5,675	194,231
1956	10,213	33,155	1,238	6,333	38,599	1,824	103,894	6,815	202,071

(a) General Banking Division of Commonwealth Bank prior to 3rd December, 1953. (b) Includes Territories of Papua and New Guinea. (c) Includes notes, cheques and bills of other banks. (d) Special deposit of General Banking Division. (e) Includes special deposit of General Banking Division. £14,265,000.

(iv) *Profits.* The net profits of the Commonwealth Trading Bank for the years ended 30th June, 1955 and 1956 were £734,185 and £708,461 respectively. These profits were distributed as follows (1955 figures shown in parentheses):—£158,210 (£134,160) was applied to writing off bank premises; £275,126 (£300,012) was appropriated to the Commonwealth Trading Bank Reserve Fund; and £275,125 (£300,013) was paid to the National Debt Sinking Fund.

7. *Private Trading Banks.*—(i) *Average Liabilities and Assets in Australia.* The average liabilities and assets within Australia of the Private Trading Banks (see page 706 for list of banks) for the years ended June, 1939 and 1952 to 1956, are shown in the following tables:—

PRIVATE TRADING BANKS: AVERAGE LIABILITIES WITHIN AUSTRALIA
(£'000.)

Year ended June—	Inter-minable Deposits or Deposit Stock.	Deposits.			Notes in Circulation.	Balances due to other Banks.	Bills payable and all other Liabilities to the Public.	Total Liabilities.
		Not Bearing Interest.	Bearing Interest.	Total.				
1939	2,644	a 118,868	198,793	317,661	167	921	(b) 3,005	324,398
1952	729	963,524	238,217	1,201,741	158	61,527	14,970	1,279,125
1953	226	943,747	218,699	1,162,446	158	10,628	14,247	1,187,705
1954	14	1,035,707	239,774	1,275,481	158	3,360	14,980	1,293,993
1955	9	1,047,677	262,986	1,310,663	158	3,282	16,432	1,330,544
1956	6	1,032,332	263,107	1,295,439	158	6,528	16,913	1,319,044

(a) Includes other Liabilities. (b) Excludes other Liabilities.

PRIVATE TRADING BANKS: AVERAGE ASSETS WITHIN AUSTRALIA.
(£'000.)

Year ended June—	Cash and Cash Balances.	Special Account with Commonwealth Bank.	Balances with Other Banks. (a)	Australian Public Securities.		Other Securities.	Loans, Advances and Bills Discounted.	All other Assets.	Total Assets.
				Treasury Bills.	Other. (b)				
1939	33,597	..	3,938	21,533	20,477	(c)	d 288,109	(e) 9,421	377,075
1952	60,589	465,991	29,140	32,402	68,416	1,124	621,435	33,151	1,312,248
1953	74,712	211,737	22,580	123,059	86,513	2,313	638,092	29,693	1,188,699
1954	71,244	285,226	17,346	99,368	130,306	3,588	658,534	36,549	1,302,161
1955	66,908	269,117	18,436	51,602	121,927	3,425	776,762	48,925	1,357,102
1956	66,883	238,803	19,672	50,015	113,977	5,839	804,392	56,042	1,355,623

(a) Includes notes, cheques and bills of other banks. (b) Government and Municipal Securities.
(c) Included with Loans, Advances and Bills Discounted. (d) See footnotes (c) and (e). (e) Landed and House Property only. Other assets included with Loans, Advances and Bills Discounted.

(ii) *Ratios of Assets and Liabilities to Total Deposits.* The following table shows, for the Private Trading Banks, the ratios of certain assets and liabilities to total deposits for the years ended June, 1939 and 1952 to 1956. The ratios are based on the average liabilities and assets for the years shown.

PRIVATE TRADING BANKS: RATIOS OF AVERAGE ASSETS AND LIABILITIES TO AVERAGE TOTAL DEPOSITS.

(Per cent.)

Year ended June—	Cash and Cash Balances.	Treasury Bills.	Government and Municipal Securities. (a)	Special Account with Commonwealth Bank.	Advances.	Deposits.	
						Not Bearing Interest.	Bearing Interest.
1939	10.6	6.8	6.5	..	90.7	37.4	62.6
1952	5.0	2.7	5.7	38.8	51.7	80.2	19.8
1953	6.4	10.6	7.4	18.2	54.9	81.2	18.8
1954	5.6	7.8	10.2	22.4	51.6	81.2	18.8
1955	5.1	3.9	9.3	20.5	59.3	79.9	20.1
1956	5.2	3.9	8.8	18.4	62.1	79.7	20.3

(a) Excludes Treasury Bills.

(iii) *Proportion of Non-Interest Bearing to Total Deposits.* The following table shows, for each State, the proportion of non-interest bearing deposits to total deposits with the Private Trading Banks for each of the years ended June, 1939 and 1952 to 1956. The ratios are based on the average deposits for the years shown.

PRIVATE TRADING BANKS: PROPORTION OF NON-INTEREST BEARING DEPOSITS TO TOTAL DEPOSITS.

(Per cent.)

Year ended June—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Total. (a)
1939	43.5	30.3	45.4	26.1	45.7	36.5	61.1	23.2	37.4
1952	83.1	77.8	82.5	72.0	83.1	75.6	84.7	78.4	80.2
1953	84.3	79.2	82.5	72.4	84.4	78.5	87.0	82.6	81.2
1954	83.9	79.6	82.7	72.3	83.1	79.7	89.5	88.2	81.2
1955	81.9	78.1	82.6	71.6	84.1	80.1	88.7	89.6	79.9
1956	81.6	78.6	81.3	71.2	82.3	79.8	86.5	88.1	79.7

(a) Includes Papua and New Guinea for 1952 and following years.

(iv) *Ratio of Advances to Total Deposits.* The ratio of advances to total deposits, for each State for the years ended June, 1939 and 1952 to 1956, is shown in the following table. The ratios are based on the averages of deposits and advances for the years shown.

PRIVATE TRADING BANKS: RATIO OF ADVANCES TO TOTAL DEPOSITS.
(Per cent.)

Year ended June—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Total. (a)
1939	104.5	71.6	99.2	77.6	155.5	57.0	24.5	37.7	90.7
1952	54.5	52.1	60.0	33.0	41.5	48.4	29.6	26.4	51.7
1953	60.2	52.8	63.7	35.2	46.1	54.0	24.0	27.6	54.9
1954	56.4	47.8	59.7	32.2	52.7	57.3	30.0	35.6	51.6
1955	66.1	51.8	68.5	37.2	71.6	61.9	55.8	49.5	59.3
1956	71.6	53.4	67.8	39.0	78.4	60.1	59.5	43.9	62.1

(a) Includes Papua and New Guinea for 1952 and following years.

8. **Other Cheque-paying Banks.**—Average Liabilities and Assets within Australia. The average liabilities and assets within Australia of "Other Cheque-paying Banks" (see page 706 for list of these banks) for the years ended June, 1952 to 1956, are shown in the following tables.

OTHER CHEQUE-PAYING BANKS: AVERAGE LIABILITIES WITHIN AUSTRALIA.
(£'000.)

Year ended June—	Inter-minable Deposits or Deposit Stock. (a)	Deposits.			Notes in Circulation.	Balances due to other Banks.	Bills payable and all other Liabilities to the Public.	Total Liabilities.
		Not Bearing Interest.	Bearing Interest.	Total.				
1952	19,336	37,445	13,369	50,814	..	504	1,478	72,132
1953	19,286	35,848	15,302	51,150	..	622	525	71,583
1954	19,734	39,408	15,309	54,717	..	664	454	75,569
1955	20,520	41,415	16,069	57,484	..	554	461	79,019
1956	20,569	39,726	16,359	56,085	..	1,536	484	78,674

(a) Inscribed stock and debentures, Rural Bank of New South Wales and State Bank of South Australia.

OTHER CHEQUE-PAYING BANKS: AVERAGE ASSETS WITHIN AUSTRALIA.
(£'000.)

Year ended June—	Cash and Cash Balances.	Special Account with Commonwealth Bank.	Balances with other Banks. (a)	Australian Public Securities.		Other Securities.	Loans, Advances and Bills Discounted.	All other Assets. (b)	Total Assets.
				Treasury Bills.	Other.				
1952	5,104	2,612	1,800	2,925	14,880	111	61,816	5,423	94,671
1953	4,640	1,153	2,176	3,911	13,874	149	64,731	3,792	94,426
1954	5,091	1,090	2,409	7,326	13,977	432	65,982	3,815	100,122
1955	4,586	1,108	2,198	5,641	13,972	701	72,189	4,923	105,318
1956	3,992	883	1,588	4,119	14,388	245	75,825	5,332	106,372

(a) Includes notes, cheques and bills of other banks. (b) Includes The Rural and Industries Bank of Western Australia and State Bank of South Australia accounts with State Treasuries.

9. **All Cheque-paying Banks.**—Average Liabilities and Assets within Australia. Particulars of the average liabilities and assets within Australia of all cheque-paying banks in Australia for the years ended 30th June, 1952 to 1956, are shown in the following tables. The series includes the Commonwealth Trading Bank (General Banking Division of the Commonwealth Bank to 3rd December, 1953), but the Central Banking business of the Commonwealth Bank is excluded.

ALL CHEQUE-PAYING BANKS: AVERAGE LIABILITIES WITHIN AUSTRALIA.(a)
(£'000.)

Year ended June—	Inter-minable Deposits or Deposit Stock.	Deposits.			Notes in Circulation.	Balances due to other Banks.	Bills payable and all other liabilities to the Public.	Total Liabilities.
		Not Bearing Interest.	Bearing Interest.	Total.				
1952	20,065	1,091,564	271,679	1,363,243	158	64,675	24,972	1,473,113
1953	19,512	1,076,259	256,818	1,333,077	158	15,070	23,341	1,391,158
1954	19,748	1,196,000	290,435	1,486,435	158	6,058	27,200	1,539,599
1955	20,529	1,220,001	322,604	1,542,605	158	4,145	33,041	1,600,478
1956	20,575	1,207,675	325,709	1,533,384	158	8,378	34,893	1,597,388

(a) Includes Territories of Papua and New Guinea.

ALL CHEQUE-PAYING BANKS: AVERAGE ASSETS WITHIN AUSTRALIA.(a)
(£'000.)

Year ended June—	Cash and Cash Balances.	Special Account with Commonwealth Bank.	Balances with other Banks.	Australian Public Securities.		Other Securities.	Loans, Advances and Bills. Dis-counted.	All Other Assets.	Total Assets.
				Treasury Bills.	Other.				
1952 ..	72,274	468,603	31,934	61,719	96,570	1,237	759,658	41,804	1,533,799
1953 ..	88,136	234,621	26,356	144,209	126,227	2,554	762,315	37,469	1,421,887
1954 ..	87,335	321,116	20,542	130,098	174,207	5,304	793,720	44,724	1,577,046
1955 ..	81,950	306,286	21,504	69,503	174,064	5,732	938,089	59,523	1,656,651
1956 ..	81,088	272,841	22,498	60,467	166,964	7,908	984,111	68,189	1,664,066

(a) Includes Territories of Papua and New Guinea.

10. Classification of Advances within Australia.—Commonwealth Trading Bank of Australia and Private Trading Banks.—(i) *States, June, 1956.* A dissection of advances made by the Commonwealth Trading Bank and the Private Trading Banks at the end of June, 1956, is shown in the following table. Business advances, which have been classified according to the main industry of the borrower, are those made mainly for business purposes and include all loans to corporate bodies other than public authorities. Advances made to public authorities are those made to Commonwealth and State Governments, Government Agencies and Local and Semi-governmental Authorities irrespective of the purpose of the advance or the industry in which the authority is engaged. Personal advances, which have been classified according to purpose, include advances to persons in their private capacity for such purposes as the purchase of a house or of household equipment, repayment of personal debts, etc.

COMMONWEALTH TRADING BANK OF AUSTRALIA AND PRIVATE TRADING BANKS : CLASSIFICATION OF ADVANCES WITHIN AUSTRALIA(a)—STATES, END OF JUNE, 1956.

(£'000.)

Classification.	N.S.W. (b)	Vic.	Q'land. (a)	S. Aust. (c)	W. Aust.	Tas.	Total Aust. (d)	Proportion of Total.
A. BUSINESS ADVANCES CLASSIFIED ACCORDING TO MAIN INDUSTRY OF BORROWER.								
1. Agriculture, Dairying and Grazing ..	84,141	42,849	53,091	12,606	16,157	4,169	213,013	23.7
2. Manufacturing ..	80,498	61,309	24,538	9,184	6,413	3,175	185,117	20.6
3. Transport, Storage and Communication ..	5,199	5,795	3,093	1,284	1,096	800	17,267	1.9
4. Finance and Property	44,955	29,760	8,877	3,286	3,089	2,605	92,572	10.3
5. Commerce—								
Retail Trade ..	33,512	23,433	11,776	6,275	7,894	3,420	86,310	9.6
Wholesale Trade ..	35,875	21,601	4,342	4,991	3,686	1,567	72,062	8.1
Total Class 5 ..	69,387	45,034	16,118	11,266	11,580	4,987	158,372	17.7
6. Miscellaneous(d) ..	20,795	18,829	10,697	2,795	5,209	1,650	59,975	6.7
7. Not elsewhere specified	4,320	2,667	1,728	553	950	114	10,332	1.2
Total ..	309,295	206,243	118,142	40,974	44,494	17,500	736,648	82.1
B. ADVANCES TO PUBLIC AUTHORITIES.								
Public Authority Advances (including Government, Semi-Governmental and Municipal Bodies) ..	4,774	11,147	1,249	232	322	372	18,096	2.0
C. PERSONAL ADVANCES CLASSIFIED ACCORDING TO MAIN PURPOSE OF ADVANCE.								
1. Advances for building or purchasing own home (Individuals)	44,270	24,947	11,100	3,614	8,846	1,794	94,571	10.6
2. All other (including Personal Loans) ..	19,997	14,918	5,499	2,307	4,111	1,078	47,910	5.3
Total ..	64,267	39,865	16,599	5,921	12,957	2,872	142,481	15.9
TOTAL ADVANCES.								
Grand Total ..	378,336	257,255	135,990	47,127	57,773	20,744	897,225	100.0

(a) Includes Papua and New Guinea. (b) Includes Australian Capital Territory. (c) Includes Northern Territory. (d) Includes (i) fishing, hunting, trapping and forestry; (ii) mining and quarrying; (iii) legal and other professions, religious, charitable and benevolent institutions, hospitals, schools and industrial and trade associations; (iv) amusements, wireless broadcasting, sporting associations and promoters; and (v) hotels, boarding houses and restaurants, laundries, social clubs, etc.

(ii) *Australia, June, 1953 to June, 1956.* The following table provides a dissection of advances within Australia (including Papua and New Guinea) as at the end of June, 1953 to 1956.

COMMONWEALTH TRADING BANK OF AUSTRALIA^(a) AND PRIVATE TRADING BANKS : CLASSIFICATION OF ADVANCES WITHIN AUSTRALIA^(b)—AMOUNT AND PROPORTION OF EACH CLASS TO TOTAL.

Classification.	At End of—							
	June, 1953.		June, 1954.		June, 1955.		June, 1956.	
	Amount (£'000.)	Per cent.						
A. BUSINESS ADVANCES CLASSIFIED ACCORDING TO MAIN INDUSTRY OF BORROWER.								
1. Agriculture, Dairying and Grazing ..	148,279	22.1	192,340	24.3	220,879	23.8	213,013	23.7
2. Manufacturing ..	141,481	21.1	139,314	17.6	190,728	20.6	185,117	20.6
3. Transport, Storage and Communication ..	12,710	1.9	16,690	2.1	17,244	1.9	17,267	1.9
4. Finance and Property	64,615	9.6	84,475	10.7	94,535	10.2	92,572	10.3
5. Commerce—								
Retail Trade ..	50,433	7.6	74,861	9.4	86,962	9.4	86,310	9.6
Wholesale Trade ..	59,132	8.8	57,678	7.3	73,827	7.9	72,062	8.1
Total Class 5 ..	109,565	16.4	132,539	16.7	160,789	17.3	158,372	17.7
6. Miscellaneous ^(c)	42,618	6.4	52,460	6.6	60,190	6.5	59,975	6.7
7. Not elsewhere specified	9,345	1.4	9,874	1.2	10,623	1.1	10,332	1.2
Total ..	528,613	78.9	627,692	79.2	754,988	81.4	736,648	82.1

B. ADVANCES TO PUBLIC AUTHORITIES.

<i>Public Authority Advances (including Government, Semi-Governmental and Municipal Bodies)</i> ..	13,551	2.0	9,871	1.2	11,378	1.2	18,096	2.0
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C. PERSONAL ADVANCES CLASSIFIED ACCORDING TO MAIN PURPOSE OF ADVANCE.

1. Advances for building or purchasing own home (Individuals)	86,587	12.9	102,872	13.0	105,676	11.4	94,571	10.6
2. All other (including Personal Loans) ..	41,325	6.2	52,083	6.6	55,399	6.0	47,910	5.3
Total ..	127,912	19.1	154,955	19.6	161,075	17.4	142,481	15.9

TOTAL ADVANCES.

Grand Total ..	670,076	100.0	792,518	100.0	927,441	100.0	897,225	100.0
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(a) Prior to 3rd December, 1953, General Banking Division of the Commonwealth Bank. (b) Includes Papua and New Guinea. (c) Includes (i) fishing, hunting, trapping and forestry; (ii) mining and quarrying; (iii) legal and other professions, religious, charitable and benevolent institutions, hospitals, schools and industrial and trade associations; (iv) amusements, wireless broadcasting, sporting associations and promoters; and (v) hotels, boarding houses and restaurants, laundries, social clubs, etc.

11. Interest on Deposits : Rates—Cheque-paying Banks.—Particulars of interest rates for fixed deposits since 1945 are shown hereunder.

BANK FIXED DEPOSIT RATES : AUSTRALIA.

(Per cent. per annum.)

Date from which Operative.	Deposits for—			
	Three Months.	Six Months.	Twelve Months.	Twenty-four Months.
1st December, 1945	$\frac{1}{2}$	$\frac{3}{4}$	1	(a) $1\frac{1}{2}$
29th July, 1952	1	$1\frac{1}{4}$	$1\frac{1}{2}$	(b) $1\frac{3}{4}$
1st January, 1955	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
15th March, 1956	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3

(a) On first £10,000; rate on amounts in excess of £10,000 was 1 per cent. (b) On first £10,000; rate on amounts in excess of £10,000 was $1\frac{1}{2}$ per cent.

12. **Clearing House Returns—Average Weekly Clearings.**—The average weekly clearings in each capital city for the years ended June, 1939 and 1952 to 1956 are shown in the following table.

BANK CLEARINGS(a) : AVERAGE WEEKLY CLEARINGS.
(£'000.)

Year ended June—	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Total.
1939 ..	17,832	15,415	4,212	2,953	2,055	623	43,090
1952 ..	92,557	86,022	17,478	17,226	11,425	2,980	227,688
1953 ..	88,557	78,965	17,886	16,794	11,441	2,985	216,628
1954 ..	97,191	87,505	20,736	18,027	13,249	3,393	240,101
1955 ..	103,849	95,245	22,072	19,681	13,684	3,670	258,201
1956 ..	109,975	101,153	22,488	21,021	14,089	3,962	272,688

(a) Excludes transactions connected with the issue and redemption of Treasury Bills.

13. **Debits to Customers' Accounts—All Cheque-paying Banks.**—Statistics of debits to customers' accounts have been collected since September, 1945. Generally they represent the total of all cheques drawn by the customers of the banks. In the following table, the average weekly debits to customers' accounts of all cheque-paying banks are shown for each State for the years ended June, 1952 to 1956. In this table, debits to accounts of Australian Governments in capital cities are excluded, as they are subject to abnormal influences and are not uniform for each State.

AVERAGE WEEKLY DEBITS TO CUSTOMERS' ACCOUNTS : ALL CHEQUE-PAYING BANKS.
(Excluding Debits to Australian Government Accounts in Capital Cities.)
(£'000.)

Year ended June—	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	A.C.T.	Total.
1952 ..	156,602	142,358	41,516	30,792	21,810	8,872	471	402,421
1953 ..	151,938	131,998	43,796	30,063	22,091	8,850	580	389,316
1954 ..	171,709	154,885	51,032	32,802	25,339	9,938	775	446,480
1955 ..	187,471	176,146	53,873	36,288	26,247	10,716	821	491,562
1956 ..	200,852	185,369	56,028	39,564	26,918	11,615	1,025	521,371

14. **Rates of Exchange.**—(i) *Oversea Exchange Rates.* In the following table, the par of exchange (based on par values agreed with the International Monetary Fund) and average telegraphic transfer selling rates of exchange for Sydney on a number of oversea countries are shown. Generally, the averages which are averages of daily quotations are based on rates quoted by the Commonwealth Bank, but where these were not available rates issued by the Department of Customs and Excise have been used.

OVERSEA EXCHANGE RATES : PAR OF EXCHANGE AND AVERAGE TELEGRAPHIC TRANSFER SELLING RATES FOR SYDNEY ON OVERSEA COUNTRIES.

Country.	Basis of Quotation.	Par of Ex-change.(a)	Selling Rate 1955-56.	Country.	Basis of Quotation.	Par of Ex-change.(a)	Selling Rate 1955-56.
Belgium ..	Francs to £A.1 ..	112.000	110.380	Netherlands ..	Guilders to £A.1 ..	8.512	8.426
Canada ..	Dollars to £A.1 ..	(b)	2.213	New Zealand ..	£A to £NZ.100 ..	(c)	124.540
Ceylon ..	Pence A. to Rupee ..	22.500	22.802	Norway ..	Kroner to £A.1 ..	16.000	15.840
Denmark ..	Kroner to £A.1 ..	15.472	15.310	Pakistan ..	Pence A. to Rupee ..	22.500	23.573
Egypt ..	Piastres to £A.1 ..	78.006	77.490	Portugal ..	Escudos to £A.1 ..	(c)	63.802
Fiji ..	£A. to £F.100 ..	112.610	113.000	Singapore ..	Pence A. to Dollar ..	35.000	35.271
Finland ..	Marks to £A.1 ..	515.200	509.960	South Africa,			
France ..	Francs to £A.1 ..	(b)	778.020	Union of ..	£A. to £SA.100 ..	125.000	125.790
French Oceania	Francs to £A.1 ..	(b)	138.610	Sweden ..	Kroner to £A.1 ..	11.588	11.476
Germany, Fed.	Deutsche Marks to			Switzerland ..	Francs to £A.1 ..	(c)	9.703
Rep. of ..	£A.1 ..	9.408	9.314	United Kingdom	£A. to £Eng.100 ..	125.000	125.500
Hong Kong ..	Pence A. to Dollar ..	18.750	18.776	United States of			
India ..	Pence A. to Rupee ..	22.500	22.724	America ..	Dollars to £A.1 ..	2.240	2.228
Indonesia ..	Rupiahs to £A.1 ..	(c)	24.706	U.S.S.R. ..	Roubles to £A.1 ..	(c)	8.924
Japan ..	Yen to £A.1 ..	806.400	792.830				

(a) As at 30th June, 1955, established under International Monetary Fund Agreement.

(b) No par value established.

(c) Not a member of International Monetary Fund.

(ii) *Interstate Exchange Rates.* Exchange rates between the capital cities and towns of each of the States and other States or parts thereof at 30th June, 1956, are shown below. Rates varied from 2s. per £100 between the nearer locations to 10s. per £100 between those more widely separated.

INTERSTATE BANK EXCHANGE RATES, 30th JUNE, 1956.(a)

(s. d. per £100.)

Between—	And—						
	New South Wales.	Victoria.	Brisbane and adjacent towns.	South Australia.	Perth and all but distant towns.	Tasmania.	Aust. Cap. Terr.
Sydney and New South Wales towns	..	2 6	2 6	5 0	7 6	5 0	2 0
Melbourne and Victorian towns ..	2 6	..	5 0	2 6	5 0	2 6	2 0
Brisbane and adjacent towns ..	2 6	5 0	..	7 6	10 0	7 6	2 6
Adelaide and South Australian towns	5 0	2 6	7 6	..	2 6	5 0	5 0
Perth and all but distant towns ..	7 6	5 0	10 0	2 6	..	7 6	7 6
Hobart and Tasmanian towns ..	5 0	2 6	7 6	5 0	7 6	..	5 0
Australian Capital Territory ..	2 0	2 0	2 6	5 0	7 6	5 0	..

(a) Unchanged since 1st January, 1940.

There is no charge for transfers within a city or a town. In all States excepting Queensland and Western Australia, the exchange for transfers between towns in the same State is 2s. per £100. Queensland and Western Australia are divided into zones. The exchange rate for transfers between towns in the same zone is 2s. per £100, with higher rates for inter-zone transfers.

The exchange rate between Papua and New Guinea and the mainland is 10s. per £100 for all points.

§ 2. Savings Banks.

1. *General.*—The inauguration of savings banks in Australia dates from 1819, when a private savings bank was opened in Sydney. In 1832, the legislature created “The Savings Bank of New South Wales” under the control of trustees, and shortly after its establishment the funds of the private savings bank were transferred to the new institution. In the other States provision for placing deposits with savings banks dates from 1841 in Victoria; 1854 in Queensland; 1848 in South Australia; 1863 in Western Australia (a savings bank was opened in 1856 but was closed a year later); 1835 in Launceston; and 1845 in Hobart. These early banks functioned as trustee savings banks, but, with the exception of the Hobart and Launceston institutions, were later absorbed by, or amalgamated with, State government savings banks. The Commonwealth Savings Bank, established as a branch of the Commonwealth Bank in 1912 and separately constituted in 1928, absorbed the Tasmanian State savings bank in 1913, the Queensland State savings bank in 1920 and the New South Wales and Western Australian State savings banks in 1931.

Post office savings banks were established in all States from 1864 onwards. These were separate government institutions except in South Australia, where the Post Office acted as agent for the savings bank. Since the federation of the Australian States in 1900, post offices have been controlled by the Commonwealth Government, but they continued to act as savings bank agencies for the State institutions until the establishment of the Commonwealth Bank in 1912. They now act as agents for the Commonwealth Savings Bank.

During 1956, four new savings banks, the Bank of New South Wales Savings Bank Ltd., the Australia and New Zealand Savings Bank Ltd., the C.B.C. Savings Bank Ltd., and The Rural and Industries Bank of Western Australia, were established. Three of these are associated with and operate from the same premises as existing private trading banks and the other is a division of a State bank—The Rural and Industries Bank of Western Australia. Savings banks operating at the end of 1956 were—the Commonwealth Savings Bank (in

all States and Territories), the Bank of New South Wales Savings Bank Ltd. and the Australia and New Zealand Savings Bank Ltd. (in all States and Territories except South Australia and Tasmania), The C.B.C. Savings Bank Ltd. (in all States except South Australia and Tasmania and in the Australian Capital Territory), The State Savings Bank of Victoria, The Savings Bank of South Australia, The Rural and Industries Bank of Western Australia, and the two trustee banks, The Launceston Bank for Savings and The Hobart Savings Bank.

The prime object of the foundation of savings banks in Australia was the encouragement of thrift, deposits of one shilling and upwards being accepted; nevertheless, the facilities offered, while preserving the original object, have led to developments in another direction. Although depositors may not operate on their accounts by means of cheques, they have practically all the other advantages of a current account and in addition receive interest on their minimum monthly balances. No charge is made by the banks for keeping the accounts.

Commencing with July, 1931, monthly returns of statistics have been furnished by savings bank authorities. The information given in the following paragraphs relates to the deposits at 30th June in each year.

2. **Number of Operative Accounts.** The following table shows the number of operative savings bank accounts in existence at 30th June, 1955 and 1956. It should be noted that these figures relate to the number of accounts and not necessarily to the number of depositors.

ALL SAVINGS BANKS: NUMBER OF OPERATIVE ACCOUNTS.(a)

State or Territory.	At 30th June.	
	1955.	1956.
New South Wales	2,336,570	2,462,816
Victoria	2,153,926	2,233,738
Queensland	868,838	907,385
South Australia	801,067	822,150
Western Australia	426,637	446,419
Tasmania	279,027	285,487
Northern Territory	9,604	10,549
Australian Capital Territory	19,412	21,271
Total	6,895,081	7,189,815

(a) Excludes school bank accounts and inoperative accounts (i.e. accounts of less than £1 which have not been operated on for more than two years).

3. **Business Transacted.** The following table shows details of the business transacted in Australia by savings banks during the years ended 30th June, 1955 and 1956:—

ALL SAVINGS BANKS: BUSINESS TRANSACTED IN AUSTRALIA.

(£'000.)

State or Territory.	Year ended 30th June, 1955.				Year ended 30th June, 1956.			
	Deposits During Year.	Withdrawals During Year.	Interest Added to Accounts During Year.	Amount on Deposit at 30th June, 1955.	Deposits During Year.	Withdrawals During Year.	Interest Added to Accounts During Year.	Amount on Deposit at 30th June, 1956.
New South Wales	322,473	310,423	6,799	358,645	365,766	345,452	7,717	386,676
Victoria	314,040	295,882	6,809	364,748	351,896	338,250	7,782	386,176
Queensland	119,281	114,244	2,371	124,814	133,639	128,439	2,686	132,700
South Australia	97,585	91,546	2,704	131,692	103,921	102,854	2,997	135,756
Western Australia	53,086	53,117	1,046	53,629	57,629	54,491	1,167	57,934
Tasmania	28,317	27,205	750	35,809	29,985	29,431	848	37,211
Northern Territory	2,108	1,959	25	1,482	2,301	2,158	31	1,656
Australian Capital Territory	3,499	3,300	48	2,575	3,998	3,620	57	3,010
Total	940,389	897,676	20,552	1,073,394	1,049,135	1,004,695	23,285	1,141,119

4. Deposits.—The amount at credit of depositors' accounts and the average deposits per head of population for each State and Territory at 30th June, 1939 and 1952 to 1956, are shown in the following table:—

ALL SAVINGS BANKS: TOTAL DEPOSITS IN AUSTRALIA.

At 30th June.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	A.C.T.	Total.
COMMONWEALTH SAVINGS BANK. (£'000.)									
1939..	87,474	11,242	29,045	3,167	12,396	2,358	99	319	146,100
1952..	304,532	76,485	102,661	22,502	47,171	11,406	1,036	1,821	567,614
1953..	319,149	85,137	109,360	25,483	49,794	12,170	1,116	2,154	604,363
1954..	339,796	94,174	117,406	28,192	52,614	12,869	1,308	2,328	648,687
1955..	358,645	104,597	124,814	30,547	53,629	13,763	1,482	2,575	690,052
1956..	363,833	110,215	126,998	31,880	54,295	14,312	4,384		705,917

STATE AND TRUSTEE SAVINGS BANKS.

(£'000.)									
1939..	..	69,219	..	24,230	..	6,038	..	..	99,487
1952..	..	224,347	..	81,224	..	18,713	..	..	324,284
1953..	..	234,834	..	88,392	..	19,908	..	..	343,134
1954..	..	245,607	..	94,757	..	21,078	..	..	361,442
1955..	..	260,151	..	101,145	..	22,046	..	..	383,342
1956..	..	264,317	..	103,876	635	22,899	..	..	391,727

PRIVATE SAVINGS BANKS.

(£'000.)									
1956..	22,843	11,644	5,702	..	3,004	..	282		43,475

ALL SAVINGS BANKS.

(£'000.)									
1939..	87,474	80,461	29,045	27,397	12,396	8,396	99	319	245,587
1952..	304,532	300,832	102,661	103,726	47,171	30,119	1,036	1,821	891,898
1953..	319,149	319,971	109,360	113,875	49,794	32,078	1,116	2,154	947,497
1954..	339,796	339,781	117,406	122,949	52,614	33,947	1,308	2,328	1,010,129
1955..	358,645	364,748	124,814	131,692	53,629	35,809	1,482	2,575	1,073,394
1956..	386,676	386,176	132,700	135,756	57,934	37,211	1,656	3,010	1,141,119

PER HEAD OF POPULATION.

(£. s. d.)									
1939..	31 16 7	42 16 8	28 10 7	45 18 6	26 7 5	35 1 5	15 14 8	25 7 4	35 4 11
1952..	91 3 10	128 6 3	81 10 3	137 7 6	78 12 9	101 13 0	67 0 5	69 1 5	103 5 5
1953..	94 6 4	133 11 8	84 13 8	146 15 9	80 4 10	105 9 10	70 8 3	75 3 8	107 9 8
1954..	99 5 1	138 11 1	89 1 3	154 4 11	82 4 9	109 19 0	79 8 8	76 15 8	112 8 1
1955..	102 15 1	144 11 4	92 16 7	160 13 9	81 8 9	113 15 11	84 6 5	79 8 4	116 13 3
1956..	108 16 4	148 4 9	96 16 3	159 19 10	85 10 6	116 8 3	90 10 0	87 5 11	121 0 10

5. **School Banking.**—With the object of encouraging principles of thrift amongst children, agencies of the Savings Banks have been established at most of the schools throughout Australia. Particulars of operative accounts for the Commonwealth at 30th June of the years 1939 and 1952 to 1956, appear below:—

SCHOOL SAVINGS BANKS: AUSTRALIA.

At 30th June—				Number of School Agencies.	Number of Operative Accounts.	Deposits.	Deposits per Operative Account.
						£	£ s. d.
1939	..	..	..	9,535	560,116	1,090,703	1 18 11
1952	..	..	..	8,219	638,476	3,866,793	6 1 2
1953	..	..	..	8,148	684,527	4,375,185	6 7 10
1954	..	..	..	8,179	724,038	4,831,538	6 13 6
1955	..	..	..	8,210	761,974	5,280,808	6 18 7
1956	..	..	..	8,591	825,777	5,786,546	7 0 2

6. **War Savings and Savings Certificates.**—Sales of savings certificates and stamps under the War Savings and Savings Certificate schemes, particulars of which were given in earlier issues of the Official Year Book (*see* No. 37, page 586), were discontinued after 31st January, 1949, except for some sales made to wind up savings groups, etc. This method of saving was replaced by special savings schemes to operate through the savings banks. Employers were asked to co-operate by forming employee savings groups and by making regular deductions from wages and salaries for payment into group savings bank accounts, and thence, at the end of each quarter to individual accounts. The total value of certificates outstanding at 30th June in each of the last five years was:—1952, £41,809,000; 1953, £35,601,000; 1954, £30,310,000; 1955, £26,615,000; 1956, £23,366,000.

7. **Commonwealth Savings Bank of Australia.**—(i) *General.* The Savings Bank Department of the Commonwealth Bank opened for business in Victoria on 15th July, 1912; in Queensland on 16th September, 1912; in the Northern Territory on 21st October, 1912; in Tasmania on 1st January, 1913, and in New South Wales, South Australia and Western Australia on 13th January, 1913. The Tasmanian State Savings Bank was absorbed by the Commonwealth Bank on 1st January, 1913, the Queensland State Savings Bank was taken over in 1920 and the New South Wales and Western Australian State Savings Banks in 1931. The Savings Bank Department was separated from the General Bank on 9th June, 1928, and established as a separate institution known as the "Commonwealth Savings Bank of Australia". It has since then operated independently, publishing its own balance-sheets and profit and loss accounts. The Commonwealth Bank Act 1927, which provided for the establishment of the Commonwealth Savings Bank as a separate institution, provided for a Commission of three members to manage the Savings Bank. This Commission was never appointed and the Commonwealth Bank Act 1945 placed the control of the Commonwealth Savings Bank under the Governor of the Commonwealth Bank.

(ii) *Balance-sheet, 30th June, 1955 and 1956.* Particulars of the liabilities and assets of the Commonwealth Savings Bank as at 30th June, 1955 and 1956 were as follows:—

COMMONWEALTH SAVINGS BANK(a): LIABILITIES AND ASSETS, 30th JUNE.
(£'000.)

Liabilities.	1955.	1956.	Assets.	1955.	1956.
Reserve Fund	8,828	9,191	Cash Balances and Money at Short Call	72,719	72,519
Depositors' Balances and Accrued Interest	695,930	712,342	Australian Notes and Coin	692	803
Contingency Account and other Liabilities ..	20,675	20,802	Government Securities	470,778	469,129
			Securities of Municipal and other Public Authorities ..	72,709	78,584
			Bank Premises ..	4,667	5,890
			Loans and Advances ..	92,821	103,277
			Other Assets	11,047	12,133
Total	725,433	742,335	Total	725,433	742,335

(a) Includes branches in London, Territories of Papua and New Guinea, and British Solomon Islands.

(iii) *Profits.* Under the terms of the Savings Bank Amalgamation Agreements the profits of the Commonwealth Savings Bank in New South Wales, Queensland, Western Australia and Tasmania are equally divided between the Bank and the former controlling authorities in those States. Net profits for the years ended 30th June, 1939 and 1952 to 1956, and the distribution of those profits are shown in the following table.

COMMONWEALTH SAVINGS BANK: DISTRIBUTION OF PROFITS.

(£.)

Year ended 30th June—	Total Profit.	Payments to State Authorities under Savings Bank Amalgamation Agreements.					Pub- lished Profit.	Distribution of Published Profit.	
		New South Wales. (a)	Queens- land. (b)	Western Aus- tralia. (b)	Tas- mania. (b)	Total.		National Debt Sinking Fund.	Savings Bank Reserve Fund.
1939 ..	532,736	168,878	30,464	13,251	3,861	216,454	316,282	158,141	158,141
1952 ..	1,522,507	453,200	140,443	20,122	7,024	620,789	901,718	450,859	450,859
1953 ..	1,525,475	497,082	94,795	23,544	4,984	620,405	905,070	452,535	452,535
1954 ..	2,031,371	629,614	155,365	33,217	12,439	830,635	1,200,736	600,368	600,368
1955 ..	1,855,901	587,959	130,415	26,284	6,327	750,985	1,104,916	552,458	552,458
1956 ..	1,251,153	453,105	60,347	12,211	304	525,967	725,186	362,593	362,593

(a) Paid to Rural Bank of New South Wales.

(b) Paid to State Consolidated Revenue Funds.

8. *State Savings Banks.*—(i) *General.* State Savings Banks (including Trustee Savings Banks) at present operating (with date of establishment shown in parentheses) are: The State Savings Bank of Victoria (1841); The Savings Bank of South Australia (1848); The Rural and Industries Bank of Western Australia (1956) and the Trustee Banks—Hobart and Launceston (1845 and 1835 respectively).

(ii) *Assets, 1956.* The assets of the State Savings Banks (except the Rural and Industries Bank of Western Australia) as at the date of their respective balance sheets are given in the following table.

STATE SAVINGS BANKS : ASSETS, 1955 AND 1956.

(£'000.)

Particulars.	1956.				1955.
	Victoria. (a)	South Australia. (a)	Tasmania. (b)	Total.	Total.
Cash in hand, in transit and on					
Current Account	3,290	} 14,774	{ 1,340 1,905	} 58,716	{ 8,183 58,027
Fixed Deposits	37,407				
Outstanding Interest, Dividends and Rents	2,297	763	261	3,321	3,036
Government Securities	113,990	54,126	6,501	174,617	178,752
Municipal and other Public Securities	105,312	20,617	8,349	134,278	118,402
Mortgages	16,085	19,944	6,382	42,411	38,142
Landed and House Property	1,430	700	323	2,453	2,013
All other Assets .. .. .	..	..	11	11	8
Total Assets	279,811	110,924	25,072	415,807	c 406,563

(a) At 30th June. (b) At 31st August. (c) State totals were: Victoria, £274,754,000; South Australia, £107,673,000; and Tasmania, £24,136,000.

(iii) *Profit and Loss Accounts, 1955 and 1956.* Details of the profit and loss accounts of the State Savings Banks included in the above table are given below for the years 1955 and 1956.

STATE SAVINGS BANKS: PROFIT AND LOSS ACCOUNTS, 1955 and 1956.
(£'000.)

Particulars.	1956.				1955.
	Victoria. (a)	South Australia. (a)	Tasmania. (b)	Total.	Total.
<i>Receipts—</i>					
Total, Interest, Dividends, Rents, and all other	8,805	3,748	894	13,447	12,212
<i>Expenditure—</i>					
Interest allotted to Depositors ..	5,058	2,337	595	7,990	7,208
Provision for accrued interest on Depositors' Balances	576	..	..	576	451
Expenses of Management	2,639	} 959	{ 210 3	} 4,176	{ 3,331 507
All other Expenditure	365				
<i>Total</i>	8,638	3,296	808	12,742	11,497
Profit for year	167	452	86	705	715
Balance of profit and loss account brought forward	133	158	106	397	383
<i>Total</i>	300	610	192	1,102	1,098
<i>Distribution of Profits—</i>					
Amount written off Bank Premises	3	(c)	32	(d) 35	124
Amount carried to Reserves and Depreciation Funds	100	450	53	603	577
Balance of Profit and Loss Account carried forward	197	160	107	464	397

(a) Year ended 30th June.
expenses of management, &c.(b) Year ended 31st August.
(d) Incomplete, see footnote (c).

(c) Not available, included with

9. Private Savings Banks.—(i) *General.* The Bank of New South Wales Savings Bank Limited and the Australia and New Zealand Savings Bank Limited on the 18th January, 1956, and the C.B.C. Savings Bank Limited on the 2nd June, 1956, were granted authority under section 8 of the Banking Act 1945–1953 to carry on banking business subject to the following conditions:—

1. The Savings Bank shall not, in the course of that business, receive a deposit from a company or other body engaged in or formed for the purpose of trading or acquiring pecuniary profit.
2. The Savings Bank shall not, in the course of that business, permit a cheque to be drawn on an account maintained with the Savings Bank, not being an account maintained by a local authority, friendly society, co-operative society, or any other society, body or club.
3. The Savings Bank shall not, in the course of that business, place money on deposit in Australia (whether fixed or in current account) with a bank other than a bank specified in Part 1. of the First Schedule to the Banking Act 1945–1953, the Commonwealth Bank of Australia or the Commonwealth Trading Bank of Australia.
4. The Savings Bank shall at all times maintain in investments of the following kinds an amount which, together with cash on hand in Australia and moneys on deposit in Australia with banks, is not less than the amount on deposit in Australia with the Savings Bank:—
 - (a) securities issued by the Government of the Commonwealth, including Commonwealth Treasury Bills;
 - (b) securities issued by the Government of a State;
 - (c) securities issued or guaranteed by an authority constituted by or under a Commonwealth or a State Act;
 - (d) loans to building societies the repayment of which is guaranteed by the Commonwealth or a State; and
 - (e) loans for housing or other purposes on the security of land in Australia.

5. The Savings Bank shall at all times maintain in investments of the following kinds an amount which, together with cash on hand in Australia and moneys on deposit with the Commonwealth Bank of Australia, is not less than seventy per centum of the amount on deposit in Australia with the Savings Bank:—
- securities issued by the Government of the Commonwealth, including Commonwealth Treasury Bills;
 - securities issued by the Government of a State; and
 - securities issued or guaranteed by an authority constituted by or under a Commonwealth or a State Act.
6. The Savings Bank shall at all times maintain in investment in Commonwealth Treasury Bills an amount which, together with moneys on deposit with the Commonwealth Bank of Australia, is not less than ten per centum of the amount on deposit in Australia with the Savings Bank.
7. For the purposes of these conditions, the amount on deposit in Australia with the Savings Bank includes interest credited to the accounts of depositors.

The Bank of New South Wales Savings Bank Limited and the Australia and New Zealand Savings Bank Limited commenced business on the 19th January, 1956 and the C.B.C. Savings Bank Limited on 16th July, 1956.

(ii) *Assets.* Two of the three private savings banks published Annual Reports for 1956. Details of the assets as shown in these Reports are given below.

PRIVATE SAVINGS BANKS : ASSETS, AT 30th SEPTEMBER, 1956.
(£'000.)

Particulars.	The Bank of New South Wales Savings Bank Ltd.	The Australia and New Zealand Savings Bank Ltd.
Cash at Bankers—		
Commonwealth Bank	2,625	1,995
Parent Bank	8,957	2,222
Government Securities—		
Treasury Bills	3,750	299
Other	23,543	13,474
Municipal and other Public Securities	3,037	3,715
Loans and Advances (including accrued Interest and other Sundry Accounts)	590	1,486
Total	42,502	23,191

(iii) *Profit and Loss.* The net profits for the year ended 30th September, 1956 (after allowing for all expenses and providing for reserves, contingencies, etc.) were : The Bank of New South Wales Savings Bank Limited, £37,135; and the Australia and New Zealand Savings Bank Limited £24,705.

10. *Classification of Depositors' Balances.*—The classification of deposits published by savings banks does not permit a fully detailed analysis with respect to Australia as a whole, but information supplied to the Royal Commission on Monetary and Banking Systems, for all savings banks except the Hobart trustee savings bank, shows that at 30th June, 1936 the amount on deposit in accounts with balances of less than £100 represented 21 per cent. of the total deposits; balances of over £100 but under £250, 21 per cent.; over £250 but under £500, 23 per cent.; over £500 but under £1,000, 25 per cent.; while those of over £1,000 accounted for 10 per cent. School, penny bank and small inoperative accounts were excluded in determining these percentages.

A similar classification as at 30th June, 1936, 1939 and 1952 to 1956, but relating only to the combined State Savings Banks of Victoria and South Australia, is shown below.

STATE SAVINGS BANKS : CLASSIFICATION OF DEPOSITS.

(Per cent.)

At 30th June—	£100 and under.	£101-£300.	£301-£500.	Total under £501.	£501-£1,000.	Over £1,000.
1936	19.54	26.13	17.84	63.51	27.42	9.07
1939	20.27	27.15	17.90	65.32	26.14	8.54
1952		45.85		45.85	32.33	21.82
1953		43.88		43.88	32.73	23.39
1954		42.17		42.17	32.03	25.80
1955		40.45		40.45	30.34	29.21
1956		39.93		39.93	29.90	30.17

11. Rates of Interest on Deposits.—The following table shows the rates of interest allowed by Savings Banks at the 30th June, 1952 to 1956.

SAVINGS BANKS : INTEREST RATES ON DEPOSITS.

(Per cent. per annum.)

Particulars.	Interest Rates at 30th June.				
	1952.	1953.	1954.	1955.	1956.
Commonwealth Savings Bank, State Savings Bank of Victoria, Bank of New South Wales Savings Bank Ltd.(a), Australia and New Zealand Savings Bank Ltd.(a), Rural and Industries Bank of Western Australia(b)—					
Ordinary Accounts(c)—					
£1 to £500	2	2½	2½	2½	2½
£501 to £1,000	1	1½	1½	1½	1½
£1,001 to £1,500	Nil	Nil	1½	1½	1½
Friendly and other Society Accounts—					
£1 to £2,000	2	2½	2½	2½	2½
£2,001 and over	1	1½	1½	1½	1½
Deposit Stock(c)(d)—					
£10 to £1,000	1	1½	1½	2	2½
Savings Bank of South Australia—					
Ordinary Accounts(c)—					
£1 to £500	2½	2½	2½	2½	2½
£501 to £750	1½	1½	1½	2½	2½
£751 to £1,000	1½	1½	1½	1½	2½
£1,001 to £1,500	Nil	Nil	1½	1½	2½
Friendly and other Society Accounts—					
£1 to £500	2½	2½	2½	2½	2½
£501 to £2,000	2	2½	2½	2½	2½
£2,001 and over	1	1½	1½	1½	1½
Deposit Stock(c)—					
£10 to £2,000	1	1½	1½	2	2½
Trustee Banks—Hobart and Launceston—					
Ordinary Accounts(c)—					
£1 to £450	2½	2½	2½	2½	3

(a) Commenced Savings Bank business on the 19th January 1956. (b) Commenced Savings Bank business on the 5th April, 1956. (c) No interest is payable on amounts in excess of the maximum amount shown. (d) State Savings Bank of Victoria only.

C. COMPANIES.

NOTE.—Statistics available in regard to companies relate to (a) Trustee, Executor and Agency Companies ; (b) Building and Investment Societies ; and (c) Co-operative Societies.

§ 1. Trustee, Executor and Agency Companies.

The following table shows, for the years 1939 and 1951 to 1955, particulars of the assets and liabilities of certain trustee companies transacting business in Australia and New Zealand. Details have been extracted from a summary of the last published balance-sheets for the various years, as shown in the *Australasian Insurance and Banking Record*.

TRUSTEE, EXECUTOR AND AGENCY COMPANIES. AUSTRALIA AND NEW ZEALAND.

Particulars.	1939.	1951.	1952.	1953.	1954.	1955.
Number of Companies ..	23	24	24	24	24	24
Liabilities—						
Capital paid-up	£ 1,408,452	£ 1,528,452	£ 1,528,452	£ 1,528,452	£ 1,528,452	£ 1,530,952
Reserves and undistributed Profits	1,254,262	1,508,912	1,511,596	1,533,107	1,583,874	1,807,231
Other Liabilities	621,069	901,314	1,000,752	1,107,642	1,133,959	1,038,225
Total Liabilities ..	3,283,783	3,938,678	4,040,800	4,169,201	4,246,285	4,376,408
Assets—						
Deposits with Government, Public Securities, Fixed Deposits, etc.	966,847	1,511,739	1,393,241	1,463,523	1,479,961	1,423,758
Mortgages	547,705	313,295	294,206	276,590	262,155	277,296
Property	1,104,216	1,117,672	1,140,149	1,149,490	1,170,708	1,385,657
Cash	102,300	265,985	478,812	481,606	559,982	544,744
Other Assets	562,715	729,987	734,392	797,992	773,479	744,953
Total Assets	3,283,783	3,938,678	4,040,800	4,169,201	4,246,285	4,376,408
Total Trust Fund Assets	£'000. (a)157,256	£'000. (a)203,585	£'000. (a)208,168	£'000. (b)219,155	£'000. (b)219,466	£'000. (b)226,874

(a) Nine offices only.

(b) Ten offices only.

§ 2. Building and Investment Societies.

1. Summary.—During 1954, returns were received from 1,074 societies, but the information is not exhaustive, as particulars regarding a number of organizations are not included. In the following table, general information is given relating to the societies for the year 1953–54.

BUILDING AND INVESTMENT SOCIETIES: SUMMARY, 1953-54.

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Societies making returns—							
Permanent .. No.	29	18	5	5	6	5	68
Terminating .. No.	977	2	9	16	2	..	1,006
Total .. No.	1,006	20	14	21	8	5	1,074
Number of shareholders ..	114,082	12,016	26,867	23,814	25,465	8,349	210,593
„ shares ..	b 2,067,782	1,201,823	8,703,531	114,804	(c)	104,075	(c)
„ borrowers ..	(d) 11,725	17,474	10,107	3,752	4,393	2,425	49,876
Income for year from interest, etc. ..	£ 1,140,708	778,460	253,697	76,091	147,371	106,737	2,503,064
Working expenses for year ..	£ 794,598	607,351	411,452	45,625	36,846	22,314	1,918,186
Amounts of deposits during year ..	£ 480,441	1,015,819	823,827	524,471	695,868	444,073	3,984,499
Repayment of loans during year ..	£ 1,995,894	3,060,657	1,209,394	356,880	803,305	461,209	7,887,339
Loans granted during year ..	£ e 3,591,484	2,465,176	1,596,767	528,436	1,243,200	661,040	10,086,103

(a) Year 1954; excludes Co-operative Housing Societies, for details of which see para. 3.

(b) Terminating societies only. (c) Not available.

(d) Permanent societies only.

(e) Incomplete —“Other terminating societies” not available.

2. **Liabilities and Assets.**—Particulars of liabilities and assets in 1953–54 of the 1,074 societies mentioned in the previous paragraph are shown below.

BUILDING AND INVESTMENT SOCIETIES: LIABILITIES, 1953-54.

(£.)

State.	Paid-up Capital and Subscriptions.	Reserve Funds.	Deposits.	Bank Overdrafts and other Liabilities.	Total Liabilities.
New South Wales ..	22,532,874	2,150,708	1,196,583	73,455,689	99,335,854
Victoria(a) ..	4,247,524	b 1,424,231	3,572,885	5,584,216	14,828,856
Queensland ..	4,942,291	102,248	104,754	683,799	5,833,092
South Australia ..	2,018,166	203,818	294,443	31,080	2,547,507
Western Australia ..	2,245,790	83,003	759,976	(c) 346,151	3,434,920
Tasmania ..	1,408,716	156,918	451,707	131,030	2,148,371
Total ..	37,395,361	4,120,926	6,380,348	80,231,965	128,128,600

(a) Year 1954. (b) Includes balance of Profit and Loss account, £147,254. (c) Includes net accumulated profits, £113,416.

BUILDING AND INVESTMENT SOCIETIES: ASSETS, 1953-54.

(£.)

State.	Advances on Mortgage.	Landed and House Property, Furniture, etc.	Cash in Hand and on Deposit	Other Assets.	Total Assets.
New South Wales ..	a97,433,157	(b)	(b)	1,902,697	99,335,854
Victoria(c) ..	14,453,380	180,091	39,591	155,794	14,828,856
Queensland ..	a 5,516,577	125,286	48,654	142,575	5,833,092
South Australia ..	2,269,947	41,719	107,092	128,749	2,547,507
Western Australia ..	3,261,763	45,006	39,954	88,197	3,434,920
Tasmania ..	2,056,648	18,608	906	72,209	2,148,371
Total ..	124,991,472	410,710	236,197	2,490,221	128,128,600

(a) Includes Starr-Bowkett and other terminating societies:—New South Wales, £86,722,760; Queensland, £1,121,138. (b) Not available. Included in Other Assets. (c) Year 1954.

3. **Co-operative Housing Societies, Victoria.**—In addition to the information shown above, the following details of co-operative housing societies in Victoria have been extracted from the 9th Annual Report of the Registrar of Co-operative Housing Societies. At 30th June, 1954, 250 co-operative housing societies were registered in Victoria with 23,697 members who had subscribed for 811,343 shares giving a nominal share capital subscribed of £42,767,419. For the twelve months ended 30th April, 1954, returns were submitted by 245 societies, the total income of those societies being £179,915, and total expenditure £160,698. The liabilities at 30th April, 1954 of the societies submitting returns were:—bank overdraft, £24,718,524; subscriptions, £3,340,012; surplus interest and management expenses, £321,361; other liabilities, £514,424; total liabilities, £28,894,321. Assets at the same date consisted of:—advances, £28,562,818; other assets, £331,503; total assets, £28,894,321.

§ 3. Co-operative Societies.

Co-operative societies are divided into three classes—(i) those engaged in the manufacture and marketing of primary products and trade requirements; (ii) those engaged in retailing general household requirements; and (iii) those engaged in activities covered by both classes (i) and (ii). The first class may be described briefly as Producers' Co-operative Societies and the second as Consumers' Co-operative Societies. The particulars given for New South Wales relate to societies registered under the Co-operative Act 1923–1950. A summary of the business of all co-operative societies for the years 1953–54 or 1954 for all States except Western Australia is given in the following tables. For Western Australia, details of the business during 1940–41 (the latest year available) are given. Separate particulars for each of the three types of Co-operative Societies are given in the annual bulletin *Finance* (see No. 46, pages 190 and 191).

CO-OPERATIVE SOCIETIES.

Particulars.	N.S.W 1953–54.	Vic. 1953–54.	Q'land. 1953–54.	S. Aust. 1954.	W. Aust. 1940–41.	Tas. 1953–54.
SUMMARY.						
Number of Societies ..	295	97	179	72	85	9
„ Branches ..	(a)	74	94	(a)	36	7
„ Members ..	199,958	62,074	120,306	107,069	21,663	12,394
Gross Turnover (Sales) ..	£ 100,132,114	£ 26,345,006	£ 53,133,054	£ 12,458,088	£ 2,548,776	£ 3,412,349
Other Income ..	£ 479,285	£ 818,725	£ 1,780,200	£ 1,024,031	£ 698,449	£ 104,431
Total Income ..	£ 100,611,399	£ 27,163,731	£ 54,913,254	£ 13,482,119	£ 3,247,225	£ 3,516,780
Total Purchases during Year ..	£ 98,300,739	£ 21,506,894	£ 42,896,091	£ 10,279,675	£ 2,254,419	£ 2,901,529
Other Expenditure ..	£ 4,621,068	£ 4,621,068	£ 9,906,243	£ 2,728,545	£ 850,741	£ 725,223
Total Expenditure ..	£ 98,300,739	£ 26,127,962	£ 52,802,334	£ 13,008,220	£ 3,105,160	£ 3,626,752
Rebates and Bonuses ..	£ 1,530,438	£ 355,646	£ 623,041	£ 537,319	£ 15,472	£ 66,271
Dividends on Share Capital ..	£ 296,504	£ 142,584	£ 155,285	£ 76,849	£ 19,097	£ 18,528

LIABILITIES AND ASSETS. (£.)

Liabilities—						
Paid-up Capital ..	7,762,048	2,782,568	4,481,692	1,744,116	469,144	346,994
Loan Capital ..		286,659	2,327,306	1,877,184	225,009	147,269
Bank Overdrafts ..	5,851,314	1,229,411	4,646,238	830,475	61,388	376,351
Accumulated Profits ..	4,713,002	785,872	1,028,742	477,217	22,814	158,008
Reserve Funds ..		2,342,307	4,829,079	1,050,363	322,255	155,451
Sundry Creditors ..		2,290,033	6,940,214	841,456	374,533	720,556
Other Liabilities ..	9,897,559	759,399	423,901	1,913,634	457,371	55,037
Total Liabilities ..	28,223,923	10,476,249	24,677,172	8,734,445	1,932,514	1,959,666
Assets—						
Land and Buildings ..			5,071,358	1,473,758	510,279	537,176
Machinery, Plant and other fixed Assets ..	11,550,982	4,476,460	6,682,518	995,281	247,143	134,335
Stocks ..	8,576,618	2,162,349	3,414,476	3,150,283	351,437	782,897
Sundry Debtors ..	6,159,985	2,682,884	8,239,948	1,165,388	468,608	378,669
Cash in hand and on deposit ..		595,185	411,648	472,181	191,383	35,508
Profit and Loss Account ..		15,770	98,715	4,395	50,025	2,112
Other Assets ..	1,936,338	543,601	758,509	1,473,159	113,639	88,969
Total Assets ..	28,223,923	10,476,249	24,677,172	8,734,445	1,932,514	1,959,666

(a) Not available.

D. INSURANCE.

§ 1. Introductory.

1. Legislation.—Section 51 of the Commonwealth Constitution confers the necessary powers on the Commonwealth Parliament to legislate with respect to “insurance other than State insurance; also State insurance extending beyond the limits of the State concerned”. Commonwealth legislation includes the Marine Insurance Act 1909 defining the limits of marine insurance and regulating the terms of contracts, etc., the Insurance

Act 1932–1937 requiring the lodgment of deposits by insurance companies, and the Life Insurance Act 1945–1953 generally regulating life assurance business in Australia. The Marine Insurance Act 1909 and the Insurance Act 1932–1937 have limited application, and, except for life assurance business, which is regulated by the Life Insurance Act 1945–1953, insurance business is conducted under State laws.

2. Insurance Act 1932–1937.—Companies, persons or associations of persons carrying on insurance business in Australia or in any Territory of Australia are required to lodge a deposit with the Commonwealth Treasurer.

Money deposited is invested by the Treasurer in prescribed securities selected by the depositor, and all interest is paid to depositors. Deposits remain as security against liability to policy holders, and are available to satisfy judgments obtained in respect of policies.

Deposits held by States, on 1st February, 1932, could, however, remain with the States subject to the conditions embodied in the laws of the States, and depositors to the extent of the value of these deposits were exempt from liability to make deposits under the Commonwealth Act.

The following are not regarded as insurance businesses under the Act:—

Staff superannuation schemes; schemes of religious organizations solely for insurance of their property; and friendly society, union and association schemes involving superannuation or insurance benefits to employees.

This Act does not apply to State insurance within the limits of the State concerned, and, under the Life Insurance Act 1945–1953, ceased to apply to life assurance business.

3. Life Insurance Act 1945–1953.—The objects of this Act are :—(a) To replace all State legislation on the subject of life assurance and to provide uniform legislation for the whole of Australia; (b) to appoint an Insurance Commissioner to exercise active supervision of the activities of life assurance companies, with a view to securing the greatest possible protection for policy holders; (c) to set up adequate machinery for dealing with any company that fails to maintain a required minimum standard of solvency.

The Act was assented to on 16th August, 1945 and came into operation on 20th June, 1946. A summary of the provisions of the Act is given in Official Year Book No. 37 (pages 595 to 597).

The main amendment by the Life Insurance Act, No. 94 of 1953 was to repeal Part VI. of the principal Act, which provided for the establishment of a Commonwealth Government Insurance Office.

4. Deposits under Insurance Acts.—Deposits lodged under the Insurance Acts at 30th June, 1955, totalled £5,766,359, comprising £1,152,282 held by the Commonwealth in respect of life assurance and £4,390,787 held by the Commonwealth and £223,290 held by the States in respect of other forms of insurance. The deposits consisted of government, municipal and other securities £4,647,709, fixed deposits £1,000, bank guarantees and undertakings £785,000 and titles and mortgages £332,650.

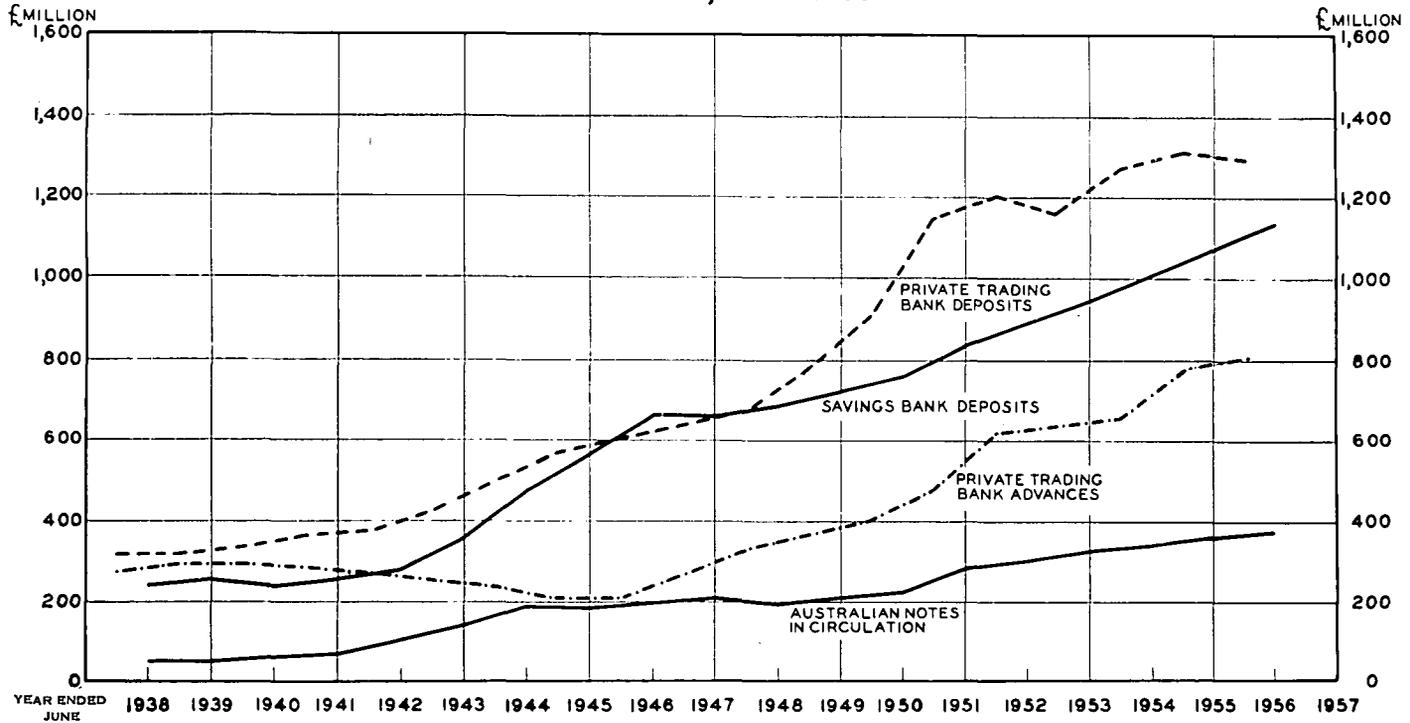
At the 30th June, 1956, total deposits lodged amounted to £6,347,552, comprising £1,212,282 held by the Commonwealth in respect of life assurance and £4,911,980 held by the Commonwealth and £223,290 held by the States in respect of other forms of insurance. The deposits consisted of government, municipal and other securities £4,924,902, fixed deposits £1,000, bank guarantees and undertakings, £1,089,000 and titles and mortgages, £332,650.

§ 2. Life Assurance.

1. General.—Statistical returns have been collected from life assurance institutions since 1907. Until 1946, these returns were collected under the Census and Statistics Act. Since 1947, returns lodged under the Life Insurance Act 1945–1953 have been used to compile life assurance statistics. This change in method of collection has resulted in some slight changes in definition and, as a result, the statistics for 1947 and later years are not in all cases strictly comparable with those for earlier years. In earlier years, statistics of

BANK DEPOSITS AND ADVANCES AND NOTES IN CIRCULATION

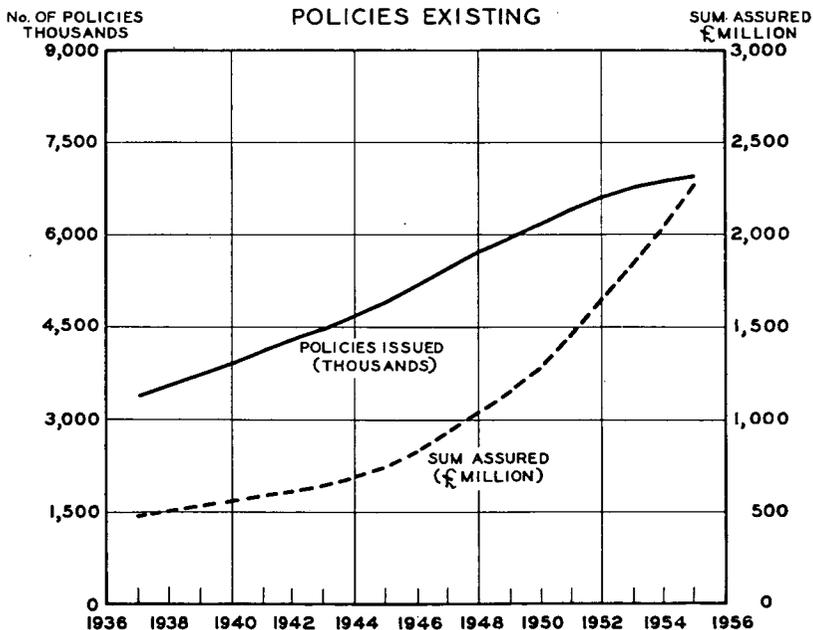
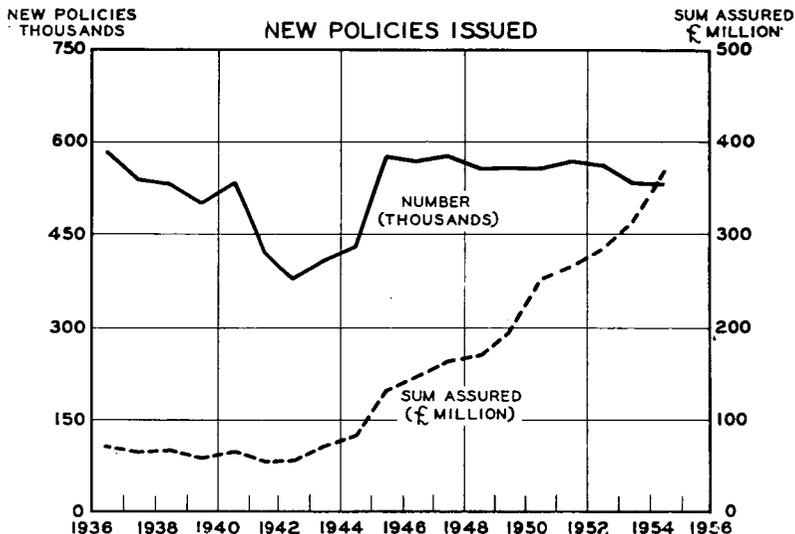
AUSTRALIA, 1938 TO 1956



LIFE ASSURANCE: AUSTRALIA

1937 TO 1955

POLICIES ISSUED AND SUM ASSURED



revenue and expenditure and of assets and liabilities, although generally related only to the life assurance business of the offices making the returns, included, in some cases, a small amount of other classes of business. Under the Life Insurance Act 1945-1953, companies transacting life assurance business are required to set up separate statutory funds for their life assurance business. As a result of this, it has been possible to separate life assurance business from other classes of business. Except where otherwise indicated, the figures in the succeeding paragraphs refer to Australian business only. Business in the Territories of Papua and New Guinea is, however, included in the Australian figures.

2. **Offices Transacting Business.**—The number of offices which transacted life assurance business in Australia during 1954 was 23 including three oversea companies. Of the twenty Australian offices, six are purely mutual, including one which transacts general business in respect of which share capital is used, twelve are public companies, and two are State Government institutions. Of the total offices, thirteen transacted both ordinary and industrial business, and one industrial business only. In 1955, the number of offices transacting life assurance business in Australia was reduced to 22, one Australian public company, which transacted industrial business only, ceasing business at the end of December, 1954. Ordinary and industrial business has, where possible, been kept separate.

3. **Australian Business—Policies in Existence.**—In the following tables, details of policies on the registers in each State and in the Australian Capital Territory are given for the years 1954 and 1955—

LIFE ASSURANCE : POLICIES EXISTING IN AUSTRALIA, 1954.

State or Territory.(a)	Assurance and Endowment Policies.				Annuity Policies.		
	Number of Policies.	Sum Assured. (£'000.)	Bonus Additions. (£'000.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities Per Annum. (£.)	Annual Premiums. (£.)
ORDINARY DEPARTMENT.							
New South Wales ..	1,093,268	603,259	51,522	21,020	5,102	1,184,519	362,083
Victoria ..	842,849	504,030	41,554	17,796	7,116	4,563,311	983,708
Queensland(b) ..	510,317	270,566	19,452	8,600	937	85,552	20,670
South Australia(c) ..	283,777	159,597	13,235	5,706	916	84,340	18,571
Western Australia ..	195,231	110,784	9,520	3,995	628	70,117	14,852
Tasmania ..	97,525	58,967	4,499	1,953	655	81,895	22,328
Australian Capital Territory ..	10,283	33,957	739	523	1,611	198,094	16,328
Total ..	3,033,250	1,741,160	140,521	59,593	16,965	6,267,828	1,438,540
INDUSTRIAL DEPARTMENT.							
New South Wales ..	1,403,180	110,868	2,983	5,428	..	..	..
Victoria ..	1,219,603	92,940	2,711	4,614	..	..	..
Queensland(b) ..	449,415	35,857	906	1,747	..	..	..
South Australia(c) ..	407,775	29,077	832	1,433	..	..	..
Western Australia ..	242,681	20,120	503	970	..	..	..
Tasmania ..	98,847	7,651	220	368	..	..	..
Australian Capital Territory ..	5,244	481	18	23	..	..	..
Total ..	3,826,745	296,994	8,173	14,583	..	..	..

(a) Location of register of policies.

(b) Includes Territories of Papua and New Guinea.

(c) Includes Northern Territory.

LIFE ASSURANCE : POLICIES EXISTING IN AUSTRALIA, 1955.

State or Territory.(a)	Assurance and Endowment Policies.				Annuity Policies.		
	Number of Policies.	Sum Assured. (£'000.)	Bonus Additions. (£'000.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities per Annum. (£.)	Annual Premiums. (£.)
ORDINARY DEPARTMENT.							
New South Wales ..	1,151,471	674,123	56,196	23,369	5,069	1,283,376	399,731
Victoria ..	876,458	571,035	45,639	19,789	7,206	5,330,853	1,089,503
Queensland(b) ..	536,650	301,281	21,335	9,496	965	89,440	25,275
South Australia(c) ..	298,732	183,485	14,671	6,520	904	89,837	20,296
Western Australia ..	205,137	125,772	10,505	4,498	659	83,965	19,156
Tasmania ..	103,419	68,241	5,007	2,240	664	87,100	25,024
Australian Capital Territory ..	11,777	46,813	1,018	639	1,668	234,302	18,125
Total ..	3,183,644	1,970,750	154,371	66,551	17,135	7,198,873	1,597,110
INDUSTRIAL DEPARTMENT.							
New South Wales ..	1,375,826	114,540	3,087	5,545	..	..	..
Victoria ..	1,194,985	95,623	2,795	4,683	..	..	..
Queensland(b) ..	445,704	37,210	960	1,790	..	..	..
South Australia(c) ..	401,777	30,146	863	1,465	..	..	..
Western Australia ..	238,787	20,744	528	987	..	..	..
Tasmania ..	97,840	7,887	232	374	..	..	..
Australian Capital Territory ..	10,932	1,220	35	57	..	..	..
Total ..	3,765,851	307,370	8,500	14,901	..	..	..

(a) Location of register of policies. (b) Includes Territories of Papua and New Guinea.
(c) Includes Northern Territory.

The following table shows particulars of policies existing at the end of the years 1939 and 1951 to 1955 inclusive:—

LIFE ASSURANCE : POLICIES EXISTING IN AUSTRALIA.

At End of Year—	Assurance and Endowment Policies.				Annuity Policies.	
	Number of Policies.	Sum Assured. (£'000.)	Average per Policy. (£.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities per Annum. (£.)
ORDINARY DEPARTMENT.						
1939	1,243,378	427,291	344	(a) 13,954	3,826	384,584
1951	2,553,710	1,211,970	475	41,868	14,459	4,346,634
1952	2,731,284	1,378,474	505	47,634	16,240	5,587,112
1953	2,892,842	1,552,706	537	53,186	16,971	5,975,783
1954	3,033,250	1,741,160	574	59,593	16,965	6,267,828
1955	3,183,644	1,970,750	619	66,551	17,135	7,198,873
INDUSTRIAL DEPARTMENT.						
1939	2,491,742	111,862	45	(a) 6,490	2	58
1951	3,842,716	253,594	66	13,069	1	13
1952	3,872,726	270,323	70	13,682	1	13
1953	3,880,768	285,594	74	14,232	..	..
1954	3,826,745	296,994	78	14,583	..	..
1955	3,765,851	307,370	82	14,901	..	..

(a) Annual premium income.

4. **New Policies issued in Australia.**—During 1955, 314,545 new policies for £335,473,000 were issued in the Ordinary Department. The average amount per policy was £1,067 as compared with an average of £574 per policy for all ordinary policies existing at the end of 1954.

In the Industrial Department, 216,896 new policies were issued during 1955, assuring £33,175,000. The average amount per policy was £153 as compared with an average of £78 per policy for all industrial policies existing at the end of 1954.

In the following tables, details are given of new policies issued in each State and the Australian Capital Territory during 1954 and 1955 for each class of business :—

LIFE ASSURANCE : NEW POLICIES ISSUED IN AUSTRALIA, 1954.

State or Territory.(a)	Assurance and Endowment Policies.				Annuity Policies.			
	Number of Policies.	Sum Assured. (£'000.)	Premiums.		Number of Policies.	Annuities per Annum. (£'000.)	Premiums.	
			Single. (£'000.)	Annual. (£'000.)			Single. (£'000.)	Annual. (£'000.)
ORDINARY DEPARTMENT.								
New South Wales ..	110,302	97,247	164	3,522	649	151	141	63
Victoria ..	79,399	77,896	128	2,831	514	719	449	157
Queensland(b) ..	49,065	40,907	109	1,299	42	10	13	3
South Australia(c) ..	26,474	26,558	32	985	34	8	17	3
Western Australia ..	20,157	18,405	14	677	28	6	15	2
Tasmania ..	11,174	11,136	6	376	35	9	2	3
Australian Capital Territory ..	897	6,355	36	83	87	36	2	1
Total ..	297,468	278,504	489	9,773	1,389	939	639	232
INDUSTRIAL DEPARTMENT.								
New South Wales ..	91,554	13,313	..	617	..	..	..	..
Victoria ..	68,135	9,365	..	433	..	..	..	..
Queensland(b) ..	29,332	3,970	..	184	..	..	..	..
South Australia(c) ..	24,934	3,298	..	151	..	..	..	..
Western Australia ..	16,396	2,470	..	111	..	..	..	..
Tasmania ..	6,283	947	..	43	..	..	..	..
Australian Capital Territory ..	302	44	..	2	..	..	..	..
Total ..	236,936	33,407	..	1,541	..	..	..	..

(a) Location of register of policies.

(b) Includes Papua and New Guinea.

(c) Includes Northern Territory.

LIFE ASSURANCE : NEW POLICIES ISSUED IN AUSTRALIA, 1955.

State or Territory.(a)	Assurance and Endowment Policies.				Annuity Policies.			
	Number of Policies.	Sum Assured. (£'000.)	Premiums.		Number of Policies.	Annuities per Annum. (£'000.)	Premiums.	
			Single. (£'000.)	Annual. (£'000.)			Single. (£'000.)	Annual. (£'000.)
ORDINARY DEPARTMENT.								
New South Wales ..	122,516	110,606	108	3,881	534	197	154	76
Victoria ..	77,367	100,614	173	3,197	672	1,304	554	288
Queensland(b) ..	52,169	46,246	198	1,424	66	10	15	6
South Australia(c) ..	28,164	32,231	24	1,153	55	11	40	3
Western Australia ..	20,016	21,553	25	761	58	17	3	5
Tasmania ..	13,007	14,224	10	459	50	11	3	4
Australian Capital Territory ..	1,306	9,999	3	128	184	49	4	4
Total ..	314,545	335,473	541	11,003	1,619	1,599	773	386
INDUSTRIAL DEPARTMENT.								
New South Wales ..	86,691	13,520	..	630	..	..	..	..
Victoria ..	61,200	9,322	..	429	..	..	..	..
Queensland(b) ..	28,222	3,994	..	186	..	..	..	..
South Australia(c) ..	20,622	3,083	..	140	..	..	..	..
Western Australia ..	13,842	2,209	..	99	..	..	..	..
Tasmania ..	5,583	901	..	41	..	..	..	..
Australian Capital Territory ..	736	146	..	7	..	..	..	..
Total ..	216,896	33,175	..	1,532	..	..	..	..

(a) Location of register of policies.

(b) Includes Papua and New Guinea.

(c) Includes Northern Territory.

New policies issued in Australia during each of the years 1939 and 1951 to 1955 were as shown in the following table:—

LIFE ASSURANCE: NEW POLICIES ISSUED IN AUSTRALIA.

Year.	Assurance and Endowment Policies.				Annuity Policies.			
	Number of Policies.	Sum Assured. (£'000.)	Premiums.		Number of Policies.	Annuities per Annum. (£'000.)	Premiums.	
			Single. (£'000.)	Annual. (£'000.)			Single. (£'000.)	Annual. (£'000.)
ORDINARY DEPARTMENT.								
1939 ..	142,157	48,263	(a)	(a)	420	87	(a)	(a)
1951 ..	287,647	221,132	460	7,854	2,658	1,300	649	380
1952 ..	298,797	233,186	365	8,240	2,602	1,741	600	418
1953 ..	300,295	252,080	518	8,765	1,724	968	552	224
1954 ..	297,468	278,504	489	9,773	1,389	939	639	232
1955 ..	314,545	335,473	541	11,003	1,619	1,599	773	386
INDUSTRIAL DEPARTMENT.								
1939 ..	385,498	18,542	(a)	(a)	..	..	..	..
1951 ..	266,577	30,661	..	1,413	..	..	..	..
1952 ..	270,391	34,367	..	1,579	..	..	..	..
1953 ..	260,948	34,570	..	1,592	..	..	..	..
1954 ..	236,936	33,407	..	1,541	..	..	..	..
1955 ..	216,896	33,175	..	1,532	..	..	..	..

(a) Not available.

5. Policies Matured or Otherwise Discontinued in Australia.—The volume of business discontinued from various causes in each year is always large. In the following tables, details are given of ordinary and industrial life assurance policies matured or otherwise discontinued in each State and the Australian Capital Territory during the years 1954 and 1955.

Policies discontinued in 1954 and 1955 include policies in existence at the beginning of the year which were discontinued as a result of the winding up of two companies.

LIFE ASSURANCE: POLICIES MATURED OR OTHERWISE DISCONTINUED IN AUSTRALIA, 1954.(a)

State or Territory.(b)	Assurance and Endowment.			Annuity Policies.		
	Number of Policies.	Sum Assured. (£'000.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities per Annum. (£'000.)	Annual Premiums. (£'000.)
ORDINARY DEPARTMENT.						
New South Wales	64,504	34,680	1,327	611	125	44
Victoria	42,244	27,091	989	534	495	87
Queensland(c)	24,654	12,845	445	26	5	1
South Australia(d)	11,070	7,153	283	41	5	1
Western Australia	8,970	5,371	210	17	3	1
Tasmania	5,625	3,682	134	76	5	2
Australian Capital Territory ..	-7	-772	-22	90	9	1
Total	157,060	90,050	3,366	1,395	647	137
INDUSTRIAL DEPARTMENT.						
New South Wales	120,217	9,098	489	..	..	..
Victoria	91,689	6,682	366	..	..	..
Queensland(c)	30,940	2,464	133	..	..	..
South Australia(d)	25,071	1,758	97	..	..	..
Western Australia	16,920	1,405	74	..	..	..
Tasmania	5,842	573	30	..	..	..
Australian Capital Territory ..	280	27	1	..	..	..
Total	290,959	22,007	1,190	..	..	..

(a) See letterpress above. (b) Location of register of policies. (c) Includes Papua and New Guinea. (d) Includes Northern Territory.

NOTE.—Minus sign (—) indicates excess of transfers to registers or other adjustment to number and value of policies.

LIFE ASSURANCE: POLICIES MATURED OR OTHERWISE DISCONTINUED IN AUSTRALIA, 1955.(a)

State or Territory.(b)	Assurance and Endowment.			Annuity Policies.		
	Number of Policies.	Sum Assured. (£'000.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities per Annum. (£'000.)	Annual Premiums. (£'000.)
ORDINARY DEPARTMENT.						
New South Wales	64,313	39,743	1,532	567	98	38
Victoria	43,758	33,608	1,204	582	536	182
Queensland(c)	25,836	15,530	529	38	6	2
South Australia(d)	13,209	8,343	338	67	6	1
Western Australia	10,110	6,565	258	27	3	1
Tasmania	7,113	4,951	172	41	6	2
Australian Capital Territory	-188	-2,857	12	127	13	2
Total	164,151	105,883	4,045	1,449	668	228

INDUSTRIAL DEPARTMENT.						
	Number of Policies.	Sum Assured.	Annual Premiums.			
New South Wales	114,045	9,848	513	..	..	..
Victoria	85,818	6,639	360	..	..	..
Queensland(c)	31,933	2,641	144	..	..	..
South Australia(d)	26,620	2,014	109	..	..	..
Western Australia	17,736	1,586	81	..	..	..
Tasmania	6,590	664	34	..	..	..
Australian Capital Territory	-4,952	-593	-27	..	..	..
Total	277,790	22,799	1,214	..	..	..

(a) See letterpress on previous page. (b) Location of register of policies. (c) Includes Papua and New Guinea. (d) Includes Northern Territory.

NOTE.—Minus sign (—) indicates excess of transfers to registers or other adjustment to number and value of policies.

Policies matured or otherwise discontinued in Australia during each of the years 1939 and 1951 to 1955 were as shown in the following table:—

LIFE ASSURANCE: POLICIES MATURED OR OTHERWISE DISCONTINUED IN AUSTRALIA.

Year.	Assurance and Endowment Policies.			Annuity Policies.		
	Number of Policies.	Sum Assured. (£'000.)	Annual Premiums. (£'000.)	Number of Policies.	Annuities per Annum. (£'000.)	Annual Premiums. (£'000.)
ORDINARY DEPARTMENT.						
1939	80,912	24,786	(a)	275	17	(a)
1951	110,969	56,307	2,067	947	360	124
1952	121,228	66,694	2,473	821	500	179
1953	138,737	77,848	3,213	993	579	135
1954(b)	157,060	90,050	3,366	1,395	647	137
1955	164,151	105,883	4,045	1,449	668	228
INDUSTRIAL DEPARTMENT.						
1939	262,096	12,132	(a)	..	..	..
1951	216,935	15,388	861	..	..	..
1952	240,381	17,638	967	..	..	..
1953	252,906	19,299	1,042	1	..	..
1954(b)	290,959	22,007	1,190	..	..	..
1955(b)	277,790	22,799	1,214	..	..	..

(a) Not available.

(b) See letterpress on previous page.

The number of policies and sums assured, excluding annuities, discontinued during the years 1939 and 1951 to 1955 and the cause for discontinuance are given in the following table:—

LIFE ASSURANCE: POLICIES^(a) MATURED OR OTHERWISE DISCONTINUED IN AUSTRALIA—CAUSE OF DISCONTINUANCE.

Year.	Death or Maturity.	Surrender.	Forfeiture.	Other.	Total.
ORDINARY DEPARTMENT: NUMBER OF POLICIES.					
1939	22,529	18,409	39,382	— 128	80,192
1951	36,150	43,347	33,259	— 1,787	110,969
1952	39,150	48,879	33,734	— 535	121,228
1953	40,836	53,064	37,027	7,810	138,737
1954	45,386	62,238	41,287	(b) 8,149	157,060
1955	48,224	67,929	42,941	5,057	164,151
ORDINARY DEPARTMENT: SUM ASSURED. (£'000.)					
1939	5,612	5,863	13,414	— 103	24,786
1951	10,816	24,303	18,108	3,080	56,307
1952	12,044	28,824	21,458	4,368	66,694
1953	13,107	34,026	25,792	4,923	77,848
1954	14,904	41,344	28,770	(b) 5,032	90,050
1955	16,012	50,065	35,467	4,339	105,883
INDUSTRIAL DEPARTMENT: NUMBER OF POLICIES.					
1939	73,585	33,766	154,328	417	262,096
1951	122,209	33,109	60,877	740	216,935
1952	136,117	43,769	60,402	93	240,381
1953	146,134	51,044	55,289	439	252,906
1954	157,150	51,917	59,828	(b) 22,064	290,959
1955	167,060	54,895	54,922	(b) 913	277,790
INDUSTRIAL DEPARTMENT: SUM ASSURED. (£'000.)					
1939	2,759	1,372	7,976	25	12,132
1951	5,056	2,462	7,819	51	15,388
1952	5,728	3,914	7,983	13	17,638
1953	6,285	5,383	7,569	62	19,299
1954	6,849	5,877	8,484	(b) 797	22,007
1955	7,517	6,574	8,675	(b) 33	22,799

(a) Excludes annuities. (b) See letterpress on p. 736.
NOTE.—Minus sign (—) indicates excess of transfers to registers or other adjustment to number and value of policies.

6. **Premiums and Claims, Australia.**—(i) *Premiums.* (a) *Ordinary Business.* Details of revenue from premiums in respect of the ordinary business of all offices doing business in Australia are shown in the following tables for each State and the Australian Capital Territory for the years 1954 and 1955:—

ORDINARY LIFE ASSURANCE: AUSTRALIAN REVENUE FROM PREMIUMS, 1954.
(£'000.)

State or Territory.(a)	Assurance and Endowment Premiums.		Consideration for Annuities.		Total.
	Single Premiums.	Other Premiums.	Single Premiums.	Other Premiums.	
New South Wales	169	20,850	142	355	21,516
Victoria	131	17,631	428	938	19,128
Queensland ^(b)	74	8,360	10	21	8,465
South Australia ^(c)	33	5,602	17	19	5,671
Western Australia	16	3,919	15	16	3,966
Tasmania	6	1,890	2	23	1,921
Australian Capital Territory	35	1,045	2	190	1,272
Total	464	59,297	616	1,562	61,939

(a) Location of register of policies.
(c) Includes Northern Territory.

(b) Includes Territories of Papua and New Guinea.

ORDINARY LIFE ASSURANCE : AUSTRALIAN REVENUE FROM PREMIUMS, 1955.
(£'000.)

State or Territory.(a)	Assurance and Endowment Premiums.		Consideration for Annuities.		Total.
	Single Premiums.	Other Premiums.	Single Premiums.	Other Premiums.	
New South Wales	126	23,428	154	463	24,171
Victoria	177	19,689	538	1,049	21,453
Queensland(b)	110	9,330	19	23	9,482
South Australia(c)	24	6,362	40	20	6,446
Western Australia	24	4,380	3	21	4,428
Tasmania	6	2,178	3	25	2,212
Australian Capital Territory ..	4	973	4	167	1,148
Total	471	66,340	761	1,768	69,340

(a) Location of register of policies. (b) Includes Territories of Papua and New Guinea.
(c) Includes Northern Territory.

(b) *Industrial Business.* Details of revenue from premiums in respect of the industrial business of all offices doing business in Australia are shown in the following table for each State and the Australian Capital Territory for the years 1954 and 1955 :—

INDUSTRIAL LIFE ASSURANCE : AUSTRALIAN REVENUE FROM PREMIUMS, 1954 AND 1955.
(£'000.)

State or Territory.(a)	1954.			1955.		
	Assurance and Endowment Premiums.		Total.	Assurance and Endowment Premiums.		Total.
	Single Premiums.	Other Premiums.		Single Premiums.	Other Premiums.	
New South Wales	2	5,296	5,298	4	5,452	5,456
Victoria	3	4,547	4,550	2	4,623	4,625
Queensland .. ..	..	1,708	1,708	..	1,755	1,755
South Australia .. ..	..	1,398	1,398	..	1,439	1,439
Western Australia	1	949	950	1	965	969
Tasmania .. ..	..	358	358	..	368	368
Australian Capital Territory .. ..	..	23	23	..	5	5
Total	6	14,279	14,285	7	14,607	14,614

(a) Location of register of policies.

(c) *Ordinary and Industrial Business.* The following table shows, for each of the years 1939 and 1951 to 1955, the aggregate Australian income from premiums in respect of both ordinary and industrial business of all offices doing business in Australia :—

LIFE ASSURANCE : AUSTRALIAN REVENUE FROM PREMIUMS.
(£'000.)

Year.	Ordinary Department.			Industrial Department.	Ordinary and Industrial Departments Combined.
	Assurance and Endowment Premiums.	Consideration for Annuities.	Total.		
1939	13,954	184	14,138	6,490	20,628
1951	41,265	1,679	42,944	12,874	55,818
1952	47,091	1,870	48,961	13,379	62,340
1953	53,114	2,029	55,143	13,888	69,031
1954	59,761	2,178	61,939	14,285	76,224
1955	66,811	2,529	69,340	14,614	83,954

(ii) *Claims, etc., Paid.* Details of the claims, etc., paid on policies in each State and the Australian Capital Territory during the years 1954 and 1955 are shown in the following tables:—

LIFE ASSURANCE : PAYMENTS TO POLICY-HOLDERS IN AUSTRALIA, 1954.
(£'000.)

State or Territory.(a)	Claims.		Sur- renders.	Annuities.	Cash Bonuses.	Total.
	Death or Disability	Maturity.				
ORDINARY DEPARTMENT.						
New South Wales	3,614	3,220	1,927	155	45	8,961
Victoria	2,914	3,061	1,482	151	49	7,657
Queensland(b)	1,419	1,210	577	23	13	3,242
South Australia(c)	851	762	303	27	9	1,952
Western Australia	654	425	267	19	9	1,374
Tasmania	329	238	147	18	3	735
Australian Capital Territory	88	69	235	11	1	404
Total	9,869	8,985	4,938	404	129	24,325

INDUSTRIAL DEPARTMENT.						
New South Wales	344	2,497	404	..	..	3,245
Victoria	277	2,251	281	..	..	2,809
Queensland(b)	114	774	117	..	..	1,005
South Australia(c)	82	580	82	..	..	744
Western Australia	57	394	61	..	..	512
Tasmania	21	126	26	..	..	173
Australian Capital Territory .. .. .	..	10	1	..	..	11
Total	895	6,632	972	..	..	8,499

(a) Location of register of policies.
Northern Territory.

(b) Includes Papua and New Guinea.

(c) Includes

LIFE ASSURANCE : PAYMENTS TO POLICY-HOLDERS IN AUSTRALIA, 1955.
(£'000.)

State or Territory.(a)	Claims.		Sur- renders.	Annuities.	Cash Bonuses.	Total.
	Death or Disability	Maturity.				
ORDINARY DEPARTMENT.						
New South Wales	3,954	3,442	1,987	165	52	9,600
Victoria	3,043	3,344	2,029	173	125	8,714
Queensland(b)	1,434	1,387	736	23	14	3,594
South Australia(c)	890	834	412	26	9	2,171
Western Australia	648	475	332	18	16	1,489
Tasmania	263	224	182	17	2	688
Australian Capital Territory	76	91	431	8	..	606
Total	10,308	9,797	6,109	430	218	26,862

INDUSTRIAL DEPARTMENT.						
New South Wales	357	2,803	432	..	..	3,592
Victoria	270	2,597	298	..	..	3,165
Queensland(b)	102	841	132	..	..	1,075
South Australia(c)	87	626	92	..	..	805
Western Australia	49	416	75	..	..	540
Tasmania	15	147	27	..	..	189
Australian Capital Territory .. .. .	..	1	..	..	..	1
Total	880	7,431	1,056	..	..	9,367

(a) Location of register of policies.
Northern Territory.

(b) Includes Papua and New Guinea.

(c) Includes

In the following table details are given of claims, etc., paid on policies in Australia for each of the years 1939 and 1951 to 1955:—

LIFE ASSURANCE: PAYMENTS TO POLICY-HOLDERS IN AUSTRALIA.
(£'000.)

Year.	Claims.	Surrenders.	Annuities.	Cash Bonuses.	Total.
ORDINARY DEPARTMENT.					
1939	7,935	1,843	220	260	10,258
1951	14,029	2,641	346	87	17,103
1952	15,576	3,287	379	107	19,349
1953	16,739	3,982	391	126	21,238
1954	18,854	4,938	404	129	24,325
1955	20,105	6,109	430	218	26,862
INDUSTRIAL DEPARTMENT.					
1939	3,132	499	..	..	3,631
1951	5,585	566	..	..	6,151
1952	6,284	772	..	..	7,056
1953	6,879	927	..	..	7,806
1954	7,527	972	..	..	8,499
1955	8,311	1,056	..	..	9,367

7. Total Revenue and Expenditure.—(i) *Total Revenue.* The following table shows particulars of the total life assurance revenue derived by life assurance offices from sources within and beyond Australia during each of the years 1939 and 1951 to 1955:—

ORDINARY AND INDUSTRIAL LIFE ASSURANCE: TOTAL REVENUE.
(£'000.)

Year.	Assurance and Endowment Premiums.	Consideration for Annuities Granted.	Interest, Dividends and Rents.	All other Revenue.	Total Revenue.
ORDINARY BUSINESS.					
1939	21,568	303	9,901	17	31,789
1951	57,869	2,461	18,244	307	78,881
1952	64,980	2,372	20,175	106	87,633
1953	72,389	2,614	22,508	2,545	100,056
1954	80,701	2,824	25,679	676	109,880
1955	89,353	3,240	29,196	548	122,337
INDUSTRIAL BUSINESS.					
1939	7,863	..	2,127	61	10,051
1951	14,915	..	3,831	85	18,831
1952	15,437	..	4,120	26	19,583
1953	15,975	..	4,415	603	20,993
1954	16,402	..	4,812	219	21,433
1955	16,757	..	5,195	179	22,131

(ii) *Total Expenditure.* The next table supplies details of the total expenditure, both within and beyond Australia, of life assurance offices during each of the years 1939 and 1951 to 1955:—

ORDINARY AND INDUSTRIAL LIFE ASSURANCE: TOTAL EXPENDITURE.
(£'000.)

Year.	Claims and Annuities paid.	Surrenders.	Cash Bonuses paid to Policy-holders.	Com-mission.	Share-holders' Dividends.	All other Expendi-ture.(a)	Total Expendi-ture.
ORDINARY BUSINESS.							
1939	12,320	2,668	380	1,483	125	3,867	20,843
1951	21,786	3,813	134	5,042	128	7,770	38,673
1952	24,034	4,691	161	5,479	120	10,355	44,840
1953	25,905	5,636	178	5,964	122	11,793	49,598
1954	28,772	6,739	178	6,724	132	11,709	54,254
1955	30,398	8,187	280	7,419	173	12,823	59,280
INDUSTRIAL BUSINESS.							
1939	3,763	576	..	1,619	72	1,278	7,308
1951	6,743	667	..	2,250	35	2,646	12,341
1952	7,594	878	..	2,405	75	3,030	13,982
1953	8,348	1,053	..	2,421	130	3,978	15,930
1954	9,124	1,096	..	2,399	88	3,408	16,115
1955	9,994	1,185	..	2,406	28	3,342	16,955

(a) Includes other expenses of management, licence fees and taxes, etc.

8. **Liabilities and Assets.**—(i) *General.* The liabilities of the Australian offices consist mainly of their assurance funds, but in the case of public companies there is a further liability on account of the shareholders' capital. The assets consist chiefly of government and municipal securities, mortgages, loans on policies, landed and house property, etc. Loans on personal security are granted by very few of the Australian offices. Separate details of liabilities and assets in respect of Australian business are not available.

(ii) *Total Liabilities and Assets.* In the two tables which follow, the details of liabilities and assets relate to all business (Australian and overseas) of Australian companies, the life assurance business of the two State Government offices, all business of the Provident Life Assurance Co. Ltd. (incorporated in New Zealand) and the Australian business only of the Prudential Assurance Co. Ltd. (incorporated in England). For various reasons several offices do not attempt the dissection of liabilities and assets between the industrial and ordinary branches, and, therefore, the figures in the following tables relate to the ordinary and industrial branches combined. Details of the total liabilities of life assurance offices for the years 1954 and 1955 are given in the following tables.

ORDINARY AND INDUSTRIAL LIFE ASSURANCE: TOTAL LIABILITIES, 1954.
(£'000.)

Item.	Life Assurance Business.	Other Classes of Business.	Total Liabilities.
<i>Shareholders' Capital—</i>			
Authorized	4,399	4,399
Less Unissued	1,704	1,704
<i>Subscribed Capital</i>	2,695	2,695
<i>Paid-up—</i>			
In Money	2,319	2,319
Otherwise than in Money	79	79
<i>Total</i>	2,398	2,398

ORDINARY AND INDUSTRIAL LIFE ASSURANCE: TOTAL
LIABILITIES, 1954—*continued.*
(£'000.)

Item.	Life Assurance Business.	Other Classes of Business.	Total Liabilities.
<i>Life Assurance Statutory Funds—</i>			
Ordinary Department	633,807	..	633,807
Industrial Department	118,969	..	118,969
<i>Total</i>	<i>752,776</i>	..	<i>752,776</i>
Funds in respect of Other Classes of Business ..	..	855	855
General Reserves	17,353	1,708	19,061
Profit and Loss Account Balance .. .. .	..	143	143
<i>Total, Shareholders' Capital, Assurance Funds and Reserves</i>	<i>770,129</i>	<i>5,104</i>	<i>775,233</i>
<i>Other Liabilities—</i>			
Deposits	1,406	3,096	4,502
Staff Provident and Superannuation Funds ..	191	314	505
Claims admitted or intimated but not paid ..	9,021	116	9,137
Annuities due but not paid	6	..	6
Premiums Paid in Advance and in Suspense ..	1,093	15	1,108
Sundry Creditors	2,706	267	2,973
Bank Overdraft	2,390	254	2,644
Reserves and Provisions for Taxation	2,823	147	2,970
All other Liabilities	473	2	475
Total Liabilities	790,238	9,315	799,553

ORDINARY AND INDUSTRIAL LIFE ASSURANCE: TOTAL LIABILITIES, 1955.
(£'000.)

Item.	Life Assurance Business.	Other Classes of Business.	Total Liabilities.
<i>Shareholders' Capital—</i>			
Authorized .. .. .	..	4,379	4,379
Less Unissued .. .. .	..	1,697	1,697
<i>Subscribed Capital</i> .. .. .	..	<i>2,682</i>	<i>2,682</i>
<i>Paid-up—</i>			
In Money .. .. .	..	2,310	2,310
Otherwise than in Money .. .. .	..	79	79
<i>Total</i> .. .. .	..	<i>2,389</i>	<i>2,389</i>
<i>Life Assurance Statutory Funds—</i>			
Ordinary Department	696,864	..	696,864
Industrial Department	124,138	..	124,138
<i>Total</i>	<i>821,002</i>	..	<i>821,002</i>
Funds in respect of Other Classes of Business ..	..	946	946
General Reserves	18,271	1,870	20,141
Profit and Loss Account Balance .. .. .	..	204	204
<i>Total, Shareholders' Capital, Assurance Funds and Reserves</i>	<i>839,273</i>	<i>5,409</i>	<i>844,682</i>
<i>Other Liabilities—</i>			
Deposits	2,007	3,102	5,109
Staff Provident and Superannuation Funds ..	249	265	514
Claims admitted or intimated but not paid ..	9,581	167	9,748
Annuities due but not paid	6	..	6
Premiums Paid in Advance and in Suspense ..	1,116	16	1,132
Sundry Creditors	3,661	246	3,907
Bank Overdraft	3,715	335	4,050
Reserves and Provisions for Taxation	3,322	167	3,489
All other Liabilities	509	5	514
Total Liabilities	863,439	9,712	873,151

The following tables furnish details of the total assets of life assurance offices for the years 1954 and 1955:—

ORDINARY AND INDUSTRIAL LIFE ASSURANCE : TOTAL ASSETS, 1954.
(£'000.)

Item.	Life Assurance Business.	Other Classes of Business.	Total.	Amount of Total Assets held in Australia.
Freehold and leasehold property, office premises, furniture, etc.	26,709	386	27,095	18,774
<i>Loans—</i>				
On Mortgage	220,272	99	220,371	165,555
On Policies of the Company including Advances of Premiums	31,135	..	31,135	23,096
Other Loans	21,793	444	22,237	22,085
<i>Total Loans</i>	<u>273,200</u>	<u>543</u>	<u>273,743</u>	<u>210,736</u>
<i>Investments—</i>				
Government Securities—				
Australia	215,795	5,833	221,628	213,193
Other	52,680	92	52,772	2
Securities of Local and Semi-Governmental Bodies	138,397	194	138,591	107,559
Other Investments	68,694	1,591	70,285	58,173
<i>Total Investments</i>	<u>475,566</u>	<u>7,710</u>	<u>483,276</u>	<u>378,927</u>
Cash on Deposit, Current Account and in hand	2,861	86	2,947	2,333
Other Assets	11,902	590	12,492	9,562
<i>Total Assets</i>	<u>790,238</u>	<u>9,315</u>	<u>799,553</u>	<u>620,332</u>

ORDINARY AND INDUSTRIAL LIFE ASSURANCE : TOTAL ASSETS, 1955.
(£'000.)

Item.	Life Assurance Business.	Other Classes of Business.	Total.	Amount of Total Assets held in Australia.
Freehold and leasehold property, office premises, furniture, etc.	31,713	436	32,149	23,094
<i>Loans—</i>				
On Mortgage	264,300	155	264,455	197,710
On Policies of the Company including Advances of Premiums	34,537	..	34,537	25,661
Other Loans	23,726	540	24,266	23,923
<i>Total Loans</i>	<u>322,563</u>	<u>695</u>	<u>323,258</u>	<u>247,294</u>
<i>Investments—</i>				
Government Securities—				
Australia	213,262	5,921	219,183	209,217
Other	51,155	98	51,253	..
Securities of Local and Semi-Governmental Bodies	143,923	186	144,109	111,254
Other Investments	84,310	1,667	85,977	71,756
<i>Total Investments</i>	<u>492,650</u>	<u>7,872</u>	<u>500,522</u>	<u>392,227</u>
Cash on Deposit, Current Account and in hand	3,566	73	3,639	2,922
Other Assets	12,947	636	13,583	10,287
<i>Total Assets</i>	<u>863,439</u>	<u>9,712</u>	<u>873,151</u>	<u>675,824</u>

(iii) *Assets held in Australia.* Details of assets held in Australia for the years 1939 and 1951 to 1955 are set out in the following table:—

ORDINARY AND INDUSTRIAL LIFE ASSURANCE(a): ASSETS HELD IN AUSTRALIA.
(£'000.)

Particulars.	1939. (b)	1951.	1952.	1953.	1954.	1955.
Landed and house property ..	12,823	13,941	15,776	16,840	18,060	22,345
Government and municipal securities	115,712	267,158	271,892	301,254	320,754	320,471
Other investments	6,700	45,613	48,218	51,885	58,173	71,756
Loans on mortgages	61,720	113,312	136,006	149,507	165,555	197,710
Loans on companies' policies ..	22,445	18,067	20,580	21,745	23,096	25,661
Other loans	(c)	16,463	19,998	22,008	22,085	23,923
All other assets	8,116	11,562	12,128	11,685	12,609	13,958
Total Assets held in Australia	227,516	486,116	524,598	574,924	620,332	675,824

(a) Life assurance and other classes of business. (b) Australian assets. (c) Included with other investments.

9. **Loans.**—In the following table, details are given of new loans granted by life assurance companies during each of the years ended 31st December, 1952 to 1956. The information has been compiled from monthly returns furnished by each company. New loans granted by the Government Insurance Office of New South Wales and the Queensland State Government Insurance Office are not included. Advances of premiums are also excluded.

LIFE ASSURANCE COMPANIES : NEW LOANS GRANTED.
(£'000.)

Particulars.	1952.	1953.	1954.	1955.	1956.
CLASS OF SECURITY.					
Mortgage of Real Estate ..	30,140	26,863	33,216	50,081	47,876
Companies' Policies ..	4,329	3,477	3,725	4,793	5,903
Other	4,937	3,967	4,113	3,415	4,081
Total	39,406	34,307	41,054	58,289	57,860
STATE OR TERRITORY.(a)					
New South Wales	21,748	18,637	17,699	25,884	22,542
Victoria	10,687	9,638	12,196	17,534	20,121
Queensland(b)	2,065	1,841	4,158	3,400	4,548
South Australia(c)	2,349	1,754	2,765	4,800	4,698
Western Australia	1,649	1,694	3,005	4,581	3,550
Tasmania	858	731	1,176	2,018	2,324
Aust. Cap. Territory	50	12	55	72	77
Total	39,406	34,307	41,054	58,289	57,860

(a) State or Territory of location of mortgage, registration of policy, or residence of borrower.
(b) Includes Papua and New Guinea. (c) Includes Northern Territory.

§ 3. Fire, Marine and General Insurance.

1. **General.**—The following statistics which are in respect of the Australian business of companies operating in Australia and State Government insurance offices, conform to the following definitions and should be interpreted in accordance therewith.

(a) Premiums represent the full amount receivable in respect of policies issued and renewed in the year, less returns, rebates and bonuses paid or credited to policy-holders during the year. They are not adjusted to provide for premiums unearned at the end of the year and consequently the amounts differ from "earned premium income" appropriate to the year. When business is increasing, as in recent years, premiums receivable (as shown in the statistics) are greater than "earned premium income" appropriate to the year. The converse applies when business is declining.

(b) Claims or losses include provision for outstanding claims and represent claims or losses incurred in the year. Salvage and other amounts recoverable have been deducted.

(c) Contributions to Fire Brigades, Commission and Agents' Charges, and Expenses of Management represent mainly charges paid during the year.

(d) Taxation represents mainly payments made during the year, and includes income tax, pay-roll tax, licence fees, stamp duty (where paid by the company), etc. Income tax paid during the year is based on the income of earlier years.

The tables contain selected items of statistics and the information shown is not suitable for the construction of a "profit and loss" statement or "revenue" account.

In cases where the business is underwritten in one State and the risk is situated in another the business is included in the State in which the policy was issued.

During 1955-56, revenue from premiums amounted to £123,970,000 and from net interest on investments, etc., to £4,372,000, totalling £128,342,000. Expenditure on claims amounted to £71,913,000, contributions to fire brigades £2,922,000, commission and agents charges £12,509,000, expenses of management £20,246,000 and taxation £4,518,000, a total of £112,108,000.

2. **States.**—The following table shows, for each State, the aggregate premium income less reinsurances and returns, and claims or losses less amounts recoverable, for all classes of insurance other than life for the years 1938-39 and 1951-52 to 1955-56.

FIRE, MARINE AND GENERAL INSURANCE : PREMIUMS AND LOSSES—STATES.
(£'000.)

State.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
GROSS PREMIUMS, LESS REINSURANCES AND RETURNS.						
New South Wales(a)	6,943	31,107	35,130	38,381	42,696	48,726
Victoria	4,505	24,441	28,215	30,775	33,946	39,110
Queensland	2,327	9,015	10,733	12,016	13,801	15,377
South Australia	1,245	6,167	7,275	8,041	9,115	10,244
Western Australia	1,373	4,975	5,779	6,224	6,854	7,362
Tasmania	457	1,878	2,214	2,547	2,813	3,151
Total	16,850	77,583	89,346	97,984	109,225	123,970
GROSS CLAIMS OR LOSSES, LESS AMOUNTS RECOVERABLE.						
New South Wales(a)	3,842	16,661	17,848	20,981	23,302	28,888
Victoria	2,194	12,205	15,208	16,709	20,303	23,081
Queensland	1,071	4,979	5,650	5,981	8,234	8,717
South Australia	487	2,858	3,021	4,835	6,402	5,441
Western Australia	731	2,938	3,085	3,078	3,671	4,131
Tasmania	204	724	953	1,084	1,372	1,655
Total	8,529	40,365	45,765	52,668	63,284	71,913

(a) From 1947-48 excludes Workers' Compensation Insurance in coal-mining industry in New South Wales.

3. **Classes of Insurance.**—The following statement shows premiums and losses in respect of the principal classes of risks, for the years 1938–39 and 1951–52 to 1955–56 :—

**FIRE, MARINE AND GENERAL INSURANCE : PREMIUMS AND LOSSES—
PRINCIPAL CLASSES OF RISK, AUSTRALIA.**

(£'000.)

Class of Risk.	1938–39.	1951–52.	1952–53.	1953–54.	1954–55.	1955–56.
GROSS PREMIUMS, LESS REINSURANCES AND RETURNS.						
Fire	5,597	18,535	21,366	22,170	23,603	25,807
Workers' Compensation(a) ..	4,361	17,159	19,310	20,279	22,133	25,660
Motor Vehicle—						
Compulsory Third Party ..	} 3,848	{ 4,725	7,106	8,496	10,480	12,789
Other			18,048	21,934	25,805	29,409	32,659
Marine	1,018	7,433	5,940	6,056	6,637	7,179
Personal Accident	554	1,899	2,184	2,479	2,911	3,391
All other	1,472	9,784	11,506	12,699	14,052	16,485
Total	16,850	77,583	89,346	97,984	109,225	123,970

GROSS CLAIMS OR LOSSES, LESS AMOUNTS RECOVERABLE.

Fire	2,223	6,669	6,731	5,842	6,859	7,191
Workers' Compensation(a) ..	2,972	8,678	10,934	14,542	18,641	20,383
Motor Vehicle—						
Compulsory Third Party ..	} 2,324	{ 5,288	7,007	9,525	10,538	12,198
Other			12,025	13,436	13,950	17,239	21,924
Marine	243	3,352	3,420	2,263	2,706	2,878
Personal Accident	264	634	741	912	1,075	1,295
All other	503	3,719	3,496	5,634	6,226	6,044
Total	8,529	40,365	45,765	52,668	63,284	71,913

(a) From 1947–48 excludes Workers' Compensation in coal-mining industry in New South Wales.

The volume of business measured by the amount of premium income shows that fire insurance represented about 21.6 per cent. of total business during 1954–55 and 20.8 per cent. during 1955–56, workers' compensation 20.3 per cent. during 1954–55 and 20.7 per cent. during 1955–56, motor vehicles (including compulsory third party insurance) 36.5 per cent. in 1954–55 and 36.7 per cent. in 1955–56 and marine insurance 6.1 per cent. in 1954–55 and 5.8 per cent. in 1955–56.

E. FRIENDLY SOCIETIES.

1. **General.**—The total membership of friendly societies in Australia is just over 500,000 but as certain benefits, such as medical attendance and free medicines, and in many cases funeral expenses, are granted to members' families as well as to members themselves, this figure must, even when due allowance is made for young and unmarried members, be more than doubled to arrive at an estimate of the number of persons who receive some direct benefit from these societies. Legislation has conferred certain privileges on friendly societies, but, on the other hand, it insists on their registration, and it is the duty of the Registrars in the various States, prior to registering a new society, to see that its proposed rules conform to the law, and that the scale of contribution is sufficient to provide the promised benefits. Societies are obliged to forward to the Registrar annual returns about their membership and their finances, and reports are published in most of the States dealing with the returns received.

2. **Societies, Members and Revenue.**—The following table sets out the number of societies, members, etc., and revenue and expenditure and funds of registered societies for the year 1953–54. More detailed information is available in *Finance*, Bulletin No. 46.

FRIENDLY SOCIETIES(a) : 1953-54.

Particulars.	New South Wales. (b)	Victoria. (c)	Queensland.	South Australia.	Western Australia.	Tasmania. (c)	Total.
	No.	No.	No.	No.	No.	No.	No.
Registered Societies	37	142	24	15	13	20	
Branches	2,155	1,377	519	696	295	151	5,193
Benefit members at end of year ..	170,257	177,620	55,700	61,345	23,279	18,229	506,430
Average benefit members during year ..	174,919	178,733	56,988	62,633	23,597	18,503	515,373
Members who received sick pay ..	(d)	38,069	10,328	13,357	4,349	2,586	(d)
Total weeks sick pay granted ..	(d)	473,603	130,153	178,518	58,101	34,127	(d)
Average weeks per member sick ..	(d)	12.44	12.60	13.37	13.36	13.20	(d)
Deaths of benefit members ..	(d)	2,566	1,033	1,058	293	339	(d)
Proportion of deaths per 1,000 members (average)	(d)	14.36	18.13	16.89	12.42	18.27	(d)
Revenue—	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Entrance fees, levies and members' contributions	1,565	1,413	392	515	323	78	4,286
Interest, dividends and rents	275	342	116	173	40	29	1,229
All other revenue	77	71		13	35	58	
Total	1,917	1,826	508	701	398	165	5,515
Expenditure—							
Sick pay	224	278	78	89	27	18	714
Medical attendance and medicine ..	719	584	133	190	219	40	1,885
Sums payable at death	125	67	48	52	16	22	330
Administration	431	339	115	131	53	32	1,101
All other expenditure	52	166	..	51	15	24	308
Total	1,551	1,434	374	513	330	136	4,338
Total Funds	7,651	9,334	2,960	4,269	1,233	693	26,140

(a) Excludes juvenile branches, dispensaries, medical institutes and certain miscellaneous societies. Receipts and payments of subsidy under the Commonwealth medical and hospital benefit schemes are excluded. (b) Includes Australian Capital Territory. (c) Year 1954. (d) Not available.

F. PROBATES AND LETTERS OF ADMINISTRATION.

The following particulars give some idea of the number and value of estates of deceased persons in each State for the latest year for which information is available. Owing to differences in legislation in the various States, the figures are not entirely comparable.

PROBATES AND LETTERS OF ADMINISTRATION,

Particulars.	New South Wales. 1954-55. (a)	Victoria. 1954.	Queensland. 1953-54.	South Australia. 1954.	Western Australia. 1954.	Tasmania. 1954. (b)
Probates—						
Estates No.	17,795	10,358	1,813	2,789	2,180	997
Gross Value £	(c)	(d)	19,744,878	16,237,522	12,197,485	5,907,667
Net Value £	80,492,038	(d)	(c)	14,962,564	11,544,598	5,511,872
Letters of Administration—						
Estates No.	(c)	2,490	274	850	276	185
Gross Value £	(c)	(d)	2,990,350	1,577,049	816,549	429,645
Net Value £	(c)	(d)	(c)	1,409,358	721,380	383,204
Total—						
Estates No.	17,795	12,848	2,087	3,639	2,456	1,182
Gross Value £	(c)	66,516,396	22,735,228	17,814,571	13,014,034	6,337,312
Net Value £	80,492,038	62,702,533	(c)	16,371,922	12,265,978	5,895,076

(a) Total estates of deceased persons assessed for death duty. (b) Estates dealt with by Taxation Department. (c) Not available. (d) Not available separately.

G. LOTTERIES AND BETTING.

§ 1. Lotteries.

State Governments operate lotteries in New South Wales, Queensland and Western Australia. Tattersalls Lotteries and Tasmanian Lotteries are operated under Government licences in Victoria and Tasmania respectively.

New South Wales State Lotteries are conducted in accordance with the New South Wales State Lotteries Act, 1930 and the first drawing took place on 20th August, 1931. At present, each ordinary lottery consists of 100,000 tickets at 5s. 6d. each, with prizes totalling £17,550 and each special lottery of 100,000 tickets at 10s. each, with prize money totalling £31,700. In addition, there is a mammoth lottery consisting of 100,000 tickets at £1 each with prize money totalling £64,200. Net profits of the lottery are paid to the Consolidated Revenue Fund from which grants are made to hospitals.

Tattersalls Lotteries, which were previously conducted in Tasmania, were transferred to Victoria in 1954 and the first drawing in Melbourne took place on 8th July, 1954. The Tattersalls Consultations Act, 1953 provides that prizes in each consultation shall not be less than sixty per cent. of total subscriptions to that consultation, and that a duty equal to thirty-one per cent. of subscriptions shall be paid into the Consolidated Revenue Fund from which an equivalent amount will be paid out into the Hospitals and Charities Fund and the Mental Hospitals Fund in such proportions as the Treasurer determines from time to time. At present, tickets are priced at 5s. each (200,000) with prizes totalling £30,000; 10s. each (100,000) with prizes totalling £30,000, and £1 each (100,000) with prizes totalling £60,000. In addition there is a special Melbourne Cup consultation at £1 each (200,000) with prize money of £120,000.

In Queensland, the Golden Casket Art Union commenced in 1916 with the specific object of augmenting the funds of the Queensland War Council. Subsequently, Anzac Cottages and Nurses Quarters Funds benefited until 1920 when net profits were paid to the Department of Health and Home Affairs (Hospitals, Motherhood and Child Welfare Trust Fund) and used for the maintenance of hospitals, grants to institutions, and for motherhood and child welfare purposes. A stamp duty is imposed on tickets sold. The proceeds of this are paid to Consolidated Revenue Fund. At present, ordinary tickets are priced at 5s. 6d. each (100,000), special tickets at 10s. (100,000) and £1 (100,000) each with prizes totalling £17,550, £32,000 and £64,300 respectively. A special Melbourne Cup lottery with tickets priced at 15s. (100,000) and prizes totalling £48,100 was introduced in 1955.

In Western Australia, lotteries are conducted by the Lotteries Commission under the Lotteries Control Act of 1932. Profits are paid by the Commission to hospitals and other charities. At present tickets are priced at 2s. 6d. each (100,000) with prizes totalling £6,630 and 5s. each (100,000) with prizes totalling £16,630.

In Tasmania, lotteries are subject to the provisions of the Racing and Gaming Act 1950-1952. With the transfer of Tattersalls from Hobart to Melbourne, Tasmanian Lotteries commenced operations under Government licence and the first drawing took place on 30th June, 1954. The stamp duty on tickets sold and the tax on prize money are paid into Consolidated Revenue. At present tickets are priced at 5s. each (250,000) with prizes totalling £38,046; £1 each (250,000) with prizes totalling £152,188; £5 each (50,000 and 100,000) with prizes totalling £152,188 and £304,375 respectively; and £100 each (5,000) with prizes totalling £304,375.

Details of ticket sales, prizes allotted, and taxes paid and other net contributions to State Government revenues relating to lotteries drawn during each of the years ended 30th June, 1952 to 1956 are given in the following table:—

LOTTERIES: VALUE OF TICKET SALES, PRIZES ALLOTTED, TAXES PAID AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES.
(£'000.)

Year ended 30th June.	New South Wales.	Victoria.	Queensland.	Western Australia.	Tasmania.	Total.
TICKET SALES.						
1952	8,775	..	4,883	950	4,500	19,108
1953	10,335	..	5,650	975	4,800	21,760
1954	10,610	..	5,760	1,100	4,763	22,233
1955	11,268	8,450	6,115	1,112	1,703	28,648
1956	11,728	8,850	6,045	1,112	3,875	31,610
PRIZES ALLOTTED.						
1952	5,592	..	3,119	512	2,739	11,962
1953	6,584	..	3,609	530	2,922	13,645
1954	6,767	..	3,679	596	2,899	13,941
1955	7,180	5,070	3,908	603	1,036	17,797
1956	7,472	5,310	3,863	605	2,359	19,609
TAXES PAID AND OTHER NET CONTRIBUTIONS TO STATE GOVERNMENT REVENUES.						
1952	2,917	..	1,471	309	1,311	6,008
1953	3,434	..	1,699	310	1,398	6,841
1954	3,469	..	1,731	357	1,387	6,944
1955	3,689 (a)	2,620	1,836	364	496	9,005
1956	3,842	2,744	1,798	362	1,129	9,875

(a) Includes £25,000 paid to Tasmanian Government in respect of incomplete lotteries at date of transfer of Tattersalls Lotteries to Victoria.

§ 2. Betting.

Estimates of totalizator investments and investments with licensed bookmakers for the years 1951–52 to 1955–56 are given in the following table:—

TOTALIZATOR INVESTMENTS AND INVESTMENTS WITH LICENSED BOOKMAKERS.
(£'000.)

Year ended 30th June—	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
TOTALIZATOR INVESTMENTS.(a)							
1952	16,344	11,334	2,857	2,204	3,226	951	36,916
1953	14,190	10,314	2,888	2,337	3,019	839	33,587
1954	14,202	10,172	2,925	2,497	3,002	993	33,791
1955	13,101	9,442	2,713	2,332	2,912	981	31,481
1956	13,645	10,669	2,530	2,267	2,263	1,004	32,378
INVESTMENTS WITH LICENSED BOOKMAKERS.(b)							
1952	115,485	52,000	(c)	25,080	(c)	8,889	(c)
1953	110,080	50,000	(c)	24,642	(c)	10,764	(c)
1954	114,402	55,000	(c)	27,197	(c)	11,662	(c)
1955	112,876	45,000	(c)	26,721	(c)	10,828	(c)
1956	113,225	52,000	(c)	30,019	(d)24,012	11,577	(c)

(a) Estimated from taxes on totalizators. (b) Estimated from taxes on betting with licensed bookmakers. (c) Not available. (d) Eleven months ended 30th June, 1956.

H. GOVERNMENT, SEMI-GOVERNMENTAL AND PARLIAMENTARY PENSION AND SUPERANNUATION SCHEMES.

§ 1. Government and Semi-Governmental Pension and Superannuation Schemes.

The Commonwealth and all State Governments have established pension or superannuation schemes for their employees. These schemes are operated through funds to which both the Government and the employees make contributions. Employees of semi-governmental authorities are in some cases covered by the Commonwealth or State Government scheme and in other cases by a separate scheme of the authority.

In the following table, aggregate details are given for the year 1954-55, of the receipts, expenditure, accumulated funds and number of contributors and pensioners of the Commonwealth and State Government and main semi-governmental schemes. The funds included are:—

- (a) *Commonwealth*.—The Superannuation Fund and Defence Forces Retirement Benefits Fund.
- (b) *New South Wales*.—State Superannuation Fund, Government Railways Superannuation Fund and Police Superannuation and Reward Fund.
- (c) *Victoria*.—The State Superannuation Fund, Police Superannuation Fund, Police Pensions Fund, Melbourne Harbor Trust Superannuation Account, Geelong Harbor Trust Superannuation Fund, Melbourne and Metropolitan Board of Works Superannuation Fund, State Electricity Commission Provident Fund, Gas and Fuel Corporation Superannuation Fund, Metropolitan Fire Brigades Board Superannuation Fund, Country Fire Authority Superannuation Fund and Port Phillip Pilots' Sick and Superannuation Fund.
- (d) *Queensland*.—Public Service Superannuation Fund and Police Superannuation Fund.
- (e) *South Australia*.—South Australia Superannuation Fund, Police Pensions Fund and Public Service Superannuation Fund.
- (f) *Western Australia*.—The Superannuation Fund.
- (g) *Tasmania*.—Public Service Superannuation Fund (Old and New Funds), Police Provident Fund and State Teachers' Superannuation Fund.

GOVERNMENT AND SEMI-GOVERNMENTAL PENSION AND SUPERANNUATION SCHEMES, 1954-55.

Particulars.	C'wlth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Receipts—</i>								
Contributions—	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Employes ..	6,094	3,528	2,564	325	716	268	358	13,853
Government ..	3,678	6,904	3,242	243	737	520	229	15,553
Interest ..	1,606	1,894	1,139	243	344	125	100	5,451
Other ..	71	6	34	5	5	1	5	127
<i>Total ..</i>	<i>11,449</i>	<i>12,332</i>	<i>6,979</i>	<i>816</i>	<i>1,802</i>	<i>914</i>	<i>692</i>	<i>34,984</i>
<i>Expenditure—</i>								
Pension Payments ..	4,436	5,902	3,172	348	951	549	268	15,626
Gratuities or Rewards ..	236	41	91	..	84	..	8	376
Refund of Contributions	931	561	229	76	..	28	57	1,966
Other ..	..	55	8	..	36	..	3	102
<i>Total ..</i>	<i>5,603</i>	<i>6,559</i>	<i>3,500</i>	<i>424</i>	<i>1,071</i>	<i>577</i>	<i>336</i>	<i>18,070</i>
<i>Funds at end of Year ..</i>	<i>45,992</i>	<i>48,400</i>	<i>31,784</i>	<i>5,472</i>	<i>8,969</i>	<i>3,471</i>	<i>2,669</i>	<i>146,757</i>
<i>Contributors at end of Year—</i>								
Males ..	No. 119,998	No. 87,310	No. 41,524	No. 10,392	No. 11,816	No. 6,989	No. 5,699	No. 310,304
Females ..	13,756	8,526	5,266	3,611	1,344	583	1,756	310,304
<i>Total ..</i>	<i>133,754</i>	<i>87,310</i>	<i>47,050</i>	<i>14,003</i>	<i>13,160</i>	<i>7,572</i>	<i>7,455</i>	<i>310,304</i>
<i>Pensioners at end of Year—</i>								
Males ..	8,392	} 24,133	8,078	1,027	2,775	2,366	789	} 68,481
Female ex-employees ..	845		1,099	225	439	166	165	
Widows ..	5,526		5,817	268	2,240	1,206	460	
Children ..	1,280		618	35	240	176	116	
<i>Total ..</i>	<i>16,043</i>		<i>24,133</i>	<i>15,612</i>	<i>1,555</i>	<i>5,694</i>	<i>3,914</i>		1,530

For details of the individual funds summarized above see *Finance Bulletin* No. 46, issued by this Bureau.

§ 2. Parliamentary Pension and Superannuation Schemes.

Pension and superannuation schemes have been established for members of the Commonwealth and State Parliaments. Details of these schemes, except for Tasmania, are given in pp. 91 to 99 of Official Year Book No. 38. Details of the Tasmanian scheme, which came into operation in November, 1955, are given in Chapter III.—General Government, p. 72 of this volume. All the schemes are operated through funds to which the members of Parliament and the Commonwealth or States contribute. Details of the receipts, expenditure, funds and number of contributors and pensioners for the year 1954-55 are given in the following table:—

PARLIAMENTARY PENSION AND SUPERANNUATION SCHEMES, 1954-55.

Particulars.	C'with.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Total.
<i>Receipts—</i>	£	£	£	£	£	£	£
<i>Contributions—</i>							
Members	29,710	13,693	14,708	7,358	4,161	5,200	74,830
Government	10,447	5,976	8,191	7,358	7,661	5,200	44,833
Interest	5,728	2,133	..	7,859	2,264	980	18,964
Other .. .. .	..	..	..	..	..	60	60
<i>Total</i>	<i>45,885</i>	<i>21,802</i>	<i>22,899</i>	<i>22,575</i>	<i>14,086</i>	<i>11,440</i>	<i>138,687</i>
<i>Expenditure—</i>							
Pension Payments (a)	13,530	11,225	22,899	2,515	3,171	3,345	56,685
Refund of Contributions	720	..	..	..	..	240	960
Other .. .. .	..	..	..	..	60	..	60
<i>Total</i>	<i>14,250</i>	<i>11,225</i>	<i>22,899</i>	<i>2,515</i>	<i>3,231</i>	<i>3,585</i>	<i>57,705</i>
<i>Funds at end of Year</i>	<i>166,385</i>	<i>62,620</i>	<i>..</i>	<i>189,605</i>	<i>64,128</i>	<i>31,343</i>	<i>514,081</i>
<i>Contributors at end of Year</i>	<i>No. 183</i>	<i>No. 98</i>	<i>No. 100</i>	<i>No. 71</i>	<i>No. 59</i>	<i>No. 78</i>	<i>No. 589</i>
<i>Pensioners at end of Year—</i>							
Ex-members	15	17	(b)	11	4	10	(b)
Widows	13	13	(b)	..	6	12	(b)
<i>Total</i>	<i>28</i>	<i>30</i>	<i>(b)</i>	<i>11</i>	<i>10</i>	<i>22</i>	<i>(b)</i>

(a) Including lump sum payments.

(b) Not available.

CHAPTER XXI.

PUBLIC FINANCE.

NOTE.—The subject of "Public Finance" is dealt with in this Chapter under the two major divisions of Commonwealth Finance and State Finance. The close financial relations between the Commonwealth and States, however, particularly since the Financial Agreement has been in operation, demand also a combination of these two divisions under the heading of Commonwealth and State Finance. Under the Financial Agreement, the Commonwealth assumed the liability to bondholders for the States' Debts existing at the date of the Agreement and now arranges for all borrowings for and on behalf of the Commonwealth or any State and for all conversions, renewals, redemptions and consolidations of the Public Debts of the Commonwealth and the States. In view of this, it has been found convenient to deal with the Commonwealth and State Public Debt in a separate division.

The subject of income taxes is also dealt with in a separate division.

A. COMMONWEALTH FINANCE.

§ 1. General.

1. **Financial Provisions of the Constitution.**—The main provisions of the Constitution relating to the initiation and development of the financial system of the Commonwealth are contained in Sections 81 to 105A of the Commonwealth Constitution (*see* pp. 17–20 of this Year Book). Two other sections which have a most important bearing on questions of Commonwealth finance are Sections 69 and 51.

Section 69 provides for the transfer from the States to the Commonwealth of certain specified departments, and Section 51, in outlining the powers of the Commonwealth Parliament, implies the transfer or creation of other departments. Section 87 deals with the financial relations between the Commonwealth and the States. These matters have been treated in previous issues of the Official Year Book and on pp. 775–778 of this issue a summary is given of the present provisions for Commonwealth financial assistance to the States.

The majority of the tables relating to Commonwealth Finance have been compiled from the annual Budget Papers as presented to Parliament by the Treasurer of the Commonwealth.

2. **Accounts of Commonwealth Government.**—The Commonwealth Government bases its accounts upon three funds, the Consolidated Revenue Fund, the Trust Fund and the Loan Fund.

§ 2. Commonwealth Consolidated Revenue Fund.

I. Nature of Fund.

1. **Provisions of the Constitution.**—The provisions made for the establishment of a Commonwealth Consolidated Revenue Fund, and the means to be adopted for operating on the fund, are contained in Sections 81 to 83 of the Constitution (*see* p. 17 of this Year Book).

2. **Annual Results of Transactions.**—In the early 1920's, receipts and expenditure of the Consolidated Revenue Fund each ranged between £60 million and £70 million. Excess receipts in these years amounted to one or two million pounds a year, and were utilized for a variety of purposes, e.g., for debt redemption, naval construction, main roads, science

and industry investigations, prospecting for oil and precious metals, civil aviation, etc. In the later 'twenties and early 'thirties, when receipts and expenditure were each about £70 million or £80 million a year, there were annual deficiencies, which by the end of 1930-31 had accumulated to more than £17 million.

In subsequent years (receipts and expenditure each rising from about £70 million in 1931-32 to £95 million in 1938-39), there were excess receipts of up to £3.5 million a year. Approximately £1.5 million of these excess receipts were used to reduce the accumulated deficiency, and the balance for non-recurring grants to the States, post office works and the provision of defence equipment. The balance of the accumulated deficiency (£15.7 million) was funded in 1937-38.

For most of the 1939-45 War years and thereafter, the Consolidated Revenue Fund has been balanced, as all available revenue after charging expenditure on ordinary services has been used for defence, war and repatriation purposes.

During the years 1951-52 to 1954-55, the Fund was balanced after special payments of £98.5 million to the National Debt Sinking Fund, £13.4 million to the War Pensions Trust Account and £56.3 million and £70.1 million to the Debt Redemption Reserve Trust Account. The amounts so transferred were subsequently invested wholly or partly in special loans for State works requirements.

Receipts and expenditure increased from £95 million in 1938-39 to £377 million in 1944-45. By 1950-51, they had risen to £842 million and by 1953-54 to £1,023 million. Receipts and expenditure for 1954-55 were £1,067 million.

II.—Revenue.

1. **General.**—The following table shows details of the revenue from each source and the amount per head of population under each of the main headings during the years 1938-39 and 1950-51 to 1954-55. Taxation constitutes the main source of Commonwealth revenue e.g. 87.8 per cent. in 1954-55.

COMMONWEALTH CONSOLIDATED REVENUE FUND : SOURCES OF REVENUE. (£'000.)

Source.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Taxation</i>	74,111	777,187	934,011	895,464	900,450	937,608
Per head of population ..	£10 13 9	£93 12 0	£109 10 4	£102 10 6	£101 3 5	£103 2 11
<i>Business Undertakings</i> ..	17,892	48,792	64,955	70,933	75,126	80,270
Per head of population ..	£2 11 9	£5 17 6	£7 12 4	£8 2 5	£8 8 10	£8 16 6
<i>Territories(a)</i>	356	1,150	1,558	1,779	2,195	2,419
Per head of population ..	£0 1 0	£0 2 10	£0 3 8	£0 4 1	£0 4 11	£0 5 4
<i>Other Revenue</i> —						
Interest, etc.	1,144	2,756	3,795	5,415	8,797	12,428
Coinage	128	499	895	310	750	725
Defence	151	702	499	2,188	2,809	4,106
Atomic Energy Commission				1,174	2,791	1,082
Civil Aviation	6	3,504	3,247	3,501	4,313	4,644
Health	18	31	51	43	80	86
Patents, Trade Marks, etc. . .	68	128	143	183	187	211
Bankruptcy	31	23	27	31	49	54
Wartime Trading Profits—						
Wool				42,361		
Commerce and Agriculture			34	121		
Shipping and Transport ..	158	282	260	255	391	321
Net Profit on Australian Note						
Issue	767	3,394	3,381	4,861	5,707	5,516
Surplus Balances of Trust						
Accounts		1,034	179	761	4,190	8,237
Australian Shipping Board						
Transfer of Surplus Funds ..					4,000	
Joint Coal Board—Repayment						
of Advances	235	2,288	3,793	500	3,342	3,550
Other				10,187	7,507	6,244
<i>Total</i>	2,706	14,663	16,304	71,891	45,019	47,204
Per head of population ..	£0 7 9	£1 15 4	£1 18 2	£8 4 7	£5 1 2	£5 3 10
<i>Grand Total</i>	95,065	841,792	1,016,828	1,040,067	1,022,790	1,067,441
Per head of population ..	£13 14 3	£101 7 8	£119 4 6	£119 1 7	£114 18 4	£117 8 7

(a) Excludes Railways.

A graphical representation of the revenue and expenditure of the Commonwealth Consolidated Revenue Fund appears on p. 765.

2. Taxation.—(i) *Total Collections.* (a) *Amount.* Collections under each heading for the years 1938–39 and 1950–51 to 1954–55 are shown below :—

COMMONWEALTH TAXATION : TOTAL NET COLLECTIONS.

(£'000.)

Heading.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Customs	31,161	91,921	113,936	70,720	94,757	101,254
Excise	16,472	73,083	99,981	113,104	125,460	143,149
Sales Tax	9,308	57,173	95,459	89,067	95,689	100,446
Land Tax	1,489	3,591	6,199	1,250	221	13
Pay-roll Tax .. .. .	..	28,721	37,170	40,171	40,384	41,455
Income Taxes(a)	11,883	451,488	551,142	554,737	528,181	532,916
Estate Duty	1,915	6,401	7,778	8,393	9,825	9,614
Gift Duty .. .. .	..	1,044	1,202	1,162	1,386	1,618
Entertainments Tax .. .. .	..	5,148	6,161	6,708	1,977	—2
Special Industry Taxes(b)	1,883	58,617	14,983	10,152	2,570	7,145
Total Taxation	74,111	777,187	934,011	895,464	900,450	937,608

(a) Includes Social Services Contribution, War-time (Company) Tax, Super Tax, Undistributed Profits Tax and Wool Deduction. (b) Used for purposes of industries concerned. The taxes are as follows :—Flour Tax, Wool Levy, Wool Contributory Charge, Wheat Export Charge, Miscellaneous Export Charges, Stevedoring Industry Charge and Gold Tax.

NOTE.—Minus (—) indicates an excess of refunds.

(b) *Proportion of each Class on Total Collections.* The following table shows the proportion of the total collections represented by returns from each class of taxation for the years 1938–39 and 1950–51 to 1954–55 :—

COMMONWEALTH TAXATION : PROPORTION OF EACH CLASS TO TOTAL NET COLLECTIONS.

(Per Cent.)

Heading.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Customs	42.1	11.8	12.2	7.9	10.5	10.8
Excise	22.3	9.4	10.7	12.6	13.9	15.3
Sales Tax	12.6	7.4	10.2	10.0	10.6	10.7
Land Tax	2.0	0.5	0.7	0.2	..	..
Pay-roll Tax .. .. .	..	3.7	4.0	4.5	4.5	4.4
Income Taxes(a)	16.0	58.1	59.0	61.9	58.7	56.8
Estate Duty	2.6	0.8	0.8	0.9	1.1	1.0
Gift Duty .. .. .	..	0.1	0.1	0.1	0.2	0.2
Entertainments Tax .. .. .	..	0.7	0.7	0.8	0.2	..
Special Industry Taxes(b)	2.4	7.5	1.6	1.1	0.3	0.8
Total Taxation	100.0	100.0	100.0	100.0	100.0	100.0

(a) See note (a) to previous table.

(b) See note (b) to previous table.

(ii) *Customs Revenue.* Particulars of net customs receipts for the years 1938–39 and 1950–51 to 1954–55 are shown in the following table :—

COMMONWEALTH CUSTOMS REVENUE : CLASSIFICATION OF NET RECEIPTS.

(£'000.)

Classes.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Ales, spirits and beverages ..	1,165	1,890	2,751	1,999	2,344	2,743
Tobacco and manufactures ..	3,256	20,830	24,996	19,199	18,890	15,813
Agricultural products and groceries ..	1,373	1,697	1,806	1,217	1,682	1,967
Textiles and attire ..	2,801	9,894	12,842	3,242	10,569	12,698
Metals and machinery ..	2,386	8,574	14,342	6,843	9,775	12,858
Oils, paints, etc. ..	9,927	23,720	25,915	25,601	27,222	22,763
Earthenware, etc. ..	510	1,467	2,188	660	1,613	2,320
Drugs and chemicals ..	310	758	941	313	655	914
Wood, wicker and cane ..	739	488	695	307	1,035	1,612
Jewellery and fancy goods ..	481	2,530	2,908	1,138	2,596	3,524
Leather and rubber ..	477	1,535	2,044	744	1,275	1,701
Paper and stationery ..	454	545	934	324	874	1,390
Vehicles ..	2,062	7,804	8,902	2,178	5,736	9,662
Miscellaneous articles ..	1,056	1,749	2,497	330	1,821	2,490
Primage ..	3,914	8,206	9,296	6,181	8,004	8,130
Other receipts ..	250	234	879	444	666	669
Total	31,161	91,921	113,936	70,720	94,757	101,254

(iii) *Excise Revenue.* Net excise receipts for the years 1938–39 and 1950–51 to 1954–55 were as follows :—

COMMONWEALTH EXCISE REVENUE : CLASSIFICATION OF NET RECEIPTS.

(£'000.)

Particulars.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Beer	7,289	37,243	56,941	65,826	71,060	76,362
Spirits	1,604	8,129	8,890	6,680	6,355	6,496
Tobacco	3,868	10,759	13,845	16,036	16,211	15,141
Cigars and cigarettes ..	2,419	10,662	13,848	17,890	23,081	29,030
Cigarette papers ..	531	1,166	1,085	1,019	1,072	1,007
Petrol	582	3,065	3,419	3,823	5,549	12,898
Matches	82	1,213	1,058	955	1,083	1,096
Playing cards	11	63	55	40	53	51
Coal .. ..	..	375	499	552	579	600
Miscellaneous	86	408	341	283	417	468
Total	16,472	73,083	99,931	113,104	125,460	143,149

(iv) *Other Taxation. (a) General.* Taxes other than customs and excise are, in general, assessed and collected by the Commissioner of Taxation. The organization comprises an office in each State assessing the returns of taxpayers whose interests are restricted to that State only, and a Central Office assessing taxpayers whose interests are in more than one State.

(b) *Sales Tax.* The sales tax was first imposed in August, 1930. The operation of the tax is controlled chiefly by a system of registration of taxpayers whereby all manufacturers and wholesale merchants, who are the taxpayers under the Act in respect of goods sold in Australia, must be registered with the Department. The tax on imports subject to sales tax is collected by the Customs Department at ports of entry.

Since the inception of the tax, certain exemptions have been allowed. These exemptions, which have been extended from time to time, relate mainly to goods of an essential nature or for use in primary production. The most recent exemptions were those granted from 19th August, 1954.

A general rate of Sales Tax is levied on all goods other than those specified in the schedules of the Sales Tax (Exemptions and Classifications) Act 1935–1954. These schedules

set out details of goods exempt from sales tax and those subject to special rates. The general and special rates which operated from 15th November, 1946, were :—

Period.	General Rate.	Special Rates.
15th November, 1946 to 7th September, 1949 ..	10 per cent. ..	25 per cent.
8th September, 1949 to 12th October, 1950 ..	8½ per cent. ..	25 per cent.
13th October, 1950 to 26th September, 1951 ..	8½ per cent. ..	10, 25 and 33½ per cent.
27th September, 1951 to 6th August, 1952 ..	12½ per cent. ..	20, 25, 33½, 50 and 66½ per cent.
7th August, 1952 to 9th September, 1953 ..	12½ per cent. ..	20, 33½ and 50 per cent.
10th September, 1953 to 18th August, 1954 ..	12½ per cent. ..	16½ per cent.
19th August, 1954 to 14th March, 1956 ..	12½ per cent. ..	10 and 16½ per cent.
From 15th March, 1956	12½ per cent. ..	10, 16½, 25 and 30 per cent.

For particulars of rates applicable since the inception of Sales Tax in August, 1930, see Official Year Book No. 37, p. 617.

Particulars of the net amount of sales tax payable, and the sales of taxable and exempt goods in each State for 1954-55, are given in the following table. The figures relate to sales during the period 1st July to 30th June. The figures for sales tax payable differ from those for net collections shown on p. 755, because the latter include some adjustments in respect of earlier years tax and would include only tax payable on returns lodged during the year, which in general cover sales for the period June to May.

SALES TAX AND AMOUNT OF SALES, 1954-55.
(£'000.)

Particulars.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	Total.
Net Sales on which Sales Tax was payable at—								
10 per cent. ..	57,242	43,293	15,316	14,111	8,330	2,307	21	140,620
12½ per cent. ..	165,903	119,652	55,508	43,588	28,360	8,357	239	421,607
16½ per cent. ..	80,758	60,956	23,898	27,214	10,129	1,745	13	204,713
Total ..	<u>303,903</u>	<u>223,901</u>	<u>94,722</u>	<u>84,913</u>	<u>46,819</u>	<u>12,409</u>	<u>273</u>	<u>766,940</u>
Sales of Exempt Goods by Registered Persons ..	670,759	501,918	216,580	150,304	111,255	46,370	2,156	1,699,342
Total Sales of Taxable and Exempt Goods ..	974,662	725,819	311,302	235,217	158,074	58,779	2,429	2,466,282
Sales Tax Payable ..	40,467	29,445	12,453	11,396	6,066	1,566	34	101,427

(a) Includes Australian Capital Territory.

Sales of taxable and exempt goods and sales tax payable for Australia as a whole, are shown in the following table for the years 1938-39 and 1950-51 to 1954-55:—

SALES TAX AND AMOUNT OF SALES.
(£'000.)

Year.	Net Sales on which Sales Tax was Payable.	Sales of Exempt Goods by Registered Persons.	Total Sales of Taxable and Exempt Goods.	Sales Tax Payable.
1938-39	196,491	280,656	477,147	9,363
1950-51	552,919	1,138,887	1,691,806	54,471
1951-52	623,390	1,321,696	1,945,086	91,332
1952-53	555,390	1,342,279	1,897,669	86,085
1953-54	687,946	1,466,323	2,154,269	96,079
1954-55	766,940	1,699,342	2,466,282	101,427

In the foregoing tables, sales include goods transferred to stock for sale by retail, goods imported by persons other than registered taxpayers, and goods used in the business of the taxpayer. Exempt sales relate to goods exempted from sales tax under the Sales Tax (Exemptions and Classifications) Act 1935–1954. The figures shown in the foregoing tables do not represent the total sales of all commodities, as vendors trading in exempt goods only are not required to be registered and consequently the volume of their sales is not included in the statistics above. In addition, non-taxable sales (i.e. goods sold by one registered taxpayer to another registered taxpayer) are excluded.

(c) *Land Tax.* Commonwealth Land Tax was levied annually from 1910–11 to 1951–52 on the unimproved value of land. It was abolished from 1st July, 1952. For rates of tax payable from 1942–43 to 1951–52, see Official Year Book No. 40, 1954, p. 669. Receipts for the years 1938–39 and 1950–51 to 1954–55 were as follows :—1938–39, £1,489,000 ; 1950–51, £3,591,000 ; 1951–52, £6,199,000 ; 1952–53, £1,250,000 ; 1953–54, £221,000 ; 1954–55, £13,000.

(d) *Pay-roll Tax.* The Pay-roll Tax Assessment Act 1941–1942 and the Pay-roll Tax Act 1941 imposed a pay-roll tax of 2½ per cent. on all wages and salaries in excess of £20 per week paid by an employer after 30th June, 1941. Employers who are liable for tax are required to register and to furnish a monthly return of all wages paid. These measures formed part of the Commonwealth scheme of child endowment, the revenue from the tax being designed to provide part of the money required. The exemption was increased to £80 per week (£4,160 per annum) from 1st October, 1953 and to £120 per week (£6,240 per annum) from 1st September, 1954.

Receipts from pay-roll tax for the years 1950–51 to 1954–55 were, 1950–51, £28,721,000 ; 1951–52, £37,170,000 ; 1952–53, £40,171,000 ; 1953–54, £40,384,000 ; 1954–55, £41,455,000.

(e) *Income Taxes.* Details of taxes on income are given in division E of this Chapter.

(f) *Wool Sales Deduction.* The Wool Sales Deduction Act 1950 and the Wool Sales Deduction (Administration) Act 1950 came into operation on 2nd December, 1950 and required that a deduction be made from the sale value of wool sold or exported, the amount deducted being set off against the Income Tax and Social Services Contribution assessed in respect of the income of the year 1950–51. These Acts were repealed by the Wool Sales Deduction Legislation Repeal Act 1951 which came into operation on 17th November, 1951, and provided for the refund to producers, etc., of amounts paid on the value of wool sold or otherwise disposed of, after 30th June, 1951. The amount of deduction collected was—1950–51, £109,531,000 ; 1951–52, £5,963,000. In 1952–53 and 1953–54, refunds amounted to £2,223,000 and £239,000 respectively.

(g) *Estate Duty.* The Commonwealth Estate Duty was first levied in 1914. Particulars of exemptions and the rates imposed prior to October, 1953 are given in earlier issues of the Year Book (see No. 40, p. 670).

Estate duty, under the Estate Duty Assessment Act 1914–1953, operative from 28th October, 1953 is assessed on the net value of the estate less a statutory exemption determined in accordance with the following formula :—(a) where the whole of the estate passes to the widow, children or grand-children of the deceased, the sum of £5,000 decreasing by £1 for every £3 by which the value exceeds £5,000 and ceasing to apply at £20,000 ; (b) where no part of the estate passes to the widow, children or grand-children, the sum of £2,500 decreasing by £1 for every £3 by which the value exceeds £2,500 and ceasing to apply at £10,000 ; and (c) where part only of the estate passes to the widow, children or grand-children, the statutory exemption is to be calculated proportionately under (a) and (b).

This Act also provides, from 27th June, 1950, for a special deduction of £5,000 from the value of estates of persons who served in Korea or Malaya.

The rates of duty levied under the Estate Duty Act 1914-1941 increase as the value of the estate increases as follows :—£1 to £10,000, 3 per cent. ; £10,001 to £20,000, 3 per cent. to 6 per cent. ; £20,001 to £120,000, 6 per cent. to 26 per cent. ; £120,001 to £500,000, 26 per cent. to 27.9 per cent. ; over £500,000, 27.9 per cent.

Total collections for the years 1938-39 and 1950-51 to 1954-55 were as follows :—1938-39, £1,915,000 ; 1950-51, £6,401,000 ; 1951-52, £7,778,000 ; 1952-53, £8,393,000 ; 1953-54, £9,825,000 ; 1954-55, £9,614,000.

Particulars of the number and value of estates and duty assessed, for each of the assessment years 1938-39 and 1950-51 to 1954-55, are given in the following table :—

ESTATE DUTY ASSESSMENTS.

Particulars.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of Estates	9,681	15,680	16,289	19,663	19,621	12,878
Gross Value Assessed	£'000 65,699	134,074	144,073	175,672	187,905	176,853
Deductions	£'000 12,630	22,714	22,083	27,795	31,010	30,136
Statutory Exemption	£'000	18,175	18,672	22,566	22,976	23,290
Dutiable Value	£'000 53,069	93,185	103,318	125,311	133,919	123,427
Duty Payable	£ 2,002,283	6,933,608	7,797,967	9,248,925	10,088,841	10,309,838
Average dutiable value	£ 5,482	5,943	6,343	6,373	6,825	9,584
Average duty per estate	£ 207	442	479	470	514	801

(h) *Gift Duty.* The Gift Duty Assessment Act 1941-1947 and the Gift Duty Act 1941-1947 impose a gift duty on all gifts made after the 29th October, 1941. A gift has been defined as any disposition of property, which is made otherwise than by will, without adequate consideration in money or money's worth. There is a liability on both the donor and the donee to furnish a return, and both are jointly and severally liable for payment of the duty.

The following rates of duty are levied under the Gift Duty Act 1941-1947 and relate to the value of all gifts made by the donor within a period of eighteen months :—Not exceeding £2,000, nil ; £2,001 to £10,000, 3 per cent. ; £10,001 to £20,000, 3 per cent. to 6 per cent. ; £20,001 to £120,000, 6 per cent. to 26 per cent. ; £120,001 to £500,000, 26 per cent. to 27.9 per cent. ; £500,001 and over, 27.9 per cent.

An amendment which operated from 3rd June, 1947 provides that gift duty will not exceed one-half of the amount by which the value of the gift exceeds £2,000.

Total receipts from gift duty for the years 1950-51 to 1954-55 were as follows :—1950-51, £1,044,000 ; 1951-52, £1,202,000 ; 1952-53, £1,162,000 ; 1953-54, £1,386,000 ; 1954-55, £1,618,000.

(i) *Entertainments Tax.* The Commonwealth levied an Entertainments Tax from 1st October, 1942 to 30th September, 1953. Details of rates are given in earlier issues of the Official Year Book (*see* No. 40, pp. 672 and 673).

Entertainments tax receipts during the five years 1950-51 to 1953-54 were as follows :—1950-51, £5,148,000 ; 1951-52, £6,161,000 ; 1952-53, £6,708,000 ; 1953-54, £1,977,000. In 1954-55, there was an excess of refunds over payments of £2,000.

(j) *Flour Tax.* Particulars of the rates of flour tax which operated from 4th December, 1933 to 21st December, 1947 are given in Official Year Book No. 37, pp. 618 and 619. Because of the rise in wheat prices, the rate was declared to be nil as from 22nd December, 1947.

(k) *Wool Levy.* The Wool Tax Act 1936 and Wool Tax Assessment Act 1936 provided for a levy on all wool grown in Australia and shorn on or after 1st July, 1936. Details of this levy are given in earlier issues of the Official Year Book. This levy was suspended from 1st July, 1946 until 30th June, 1952 while the Wool Contributory Charge was imposed.

With the repeal of the Wool Contributory Charge, however, a levy on wool produced in Australia was re-introduced from 1st July, 1952. The Wool Tax Acts (Nos. 1 and 2) of 1952 provide for the payment of a levy of four shillings per bale until 30th June, 1953, after which date the rate of tax may be varied within prescribed limits. There was no variation to 30th June, 1954. The purpose of the tax is to provide funds for publicity and research previously provided by the Wool Contributory Charge. Collections during 1952–53, 1953–54 and 1954–55 were £675,000, £772,000 and £784,000 respectively.

(l) *Wool Contributory Charge.* The Wool (Contributory Charge) Act 1945 and the Wool (Contributory Charge) Assessment Act 1945 imposed a charge on all wool produced in Australia and sold, manufactured or exported. Wool sold by the Australian Wool Realization Commission was not liable to the charge. Details of the rate of the charge are given in earlier issues of the Official Year Book (*see* No. 40, p. 675).

The various Wool (Contributory Charge) Acts were repealed by the Wool Tax Assessment Act of 1952 and the charge superseded by the wool levy. Collections during the years 1950–51 to 1952–53 were as follows :—1950–51, £44,844,000, 1951–52, £2,230,000, and 1952–53, £28,000.

(m) *Wheat Export Charge and Wheat Tax.* A summary of the provisions of the Wheat Export Charge Acts 1946, 1948 and 1952 is contained in previous issues of the Official Year Book (*see* No. 40, p. 676 and No. 41, p. 604).

The Wheat Export Charge Act 1954 repealed previous Acts and provided for an export charge on wheat and wheat products for the seasons 1953–54 to 1957–58 inclusive. The charge levied is based on the difference between the cost of production and the export price with a maximum levy of 1s. 6d. per bushel. Under the Wheat Industry Stabilization Act 1954, to which the Wheat Export Charge Act is complementary, the Commonwealth Government guarantees a return to wheat-growers of the ascertained cost of production in respect of up to 100 million bushels of wheat exported from Australia during each of the five seasons. Collections from the wheat export charge are paid into the Wheat Prices Stabilization Fund, out of which payments will be made to the Australian Wheat Board, when required, for the purpose of building up the average export price for any season to the guaranteed price. If the Fund is exhausted, additional payments will be made from the Consolidated Revenue Fund.

Collections of the wheat export charge amounted to £13,353,000 in 1950–51, £12,202,000 in 1951–52, £8,139,000 in 1952–53, nil in 1953–54, and £5,063,000 in 1954–55.

(n) *Miscellaneous Export Charges.* These consist of charges levied on exports of apples and pears (Apple and Pear Export Charges Act 1938–1947), canned fruits (Canned Fruits Export Charges Act 1926–1952), dairy produce (Dairy Produce Export Charges Act 1924–1937), dried fruits (Dried Fruits Export Charges Act 1924–1929), eggs (Egg Export Charges Act 1947) and meat (Meat Export Charge Act 1935–54) and on grapes used in the manufacture of wine (Wine Grapes Charges Act 1929–1954). The collections are paid into funds to be applied for the purposes of Export Boards established under various Acts, in controlling the quantity and quality of produce exported.

Collections for the last five years were as follows :—1950–51, £76,000 ; 1951–52, £72,000 ; 1952–53, £166,000 ; 1953–54, £168,000 ; and 1954–55, £300,000.

(o) *Stevedoring Industry Charge.* The Stevedoring Industry Charge Act 1947 and the Stevedoring Industry Charge Assessment Act 1947 imposed a charge of 4½d. per man-hour on the employer of a waterside worker after 22nd December, 1947.

The amounts received are paid to the Stevedoring Industry Board for the payment of attendance money to waterside workers and for other expenses of the Board.

Since 1947, the charge has been amended as follows :—11th October, 1949, a reduction to 2½d. per man-hour ; 11th December, 1951, an increase to 4d. per man-hour ; 28th October, 1952, an increase to 11d. per man-hour and from 4th May, 1954, a reduction to 6d. per man-hour.

Collections during the years 1950–51 to 1954–55 were as follows :—1950–51, £420,000 ; 1951–52, £551,000 ; 1952–53, £1,144,000 ; 1953–54, £1,630,000 ; and 1954–55, £998,000.

(p) *Gold Tax.* Particulars of the Gold Tax which operated from 15th September, 1939 to 20th September, 1947 are given in Official Year Book No. 39, p. 767.

3. *Business Undertakings.*—(i) *Postmaster-General's Department.* Particulars of net receipts for each of the financial years 1938–39 and 1950–51 to 1954–55 are contained in the following table :—

POSTMASTER-GENERAL'S DEPARTMENT : NET RECEIPTS.
(£'000.)

Particulars.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Private boxes and bags ..	74	144	164	169	175	180
Commission on money orders and postal notes	289	472	827	859	887	862
Telegraphs	1,372	4,442	5,066	4,547	4,710	4,934
Telephones	8,040	22,667	31,059	35,177	37,113	40,402
Postage	6,636	16,020	20,687	21,821	22,893	24,139
Radio	516	(a)	(a)	(a)	(a)	(a)
Miscellaneous	439	1,032	1,568	1,825	2,020	2,308
Total	17,366	44,777	59,371	64,398	67,798	72,825

(a) Included under Broadcasting Services.

Further particulars of the Postmaster-General's Department's receipts to 1954–55 are given in Chapter XI.—Transport and Communication (Part 2, Division A. Posts, Telegraphs, Telephones and Wireless).

(ii) *Broadcasting Services.* Following the amendment of the Australian Broadcasting Act 1942–1946 by Act No. 64 of 1948, the Broadcasting Control Board was set up on 15th March, 1949. (See also Chapter XI.—Transport and Communication).

Details of net receipts for the years 1950–51 to 1954–55 are shown in the following table :—

BROADCASTING SERVICES : NET RECEIPTS.
(£'000.)

Particulars.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Listeners' Licence Fees	1,943	2,776	3,770	3,827	3,832
Broadcasting Station Licence Fees	18	20	23	25	27
Miscellaneous	10	9	13	15	16
Total	1,971	2,805	3,806	3,867	3,875

(iii) *Commonwealth Railways.* The Commonwealth Government is responsible for four railways—the Trans-Australian, the Central Australia, the North Australia and the Australian Capital Territory. The following table shows the amounts paid to the credit of the Consolidated Revenue Fund on account of each of these railways for the years 1938–39 and 1950–51 to 1954–55 :—

COMMONWEALTH RAILWAY REVENUE.
(£'000.)

Railway.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Trans-Australian	331	1,175	1,479	1,372	1,825	1,928
Central Australia	138	816	1,241	1,290	1,553	1,483
North Australia	50	38	49	42	68	70
Aust. Cap. Territory	7	15	10	25	15	29
Total	526	2,044	2,779	2,729	3,461	3,510

Further particulars to 1954-55 are given in Chapter XI.—Transport and Communication (Division B. Government Railways).

4. **Other Sources of Revenue.**—Revenue derived by the Consolidated Revenue Fund from the Territories of the Commonwealth during 1954-55 amounted to £2,419,000 (Australian Capital Territory, £1,776,000; Northern Territory, £643,000). Of other sources of revenue, amounting in 1954-55 to £47,199,000, the following are noteworthy:—Interest, £12,428,000; Civil Aviation, £4,644,000; Net Profit on Australian Note Issue, £5,516,000; Joint Coal Board—Repayment of Advances £3,550,000 and Surplus Balances of Trust Accounts, £8,237,000.

III.—Expenditure.

1. **Details of Expenditure from Consolidated Revenue.**—The following table shows details of the expenditure from the Consolidated Revenue Fund during the years 1938-39 and 1950-51 to 1954-55.

COMMONWEALTH CONSOLIDATED REVENUE FUND: EXPENDITURE. (£'000.)

Department, etc.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Defence Services(a)	7,579	73,455	125,008	173,699	162,148	153,791
War (1914-18 and 1939-45) and Repatriation Services	19,257	129,622	105,891	117,832	120,262	120,325
Subsidies and Bounties	236	40,537	31,341	25,332	21,320	21,539
Cost of Departments(b)	9,229	60,505	71,006	74,094	71,664	78,675
National Welfare Fund	(c) 16,428	132,680	171,709	165,511	176,565	189,319
National Debt Sinking Fund Special Payment (Surplus) .. ..	..	..	98,500	..	..	..
Business Undertakings—						
Postmaster-General	14,878	54,802	64,291	69,917	72,244	76,246
Broadcasting Services	(d)	3,591	4,135	4,556	4,684	4,871
Railways(e)	1,331	3,063	3,491	3,390	3,527	3,622
Territories(f)	1,100	8,276	9,773	9,838	11,153	12,971
Capital Works and Services—						
Defence	1,349	75,138	45,126	42,317	28,513	33,003
Repatriation	141	(g) 342	27,861	28,167	27,073	30,131
Postmaster-General	3,851	34,897	28,819	28,427	25,986	25,839
Broadcasting Services	(d)	212	251	202	281	273
Railways	142	1,461	2,637	4,746	3,382	3,100
Territories	739	5,085	5,153	4,821	4,511	5,168
Other(h)	493	31,050	45,152	35,927	31,467	29,455
Payments to or for States(i)	15,669	128,459	161,701	184,204	195,648	200,729
Other Expenditure(j)	2,015	58,617	14,983	53,687	6,091	8,233
Grand Total	94,437	841,792	1,016,828	1,026,667	(l) 966,519	m 997,290
Per Head of Population	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	13 12 5	101 7 8	119 4 6	117 10 11	108 11 10	109 14 3

(a) Excludes debt charges and Defence Division of the Department of the Treasury. (b) Includes Railway Fare and Freight Concessions. (c) Invalid and Age Pensions and Maternity Allowances. (d) Provided in part from Postmaster-General's Department votes and balance from Broadcasting Trust Account. (e) Excludes Railway Fare and Freight Concessions and Contribution to South Australia (Port Augusta to Port Pirie Railway Act). (f) Includes Northern Territory Railway Freight Concessions. (g) In addition, £24,911,000 was provided from Loan Fund. (h) Excludes Tuberculosis Act 1948—Reimbursement of capital expenditure to States. (i) Includes Tuberculosis Act 1948—Reimbursement of capital expenditure to States. (j) Includes assistance to primary producers. (k) Excludes surplus £13,400,000 transferred to War Pensions Trust Account. (l) Excludes surplus £56,271,000 transferred to Debt Redemption Reserve Trust Account. (m) Excludes surplus revenue £70,151,000 transferred to Debt Redemption Reserve Trust Account.

Further details of the expenditure in each section are given in paragraphs 2 to 11 following.

A graphical representation of the revenue and expenditure of the Commonwealth Consolidated Revenue Fund appears on p. 765. In this diagram, Public Debt Charges (interest and debt redemption, etc.) are shown as a separate item, whereas, in the table above, these charges are included in the section to which they relate.

Details of Commonwealth expenditure on public debt charges for 1938-39 and 1950-51 to 1954-55 are shown in the following table :—

PUBLIC DEBT CHARGES(a) : COMMONWEALTH EXPENDITURE.
(£'000.)

Item.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>War (1914-18 and 1939-45)</i>						
<i>Debt(b)</i>						
Interest and Exchange ..	7,616	44,614	43,902	43,354	43,698	43,234
Debt Redemption ..	2,049	13,835	15,002	21,256	19,981	15,273
Other(c) ..	224	312	215	279	249	376
<i>Total</i>	<i>9,889</i>	<i>58,761</i>	<i>59,119</i>	<i>64,889</i>	<i>63,928</i>	<i>58,883</i>
<i>Business Undertakings—</i>						
<i>Postmaster-General's Department—</i>						
Interest and Exchange ..	1,758	1,454	1,437	1,349	1,207	1,303
Debt Redemption ..	1,129	2,150	2,257	2,371	2,313	1,655
Other(c) ..	..	..	..	..	13	253
<i>Total</i>	<i>2,887</i>	<i>3,604</i>	<i>3,694</i>	<i>3,720</i>	<i>3,533</i>	<i>3,211</i>
<i>Railways—</i>						
Interest and Exchange ..	455	420	415	413	406	410
Debt Redemption ..	75	134	141	148	155	163
Other(c) ..	11	1	..	1	..	19
<i>Total</i>	<i>541</i>	<i>555</i>	<i>556</i>	<i>562</i>	<i>561</i>	<i>592</i>
<i>Territories—</i>						
Interest and Exchange ..	318	230	219	218	238	234
Debt Redemption ..	58	105	110	115	121	127
Other(c) ..	4	3	..	..	..	..
<i>Total</i>	<i>380</i>	<i>338</i>	<i>329</i>	<i>333</i>	<i>359</i>	<i>361</i>
<i>Works and Other Purposes—</i>						
Interest and Exchange ..	3,226	2,794	3,259	4,149	5,308	6,089
Debt Redemption ..	613	864	791	718	708	556
Other(c) ..	37	59	46	66	133	145
<i>Total</i>	<i>3,876</i>	<i>3,717</i>	<i>4,096</i>	<i>4,933</i>	<i>6,149</i>	<i>6,790</i>
<i>Total—</i>						
Interest and Exchange ..	13,373	49,512	49,232	49,483	50,857	51,270
Debt Redemption ..	3,924	17,088	18,301	24,608	23,278	17,774
Other(c) ..	276	375	261	346	395	793
<i>Grand Total</i>	<i>17,573</i>	<i>66,975</i>	<i>67,794</i>	<i>74,437</i>	<i>74,530</i>	<i>69,837</i>

(a) Excludes payments to or for States under the Financial Agreement. See pp. 775-778.

(b) Includes repatriation debt.

(c) Redemption, conversion and loan management, etc., expenses.

2. Defence Services.—Details of the expenditure on Defence Services by the Departments of Defence, Navy, Army, Air, Supply and Defence Production are shown in the following table. The expenditure shown under Department of Supply includes the former Departments of Shipping and Fuel, Supply and Development, Supply and Shipping, and Munitions. This table covers expenditure by the service and associated departments only, and includes the cost of maintaining forces in Korea and at other overseas posts.

The figures represent the combined expenditures from revenue, trust and loan funds for the years 1938-39 and 1950-51 to 1954-55.

DEFENCE SERVICES(a) : COMMONWEALTH EXPENDITURE FROM REVENUE, TRUST AND LOAN FUNDS.

(£'000.)

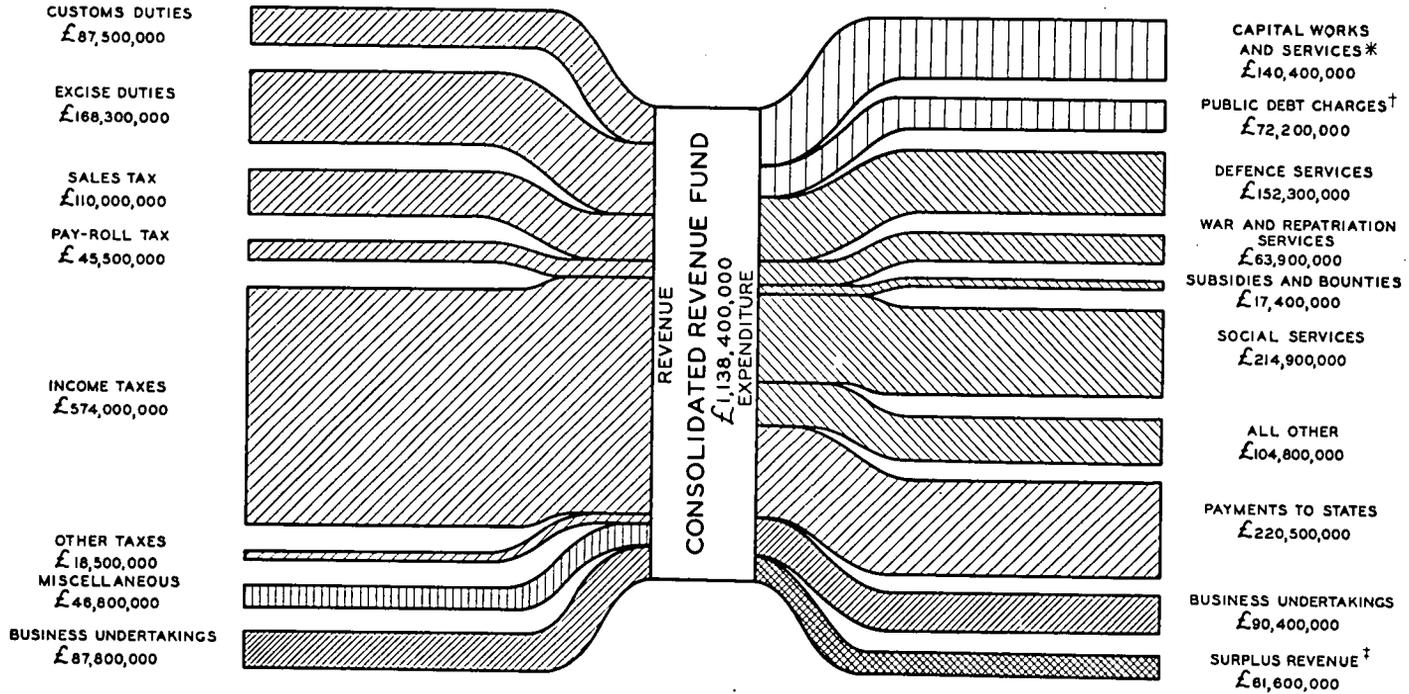
Item.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Department of Defence</i>	61	364	493	619	651	659
<i>Department of the Navy—</i>						
Naval Forces—Pay, maintenance, etc.	2,592	19,337	30,390	36,411	34,649	34,317
Naval construction and additions to the fleet	1,643	2,244	3,302	5,436	5,996	6,422
Buildings, works, etc.	433	1,659	2,812	2,510	1,665	1,674
Administrative and miscellaneous expenditure(b)	35	1,443	1,308	3,031	2,783	5,051
<i>Total</i>	4,703	24,683	37,812	47,388	45,093	47,464
<i>Department of the Army—</i>						
Military Forces—Pay, maintenance, etc.	2,941	16,977	28,615	58,441	44,908	38,826
Arms, armament, ammunition	1,129	5,387	17,926	26,174	15,201	18,435
Buildings, works, etc.	418	4,349	8,769	6,039	3,313	2,938
Administrative and miscellaneous expenditure(b)	126	—180	1,036	1,296	1,407	1,914
<i>Total</i>	4,614	26,533	56,346	91,950	64,829	62,113
<i>Department of Air—</i>						
Air Force—Pay, maintenance, etc.	1,304	12,042	20,042	23,815	21,561	22,764
Aircraft, equipment and stores	1,049	13,210	23,502	25,881	22,886	22,708
Buildings, works, etc.	489	1,592	3,883	4,521	3,312	2,587
Administrative and miscellaneous expenditure(b)	17	952	1,073	1,219	1,175	1,441
<i>Total</i>	2,859	27,796	48,500	55,436	48,934	49,500
<i>Department of Supply—</i>						
Defence research and development	..	6,264	6,434	6,786	7,444	9,307
Strategic stores and equipment reserve .. ..	..	57,048	10,049	..	..	..
Buildings, works, etc.	463	264	270	372	200	175
Administrative and miscellaneous expenditure(b)	1,212	5,629	3,090	4,279	4,203	4,263
<i>Total</i>	1,675	69,205	19,843	11,437	11,847	13,745
<i>Department of Defence Production(c)</i> .. ..	..	..	7,140	9,186	7,307	5,280
<i>Defence Equipment and Supplies(d)</i> .. ..	..	..	..	..	12,000	8,000
<i>Civil Defence</i> .. ..	..	..	..	..	..	33
<i>Total Defence Services—</i>						
Consolidated Revenue Fund	8,927	148,593	170,134	216,016	190,661	186,794
Trust Funds	(e) 3,072	..	..	..	..	..
Loan Fund	1,913	—12	..	..	..	..
<i>Grand Total</i>	13,912	148,581	170,134	216,016	190,661	186,794

(a) Excludes expenditure on debt charges and on Defence Division of the Department of the Treasury. (b) As a dissection is not available expenditure on War and Repatriation Services (see p. 767) has been deducted from this item instead of from departmental expenditure above. (c) Included with Department of Supply prior to 1951-52. (d) Paid to credit of Defence Equipment and Supplies Trust Account. (e) Expenditure from excess receipts of previous years appropriated for Defence Equipment Trust Account.

NOTE.—Minus sign (—) indicates excess of transfers or repayments over expenditure.

3. War and Repatriation Services.—Expenditure from Consolidated Revenue and Loan Fund for War and Repatriation Services and Post-war Charges in relation to both the 1914-18 and 1939-45 Wars is shown in the following table for the years 1938-39 and

COMMONWEALTH CONSOLIDATED REVENUE FUND, YEAR ENDED 30TH JUNE, 1956

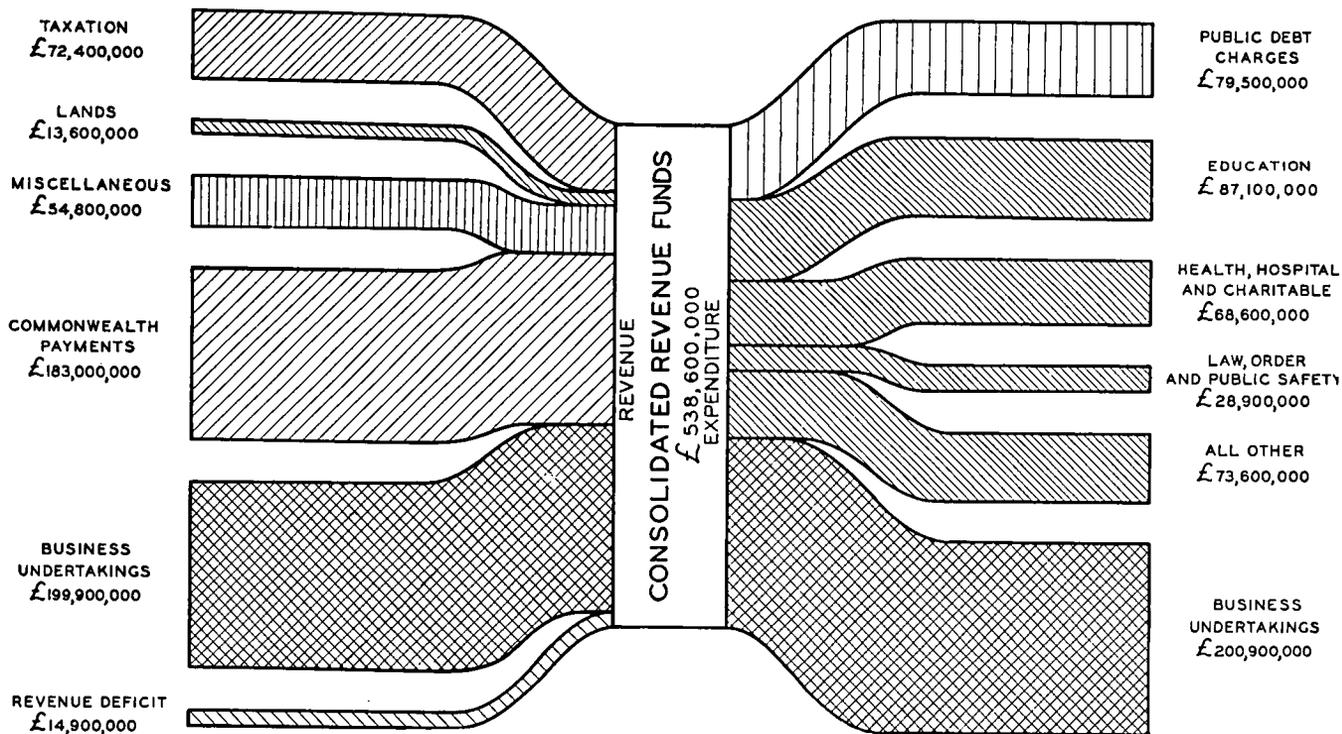


* INCLUDES DEFENCE WORKS AND SERVICES £38,500,000

† INCLUDES WAR DEBT CHARGES £80,000,000

‡ PAID TO LOAN CONSOLIDATION AND INVESTMENT RESERVE TRUST ACCOUNT

STATE CONSOLIDATED REVENUE FUNDS, YEAR ENDED 30TH. JUNE, 1956



1950-51 to 1954-55. Expenditure on the maintenance of forces in Korea and at other oversea posts and the cost of arms and equipment is included in Defence Services (see paragraph 2).

WAR AND REPATRIATION SERVICES AND POST-WAR CHARGES : COMMONWEALTH EXPENDITURE FROM CONSOLIDATED REVENUE AND LOAN FUNDS.

(£'000.)

Item.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Public Debt Charges—</i>						
Interest and Exchange	7,616	44,614	43,902	43,354	43,698	43,234
Debt Redemption	2,049	13,835	15,002	21,256	19,981	15,273
Other	224	312	215	279	249	376
<i>Total Public Debt Charges(a)</i> ..	9,889	58,761	59,119	64,889	63,928	58,883
War Gratuities		30,797	42	15		
War and Service Pensions	8,228	27,532	33,566	36,577	39,425	44,548
Commonwealth Reconstruction Training Scheme		4,141	1,807	974	502	314
War Service Land Settlement		4,388	5,641	6,567	5,506	4,789
Re-establishment loans for agricultural purposes		296	188	140	115	106
<i>Repatriation Department—</i>						
Repatriation benefits	631	7,834	9,758	10,822	11,500	11,720
Other benefits	119	263	298	388	443	486
Administration and general expenses	315	3,061	3,196	3,464	3,597	3,671
Expenditure recovered(b)	-71	-1,777	-1,615	-1,534	-1,281	-1,226
<i>Total Repatriation Department</i> ..	994	9,381	11,637	13,140	14,259	14,651
War Service Homes—Salaries and general expenses	98	492	631	622	685	815
Defence Departments—Proportion of expenditure(c)		2,455				
Other Departments—Miscellaneous expenditure	48	438	1,243	1,386	922	646
International Payments(d)		81	102	48	40	41
Other Administrations—Recoverable expenditure(e)		-1,849	1,071	-842	-921	-429
Miscellaneous Credits		-1,749	-2,853	(f)	(f)	(f)
Credits from the Disposals Commission		-1,681	-1,183	(f)	(f)	(f)
<i>Capital Works and Services—</i>						
Repatriation Department	36	342	271	203	227	132
War Service Homes Act 1918-1949	105	24,911	27,590	27,964	26,846	29,999
<i>Total Capital Works and Services</i> ..	141	25,253	27,861	28,167	27,073	30,131
<i>Total, War and Repatriation Services and Post-war Charges—</i>						
Consolidated Revenue Fund	19,398	129,963	133,752	145,999	147,335	150,456
Loan Fund		28,773	5,120	5,684	4,199	4,039
Grand Total	19,398	158,736	138,872	151,683	151,534	154,495

(a) Excludes Interest and Redemption on War (1914-18) Debt due to the United Kingdom Government, payment of which was suspended in 1931. (b) From Service Departments and Australian Soldiers' Repatriation Trust Account. (c) Represents expenditure on War and Repatriation Services by Defence Departments (see page 764) for which dissection is not available. (d) Excludes International Monetary Fund Charges. (e) Munitions, stores, etc., supplied to the Government of United Kingdom and other administrations. Includes repayments and waiver of war-time indebtedness of other administrations. (f) Receipts credited to Defence revenue.

NOTE.—Minus sign (—) indicates excess of credits or repayments over expenditure.

4. **Subsidies and Bounties.**—The following table shows details, for the years 1938-39 and 1950-51 to 1954-55, of Commonwealth expenditure from revenue on subsidies, bounties and assistance to primary producers. Expenditure on special relief such as drought, frost, flood and bush fire, etc. (see table, p. 770, for more important items), is not included, nor is expenditure from the proceeds of certain taxes on primary products and profits from marketing schemes, which have been paid to trust funds for the purpose of price or other stabilization schemes or for distribution to producers (see paragraph 11) p. 775. Further information relating to these schemes and other assistance to, primary producers is given in Chapter XXII.—Agricultural Production.

Details of price stabilization subsidies and of various forms of assistance to primary producers for earlier years may be found on pages 414 and 1014-15 respectively of Official Year Book No. 38.

SUBSIDIES AND BOUNTIES : COMMONWEALTH EXPENDITURE.
(£'000.)

Item.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Subsidies—</i>						
<i>Price Stabilization—</i>						
Tea .. .. .	..	7,129	5,577	4,683	4,180	5,077
Coal .. .. .	..	1,704	1,519	1,114	200	185
Wheat Shipped to Tasmania—						
Freight Subsidy .. .. .	..	140	143	210	192	..
<i>Total</i> .. .. .	..	8,973	7,239	6,007	4,572	5,262
<i>Assistance to Primary Production—</i>						
Dairy Industry(a) .. .. .	..	14,998	17,843	15,719	15,400	15,750
Superphosphate .. .. .	..	263	..	..	..	..
Nitrogenous Fertilizers .. .. .	..	599	1,521	289	175	..
Wheat Industry .. .. .	..	683	..	..	..	..
Other .. .. .	..	36	9	519	..	..
<i>Total</i> .. .. .	..	16,579	19,373	16,527	15,575	15,750
<i>Assistance to Gold-mining Industry</i> .. .. .	..	..	..	..	..	97
<i>Total Subsidies</i> .. .. .	..	25,552	26,612	22,534	20,147	21,109
<i>Bounties—</i>						
Tractor .. .. .	..	90	103	38	145	82
Wool Products .. .. .	..	14,875	2,254	1	..	..
Wheat—for Stock Feed .. .. .	..	..	2,368	2,759	1,010	..
Sulphuric Acid .. .. .	..	..	..	..	..	306
Other	(b)	236	4	..	18	42
<i>Total Bounties</i> .. .. .	..	14,985	4,729	2,798	1,173	430
<i>Grand Total</i> .. .. .	..	40,537	31,341	25,332	21,320	21,539

(a) Dairy products.

(b) Includes Raw Cotton Bounty, £115,000 and Sulphur Bounty, £88,000.

5. **Total Cost of Departments.**—Expenditure under this heading covers expenditure by departments, other than the defence and repatriation departments and business undertakings, on administrative services and other activities. Expenditure on defence (other than interest and debt redemption in respect of the defence departments which is included in the expenditure of the Department of the Treasury), war and repatriation services, subsidies and bounties, social services paid from the National Welfare Fund, business undertakings, Commonwealth territories and capital works and services is excluded.

Information on the functions of departments and the acts administered by the Ministers of departments was published in Official Year Book No. 37, pages 76-86, and particulars of subsequent changes in departmental structure are given in later issues.

In the following table, details are given of that expenditure on the branches of each department which might be termed running expenses. Miscellaneous expenditure and debt charges, etc., are not included in this table but are in the one following.

COMMONWEALTH CONSOLIDATED REVENUE FUND : COST OF DEPARTMENTS—SALARIES, WAGES AND GENERAL EXPENDITURE.
(£'000.)

Department.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Governor-General</i>	28	44	64	81	88	82
<i>Parliament—</i>						
Cost of Parliament	279	833	1,062	1,193	1,184	1,282
Electoral Office	105	344	341	441	434	427
<i>Total</i>	384	1,177	1,403	1,634	1,618	1,709
<i>Prime Minister—</i>						
Department	62	155	210	246	256	268
Audit Office	38	272	289	(a)	(a)	(a)
Public Service Board	51	381	405	429	440	485
National Library	4	73	96	107	121	136
High Commissioner's Office—United Kingdom	81	548	621	621	612	587
Commonwealth Grants Commission	5	12	14	15	15	17
Office of Education .. .. .	..	276	200	148	149	156
Security Services .. .. .	..	208	276	331	332	362
<i>Total</i>	241	1,925	2,111	1,897	1,925	2,011
<i>External Affairs—</i>						
Department	20	380	442	427	429	456
Oversea representation .. .. .	..	965	1,160	1,301	1,280	1,232
<i>Total</i>	20	1,345	1,602	1,728	1,709	1,688

For footnotes see next page.

COMMONWEALTH CONSOLIDATED REVENUE FUND : COST OF DEPARTMENTS—SALARIES, WAGES AND GENERAL EXPENDITURE—*continued.*
(£'000.)

Department.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Treasury—</i>						
Department	59	387	430	540	530	569
Taxation Branch and Boards of Review	616	5,323	6,117	6,668	6,674	6,741
Bureau of Census and Statistics	61	374	461	530	594	646
Commonwealth Superannuation Board	9	52	73	78	80	82
<i>Total</i>	745	6,136	7,081	7,816	7,878	8,038
<i>Attorney-General—</i>						
Department	20	123	149	187	199	223
Crown Solicitor	28	179	205	227	237	264
High Court	34	69	78	87	85	96
Bankruptcy Administration	44	79	90	97	113	122
Court of Conciliation and Arbitration	24	139	168	175	174	180
Patents, Trade Marks and Designs	71	197	319	334	381	379
Other Branches	37	231	241	233	244	329
<i>Total</i>	258	1,017	1,250	1,340	1,433	1,593
<i>Interior—</i>						
Department	296	965	1,083	1,212	1,204	1,248
Meteorological Branch	80	399	440	438	515	540
Observatory	7	56	60	67	72	76
Forestry Branch	10	79	86	88	90	93
<i>Total</i>	393	1,499	1,669	1,805	1,881	1,957
<i>Works</i>	(b)	1,594	1,481	1,384	1,939	2,110
<i>Civil Aviation</i>	90	3,166	3,371	3,788	2,511	2,504
<i>Trade and Customs</i>	721	2,474	2,953	3,244	3,390	3,676
<i>Health—</i>						
Department	135	297	353	405	445	471
Quarantine .. .. .	..	143	161	198	222	222
Health Services .. .. .	..	287	343	479	459	505
<i>Total</i>	135	727	857	1,082	1,126	1,198
<i>Commerce and Agriculture—</i>						
Department	58	296	333	388	407	452
Inspection of goods for export	175	516	582	689	740	841
Commercial Intelligence Services Abroad	47	241	299	334	364	393
Division of Agricultural Economics and Division of Agricultural Production .. .. .	..	119	122	123	140	152
<i>Total</i>	280	1,172	1,336	1,534	1,651	1,838
<i>Social Services—Department</i>	139	1,686	1,974	2,300	2,395	2,475
<i>Shipping and Transport—</i>						
Department .. .. .	..	223	161	144	135	144
Marine Branch	208	553	748	792	813	816
Ship Construction .. .. .	..	80	85	91	91	17
<i>Total</i>	208	856	994	1,027	1,039	977
<i>Territories—Department</i>	(c)	127	158	193	166	167
<i>Immigration—Department</i>	(b)	888	1,230	1,269	1,193	1,384
<i>Labour and National Service—Department</i> .. .. .	..	1,845	1,773	1,785	1,732	1,774
<i>National Development—</i>						
Department .. .. .	..	437	452	448	385	361
Bureau of Mineral Resources .. .. .	..	282	480	698	434	379
<i>Total</i> .. .. .	..	719	932	1,146	819	740
<i>Commonwealth Scientific and Industrial Research Organization—Departments</i>	195	2,477	2,895	3,260	3,537	3,994
<i>Atomic Energy Commission</i> .. .. .	..	..	..	6	253	430
<i>Total All Departments</i>	3,837	30,874	35,334	38,319	38,283	40,345

(a) Allocated to Departments.
with Prime Minister's Department.

(b) Included with Department of the Interior.

(c) Included

The following table gives details of miscellaneous expenditure included in the total cost of departments. It covers such items as interest and debt redemption in respect of departments (including defence departments) which is included under expenditure by the Department of the Treasury, repairs and maintenance of buildings, and special expenditure for which the Commonwealth is committed, such as contributions to international organizations, payment of Commonwealth scholarships, etc. The costs of social services, which are paid from the National Welfare Fund, are not included in this table (see pp. 771-2 for this information).

**COMMONWEALTH CONSOLIDATED REVENUE FUND : COST OF
DEPARTMENTS—MISCELLANEOUS EXPENDITURE.(a)
(£'000.)**

Department.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Governor-General</i>	1	4	10	7	6	25
<i>Parliament—</i>						
Cost of elections	3	210	231	244	240	15
Other	17	46	45	35	45	37
<i>Total</i>	20	256	276	279	285	52
<i>Prime Minister—</i>						
Commonwealth Scholarship Scheme and financial assistance to University students .. .. .	..	425	742	864	917	984
Australian National University .. .. .	..	280	450	600	650	748
Bush fire and flood relief, etc.	19	312	43	75	108	598
Other	259	536	377	615	931	528
<i>Total</i>	278	1,553	1,612	2,154	2,606	2,858
<i>External Affairs—</i>						
United Nations and Allied Organizations	(b) 46	701	715	597	632	647
Australian National Antarctic Research Expeditions .. .. .	..	119	145	152	224	213
International development and relief .. .. .	..	1,511	4,859	4,271	3,574	3,429
Contributions to other international agencies, etc.	4	102	94	105	112	172
<i>Total</i>	50	2,433	5,813	5,125	4,542	4,461
<i>Treasury—</i>						
Interest (including exchange)	3,229	2,794	3,259	4,149	5,309	6,089
Debt Redemption(c)	614	864	792	718	708	556
Other	87	550	595	1,241	1,094	2,801
<i>Total</i>	3,930	4,208	4,646	6,108	7,111	9,446
<i>Attorney-General</i>	23	78	98	97	117	123
<i>Interior—</i>						
Other departments in Canberra—Transport services, fuel, light and power ; oversea publicity, etc. .. .. .	..	262	231	302	317	358
Other	123	267	298	366	430	459
<i>Total</i>	123	529	529	668	747	817
<i>Works</i>	(d)	148	138	131	158	172
<i>Civil Aviation—</i>						
Maintenance and development of civil aviation	162	1,767	2,526	2,671	3,883	4,080
Domestic and international air services—						
Mails, subsidies, etc.	56	3,041	3,274	3,968	3,573	3,543
Meteorological maintenance services and other	8	503	616	684	620	616
<i>Total</i>	226	5,311	6,416	7,323	8,076	8,239
<i>Trade and Customs</i>	82	174	218	251	310	329
<i>Health—</i>						
Subsidy, cattle tick control	69	53	53	53	53	250
Miscellaneous expenditure on health	93	265	295	369	377	472
Other	17	65	77	73	97	114
<i>Total</i>	179	383	425	495	527	836
<i>Commerce and Agriculture—</i>						
Dairy Industry—Efficiency grant .. .. .	..	205	293	244	238	241
Wool use publicity, promotion and research	74	348	341	371	386	392
Other	186	148	199	356	545	393
<i>Total</i>	260	701	833	971	1,169	1,026

For footnotes see next page.

COMMONWEALTH CONSOLIDATED REVENUE FUND: COST OF DEPARTMENTS—MISCELLANEOUS EXPENDITURE(a)—continued.

(£'000.)

Department.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Social Services—</i>						
Compassionate allowances, etc.	} 186	{ 76	{ 87	{ 104	{ 116	{ 546
Other		64	73	79	92	102
<i>Total</i>	186	140	160	183	208	648
<i>Shipping and Transport—</i>						
Shipping subsidies, etc. . . . .	..	86	186	186	148	170
Railway fare and freight concessions . . . . .	..	283	487	510	569	631
Storage services . . . . .	..	285	(e) 92	(e) 55	(e) 62	(e) 72
Other	7	50				
<i>Total</i>	7	704	765	751	779	873
<i>Territories</i>	(f)	2	2	2	6	12
<i>Immigration—</i>						
Assisted migration	(d)	8,110	8,892	6,400	3,645	5,791
Other migration activities	(d)	3,708	3,365	3,096	1,960	1,649
Other	(d)	264	283	277	209	261
<i>Total</i>	(d)	12,082	12,540	9,773	5,814	7,701
<i>Labour and National Service</i> . . . . .	..	148	108	102	96	101
<i>National Development—</i>						
Joint Coal Board . . . . .	..	636	716	1,031	621	282
Other . . . . .	..	52	259	194	73	174
<i>Total</i> . . . . .	..	688	975	1,225	694	456
<i>Commonwealth Scientific and Industrial Research Organization—</i>						
Miscellaneous grants to scientific bodies	28	69	83	102	98	110
Other . . . . .	..	20	25	28	32	45
<i>Total</i>	28	89	108	130	130	155
Total, All Departments	5,393	29,631	35,672	35,775	33,381	38,330

(a) Includes rent, repairs and maintenance, pension and superannuation contributions. Interest and debt redemption in respect of the various departments is included under the Department of the Treasury.

(b) League of Nations. (c) Unallocated debt charges, in respect of all departments including defence departments. (d) Included with Department of the Interior. (e) Provided under Defence Services. (f) Included with Prime Minister's Department.

6. **National Welfare Fund.**—The National Welfare Fund was established for the purpose of providing a fund for the payment of Commonwealth social services benefits. During the year 1949-50, an amount equivalent to the total collections of pay-roll tax and social services contribution was paid to the fund from Consolidated Revenue. During 1950-51, the social services contribution was amalgamated with the normal income tax and it became necessary to base the contributions on other formula. For the year 1950-51, the amount paid to the fund was the total of collections of pay-roll tax and social services contribution plus £30,000,000. In 1951-52, the amount paid to the fund was the amount paid in 1950-51 increased in the same proportion as collections of pay-roll tax increased over the collections of pay-roll tax in 1950-51. By an amendment to the National Welfare Fund Act 1943-1950, the amount to be paid to the fund in 1952-53 and subsequent years was changed to the amount of moneys paid out of the fund. In addition to these payments from Consolidated Revenue, the fund received a small amount of interest from investments.

In the following table, details are given of the income and expenditure of the National Welfare Fund and the balance in the fund at the end of each year for the years 1950–51 to 1954–55. A dissection of expenditure into the various types of benefits is given in Chapter XV.—Welfare Services (see page 522).

NATIONAL WELFARE FUND : RECEIPTS, EXPENDITURE AND BALANCES.
(£'000.)

Year.	Income.			Expenditure.	Balance in Fund at end of Year.
	Contribution from Consolidated Revenue.	Interest on Investments.	Total.		
1950–51	132,680	985	133,665	114,983	149,797
1951–52	171,709	1,129	172,838	137,608	185,027
1952–53	165,511	1,809	167,320	165,511	186,836
1953–54	176,565	2,094	178,659	176,565	188,930
1954–55	189,319	2,108	191,427	189,319	191,038

7. **National Debt Sinking Fund.**—During 1951–52, surplus revenue of £98,500,000 was paid to the National Debt Sinking Fund for investment in a special loan raised to finance State works expenditure.

8. **Business Undertakings.**—(i) *Postmaster-General's Department.* From the beginning of 1949–50, Broadcasting Services were separated from the Postmaster-General's Department. Prior to 1949–50, part of the expenditure on these services was included with the Postmaster-General's Department. Details of the expenditure of this Department for the years 1938–39 and 1950–51 to 1954–55 are given in the following table :—

POSTMASTER-GENERAL'S DEPARTMENT : EXPENDITURE.
(£'000.)

Item.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Salaries, stores and materials, mail, engineering services, etc.	11,485	49,670	58,686	64,157	66,619	70,568
Superannuation, Pensions, etc.	392	795	1,061	1,056	1,214	1,490
Rents, repairs, etc.	114	733	850	984	878	977
Interest and Exchange	1,758	1,454	1,437	1,349	1,220	1,356
Debt Redemptions	1,129	2,150	2,257	2,371	2,313	1,655
<i>Total Working, etc., Expenses</i>	14,878	54,802	64,291	69,917	72,244	76,246
Capital Works and Services	3,851	34,897	28,819	28,427	25,986	25,839
Grand Total	18,729	89,699	93,110	98,344	98,230	102,085

Further details of expenditure for 1954–55 on account of the Postmaster-General's Department appear in Chapter XI.—Transport and Communication (Part II., Division A., Posts, Telegraphs, Telephones and Wireless).

(ii) *Broadcasting Services.* Since 1949–50, all expenditure on broadcasting services has been brought together in one section. Previously these services had been financed partly by the Postmaster-General's Department and partly from the Wireless Broadcasting Trust Account. Details of expenditure for the years 1950–51 to 1954–55 are shown in the following table.

COMMONWEALTH BROADCASTING SERVICES : EXPENDITURE.

(£'000.)

Item.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Australian Broadcasting Control Board ..	59	61	56	77	83
Australian Broadcasting Commission— Salaries, general and programme expenses	2,010	2,254	2,497	2,590	2,702
Technical and other Services—Postmaster- General	1,509	1,807	1,988	2,006	2,068
Repairs, maintenance, etc.	13	13	15	11	18
<i>Total Working, etc., expenses</i>	<i>3,591</i>	<i>4,135</i>	<i>4,556</i>	<i>4,684</i>	<i>4,871</i>
Capital Works and Services	212	251	202	281	273
Grand Total	3,803	4,386	4,758	4,965	5,144

(iii) *Railways.* The Commonwealth Railways, previously administered by the Department of the Interior, were transferred in March, 1950, to the newly-formed Department of Fuel, Shipping and Transport, which became the Department of Shipping and Transport in May, 1951. The expenditure on railways for the years 1938-39 and 1950-51 to 1954-55 is shown below.

COMMONWEALTH RAILWAYS : EXPENDITURE.(a)

(£'000.)

Item.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Working expenses—						
Trans-Australian	494	1,457	1,540	1,285	1,352	1,412
North Australia	55	69	91	115	139	158
Central Australia	214	867	1,178	1,297	1,359	1,322
Aust. Capital Territory	7	26	37	46	43	40
Interest and Exchange	455	420	415	413	406	410
Debt Redemption	75	134	141	148	155	163
Superannuation	14	34	43	44	50	58
Miscellaneous(b)	17	55	46	42	23	59
<i>Total Working, etc., ex- penses</i>	<i>1,331</i>	<i>3,062</i>	<i>3,491</i>	<i>3,390</i>	<i>3,527</i>	<i>3,622</i>
Capital Works and Services	142	1,461	2,637	4,746	3,382	3,100
Grand Total	1,473	4,523	6,128	8,136	6,909	6,722

(a) Excludes fare and freight concessions and contribution to South Australia—Port Augusta to Port Pirie Railway. (b) Includes loans redemption and conversion expenses, 1950-51, £1,000; 1952-53 £1,000; 1954-55, £19,000.

Additional details of the financial operations of the Commonwealth Railways to 1954-55 are given in Chapter XI.—Transport and Communication (Part I., Division B. Government Railways).

9. *Territories.*—The following table shows the expenditure on account of Commonwealth Territories for the years 1938-39 and 1950-51 to 1954-55. The Australian Capital Territory is administered by the Department of the Interior, and the Department of Territories controls the Northern Territory and the external territories. The expenditure has been grouped in one table for convenience. Information in greater detail will be found in the annual bulletin *Finance*.

COMMONWEALTH TERRITORIES : EXPENDITURE.
(£'000.)

Territory.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Administration and Maintenance of Services—</i>						
Australian Capital Territory(a)	637	1,924	2,157	2,462	2,652	2,786
Northern Territory (a) ..	403	1,830	2,068	2,448	2,622	2,829
Papua	49	4,518	5,532	4,888	5,821	7,322
New Guinea	6					
Norfolk Island	5					
<i>Total</i>	<i>1,100</i>	<i>8,276</i>	<i>9,773</i>	<i>9,838</i>	<i>11,153</i>	<i>12,971</i>
<i>Capital Works and Services—</i>						
Australian Capital(a) ..	244	3,713	3,851	3,246	2,642	3,342
Northern(a)	495	1,361	1,281	1,206	1,452	1,818
Papua and New Guinea ..	..	11	21	369	417	8
<i>Total</i>	<i>739</i>	<i>5,085</i>	<i>5,153</i>	<i>4,821</i>	<i>4,511</i>	<i>5,168</i>

(a) Excludes Railways, see para 8 (iii).

10. Capital Works and Services.—In the following table, details are given of Commonwealth expenditure on capital works and services during each of the years 1938-39 and 1950-51 to 1954-55. The table covers all expenditure on capital works and services made from the Consolidated Revenue Fund, the Loan Fund and Trust Funds.

COMMONWEALTH EXPENDITURE ON CAPITAL WORKS AND SERVICES FROM REVENUE, TRUST AND LOAN FUNDS.
(£'000.)

Particulars.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Defence and War—</i>						
Navy	2,076	4,357	6,415	9,847	9,248	11,746
Army	1,547	7,153	18,410	20,960	11,172	14,033
Air Force	1,538	1,592	3,883	4,521	3,312	2,587
Munitions and other	1,173	a 62,024	a 16,418	6,989	4,781	4,637
<i>Repatriation Services—</i>						
War Service Homes	105	24,911	27,590	27,964	26,846	29,999
Other .. .. .	..	342	271	203	227	132
Postmaster-General's Department ..	3,849	34,897	28,818	28,427	25,986	25,837
Broadcasting Services .. .. .	..	212	251	202	281	273
<i>Railways—</i>						
Commonwealth	142	1,460	2,634	4,742	3,381	3,099
<i>Territories—</i>						
Australian Capital Territory ..	488	3,697	3,851	3,237	2,630	3,338
Northern Territory	244	1,361	1,281	1,206	1,452	1,818
Papua-New Guinea .. .. .	..	11	20	369	417	8
<i>Other—</i>						
Ships, yards and docks	-300	1,462	2,413	1,786	3,494	3,228
Civil Aviation	419	4,845	6,424	6,096	4,933	3,657
Snowy Mountains Scheme .. .. .	..	6,077	10,393	13,600	13,170	13,200
Immigration .. .. .	..	7,168	7,243	2,279	558	208
Coal Industry Act 1946 .. .. .	..	3,000	4,100	26	..	..
Health	35	271	490	416	409	383
Subscriptions to Capital(b) .. .. .	..	377	..	1,049	1,000	1,000
Advances(c) .. .. .	..	477	2,389	4,180	2,451	2,403
All other works, buildings, etc. ..	243	7,373	11,700	6,493	5,453	5,376
<i>Total</i>	<i>11,559</i>	<i>173,067</i>	<i>154,994</i>	<i>144,592</i>	<i>121,201</i>	<i>126,962</i>
<i>Source of Funds—</i>						
Consolidated Revenue Fund ..	6,715	148,185	154,999	144,606	121,214	126,969
Loan Fund	1,598	24,882	-5	-14	-13	-7
Trust Funds(d)	3,246	..	..	..	..	..
<i>Total</i>	<i>11,559</i>	<i>173,067</i>	<i>154,994</i>	<i>144,592</i>	<i>121,201</i>	<i>126,962</i>

(a) Includes Strategic Stores and Equipment Reserve, 1950-51, £57,048,000; 1951-52, £10,049,000.
(b) Excludes Amalgamated Wireless (Aust.) Ltd. and Commonwealth New Guinea Timbers Ltd. included under Postmaster-General's Department and Territories respectively. (c) Excludes Overseas Telecommunications Commission included under Postmaster-General's Department. (d) From excess receipts of previous years and National Defence Contributions Trust Account.

NOTE.—Minus sign (-) indicates excess of credits or repayments over expenditure.

11. Payments to or for the States.—(i) *General.* An outline of the provisions of the Constitution requiring the Commonwealth to make payments to the States, and of the systems which followed, is given in earlier issues of the Official Year Book (see No. 37, pages 633 to 638). In the following paragraphs, reference is made to the arrangements at present in operation.

(ii) *Amounts Paid.* (a) *Year 1954-55.* The table below shows particulars of the amounts paid to each of the States as grants for the several purposes referred to in subsequent paragraphs.

COMMONWEALTH PAYMENTS TO OR FOR THE STATES, 1954-55.(a)
(£'000.)

Particulars.	N.S.W.	Vic.	O'land.	S.A.	W.A.	Tas.	Total.
Interest on States' Debts ..	2,918	2,127	1,096	704	473	267	7,585
Sinking Fund on States' Debts(b) ..	1,430	880	497	503	397	240	3,947
Special Grants				2,250	7,450	2,600	12,300
Tax Reimbursement Grants	50,697	32,397	20,897	11,414	10,238	4,403	130,046
Special Financial Assistance	7,758	4,960	3,198	1,746	1,567	673	19,902
Commonwealth Aid Roads(c)	5,893	3,771	4,125	2,409	4,190	1,073	21,461
Tuberculosis Act 1948—Reimbursement of Capital Expenditure	817	46	576	54	198	18	1,709
Western Australian Waterworks Grant					366		366
Coal Mining Industry—Long Service Leave	469	1	89		32	9	600
Imported Houses—Grants ..	18			23	47		88
Contribution to South Australia—Port Augusta to Port Pirie Railway ..				20			20
Encouragement of Meat Production			101		160		261
Grants to Universities	629	367	180	184	122	62	1,544
Total	70,629	44,549	30,759	19,307	25,240	9,345	199,829

(a) Excludes relief to primary producers and other payments for medical research, etc. (b) Paid to National Debt Sinking Fund. (c) Paid to Trust Fund; excludes £900,000 for road safety practices and Commonwealth strategic roads.

(b) 1938-39 and 1950-51 to 1954-55. The following table shows particulars of payments by the Commonwealth to or on behalf of the States during each of these years.

COMMONWEALTH PAYMENTS TO OR FOR THE STATES.(a)
(£'000.)

Particulars.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Financial Agreement—						
Interest on States' Debts ..	7,585	7,585	7,585	7,585	7,585	7,585
Sinking Fund on States' Debts(b) ..	1,478	2,241	2,557	3,011	3,463	3,947
Special Grants	2,020	12,175	10,522	15,934	15,400	12,300
Tax Reimbursement—						
Grants		70,107	86,268	108,623	120,415	130,046
Additional Grants		5,000				
Special Financial Assistance		15,000	33,577	27,146	21,915	19,902
Grants for Road Construction, etc.(c)	4,266	13,543	14,647	15,107	16,457	21,461
Commonwealth Aid Roads (Supplementary) Trust Account ..					5,000	
Tuberculosis Act 1948—Reimbursement of Capital Expenditure ..		408	734	1,292	1,380	1,709
Price Control Reimbursement		704	937	1,056	84	
Local Public Works—Interest and Sinking Fund	100					
Youth Employment	200					
Western Australian Waterworks		219	289	224	333	366
Coal Mining Industry—Long Service Leave		374	499	552	579	600
Imported Houses—Grants		170	1,788	1,530	615	88
Contribution to South Australia—Port Augusta to Port Pirie Railway ..	20	20	20	20	20	20
Encouragement of Meat Production ..		315	205	398	413	261
Grant to Universities			1,473	1,125	1,389	1,544
Total	15,669	127,861	161,101	183,603	195,043	199,829

(a) Excludes relief to primary producers and other payments for medical research, etc. (b) Paid to National Debt Sinking Fund. (c) Excludes expenditure on strategic roads and road safety practices, 1950-51 to 1953-54, £600,000, 1954-55, £900,000.

Particulars of special Commonwealth grants for the relief of primary producers are not included in the foregoing tables. For details see Chapter XXII.—Agricultural Production. See also para. 4, Subsidies and Bounties, and para. 12, Other Expenditure, of this subsection.

(iii) *Financial Agreement.* Details of the Financial Agreement between the Commonwealth and the States are given in Official Year Book No. 37, pages 685 to 690. Under this Agreement, the Commonwealth undertook to contribute £7,584,912 per annum towards interest payable on the State Debts for a period of 58 years from 1st July, 1927. This amount is to be distributed amongst the States as follows :—New South Wales, £2,917,411 ; Victoria, £2,127,159 ; Queensland, £1,096,235 ; South Australia, £703,816 ; Western Australia, £473,432 ; Tasmania, £266,859.

These amounts are equal to the sums paid by the Commonwealth to each State in the year 1926–27 at the rate of 25s. per head of population, the rate at which the Commonwealth had contributed annually to the States since 1st July, 1910 as compensation for the States relinquishing, after Federation, the right to levy Customs and Excise Duties.

In addition, under the Financial Agreement, the Commonwealth agreed to make certain contributions to the National Debt Sinking Fund for redemption of State Debts. Details of these payments are given in division D of this Chapter (§ 2, page 795).

(iv) *Special Grants.* The Constitution provides in Section 96 for the granting of special financial assistance to the States. Prior to 1933, financial assistance of varying amounts was granted by the Commonwealth to South Australia, Western Australia and Tasmania. Details of this may be found in earlier issues of the Official Year Book (see No. 40, page 695).

In 1933, the Commonwealth Government appointed the Commonwealth Grants Commission of three members to inquire into and report upon claims made by any State for a grant of financial assistance and any matters relevant thereto.

Applications have been received from South Australia, Western Australia and Tasmania each year from 1933 onwards and the recommendations of the Commission in respect of the years 1938–39 and 1951–52 to 1955–56 are shown in the following table. Commencing with 1949–50, the Commission has divided the grants recommended into two parts. One part is the Commission's estimate of the indispensable need of the claimant State for the year in which the payment is to be made after allowing a sufficient margin for safety. The other part is an adjustment of this estimate for an earlier year after an examination of the audited accounts for that year. Thus the grants for 1955–56 include an estimate of the indispensable need of the claimant State for 1955–56 and an adjustment to the estimated grant for 1953–54.

COMMONWEALTH GRANTS COMMISSION : GRANTS RECOMMENDED.
(£'000.)

Particulars.	1938–39.	1951–52.	1952–53.	1953–54.	1954–55.	1955–56.
<i>South Australia—</i>						
Estimated grant	1,040	4,250	6,600	6,300	3,350	5,940
Adjustment(a) .. ..	..	308	-257	-200	-1,100	-540
<i>Net grant recommended</i> ..	<u>1,040</u>	<u>4,558</u>	<u>6,343</u>	<u>6,100</u>	<u>2,250</u>	<u>5,400</u>
<i>Western Australia—</i>						
Estimated grant	570	5,000	8,200	7,350	7,100	8,875
Adjustment(a) .. ..	..	88	-159	450	350	25
<i>Net grant recommended</i> ..	<u>570</u>	<u>5,088</u>	<u>8,041</u>	<u>7,800</u>	<u>7,450</u>	<u>8,900</u>
<i>Tasmania—</i>						
Estimated grant	410	750	1,550	1,650	3,200	4,384
Adjustment(a) .. ..	..	126	..	-150	-600	-184
<i>Net grant recommended</i> ..	<u>410</u>	<u>876</u>	<u>1,550</u>	<u>1,500</u>	<u>2,600</u>	<u>4,200</u>
Grand Total	2,020	10,522	15,934	15,400	12,300	18,500

(a) Adjustment to estimated grant paid two years previously.

(v) *Tax Reimbursement Grants.* Details of the States Grants (Income Tax Reimbursement) Act 1942 and the States Grants (Entertainments Tax Reimbursement) Act 1942 are given in earlier issues of the Official Year Book (see No. 37, pages 635 to 637). These Acts provided for grants to the States as compensation for vacating the fields of Income Tax and Entertainments Tax. Grants under these Acts ceased after 1945–46 and were replaced by grants under the States Grants (Tax Reimbursement) Act 1946–1948.

This Act provided for reimbursement grants of certain specified amounts to be paid to the States during 1946-47 and 1947-48. For 1948-49 and subsequent years, the grants were assessed on the aggregate paid in 1947-48 (£45,000,000) increased in accordance with a formula based on increases in population and average wages. Details of the formula and of the treatment of arrears of State income taxes were given in earlier issues of the Official Year Book (see No. 40, page 696).

In 1950-51, an amount of £5,000,000 was paid to the States under the States Grants (Additional Tax Reimbursement) Act 1950. As this was considered as a non-recurring grant, the formula outlined above was not amended.

(vi) *Special Financial Assistance Grants.* During the years 1950-51 to 1954-55, there were heavy additions to the financial needs of the States and special assistance grants amounting to £15,000,000, £33,577,000, £27,146,000, £21,915,000 and £19,902,000 respectively were made. For details of amounts paid to each State during 1954-55 see page 775 and for payments during 1950-51, 1951-52, 1952-53 and 1953-54, see Official Year Book No. 39, page 791, No. 40, page 698, No. 41, page 619 and No. 42, page 783.

(vii) *Grants for Road Construction.* (a) *Main Roads Development Act 1923-25, Federal Aid Roads Acts 1926, 1931 and 1936, Federal Aid Roads and Works Act 1937, Commonwealth Aid Roads and Works Act 1947-1949 and Commonwealth Aid Roads Act 1950.* Details of these Acts are given in earlier issues of the Official Year Book (see No. 38, pp. 787-8 and No. 41, p. 62) and in the annual bulletin *Finance*.

(b) *The Commonwealth Aid Roads Act 1954* repealed the Commonwealth Aid Roads Act 1950 and provided for payment to the States, for a period of five years from 1st July, 1954, of an amount equivalent to 7d. per gallon on all petrol except aviation spirit which is entered for home consumption and which is subject to Customs and Excise duties as specified in Customs Tariff Items 229 c and 229 (d) (2) and Excise Tariff Item 11. Out of this amount, the following grants are to be made to the States, for construction and maintenance of roads and the purchase of roadmaking plant :—

- (a) Sixty per cent. of the amount, less £900,000 per annum, for expenditure on roads, and
- (b) Forty per cent. of the amount for expenditure on roads in rural areas other than highways, trunk or main roads.

The States may spend from the Commonwealth road grants up to £1,000,000 per annum on works connected with transport by road or water. Five per cent. of the grants is payable to Tasmania and the remainder is to be divided among the other five States, three-fifths according to population and two-fifths according to area. In addition, the Commonwealth may spend each year £800,000 on strategic roads and £100,000 on the promotion of road safety practices.

An amendment to the Commonwealth Aid Roads Act 1954 increased the allocation for road safety purposes to £150,000 per year as from 1st July, 1955.

(viii) *Tuberculosis Act 1948.* Reimbursement of Capital Expenditure. The Tuberculosis Act 1948 provided for the reimbursement by the Commonwealth of capital expenditure incurred by the States in the provision of facilities for the diagnosis, treatment and control of tuberculosis, as from 1st July, 1948. This expenditure is included in "Payments to the States" for the first time in 1954-55. It was previously classified under Capital Works and Services—Health Department.

(ix) *Other Payments.* (a) *Price Control Reimbursement.* These grants were made from 1948-49 to 1953-54 to reimburse the States for expenditure incurred in administering prices, rents and land sales controls.

(b) *Western Australian Waterworks.* The Western Australia (Water Supply) Act, 1948, provides for grants to Western Australia not exceeding an aggregate of £2,150,000 for the development of the agricultural areas, great southern towns and Goldfields Water Supply scheme. The amount provided by the Commonwealth is not to exceed half the total expenditure on the scheme.

(c) *Coal Mining Industry—Long Service Leave.* To provide funds for the payment for long service leave in the coal mining industry, the Commonwealth imposed an excise duty of 6d. per ton on coal produced from 1st November, 1949. The rate of duty was raised to 7½d. per ton from 26th August, 1951 and to 8d. per ton from 30th May, 1952. The proceeds of this excise duty are paid to a trust fund out of which the States are reimbursed for expenditure incurred in granting long service leave to employees in the coal mining industry.

(d) *Imported Houses.* A subsidy is paid to the States for houses imported by a State or a housing authority of a State after 12th October, 1949. The amount of the subsidy is the amount by which the cost of imported houses exceeds the cost of building comparable houses from local materials. The subsidy is limited to £300 per house and in aggregate to 30,000 houses or £9,000,000.

(e) *Contribution to South Australia—Port Augusta to Port Pirie Railway.* The Port Augusta to Port Pirie Railway Act 1935–1950 approved an agreement between the Commonwealth and South Australia to provide for the extension of the Trans-Australian Railway by the construction of a railway in South Australia from Port Augusta to Port Pirie. As a contribution towards reimbursing South Australia for the cost of the section to be constructed by the State, and for any additional expense incurred by the State in carrying out the Agreement, the Act provided for a payment by the Commonwealth to the State of South Australia of £20,000 per annum for twenty years, the first payment being made after the opening of the Railway in 1937–38.

(f) *Encouragement of Meat Production.* To develop meat production in Queensland and Western Australia, grants are made to these States for the provision of improved roads and other facilities for the movement of live-stock. Provision is made for the Commonwealth to meet the cost of the construction and improvement of certain specified roads in both States and the construction of eight cattle loading and unloading points in Queensland. Provision is also made for the Commonwealth to meet half the cost of improving watering facilities on specified stock routes in both States. The amount of the grants for improving watering facilities on stock routes is limited to £75,000 in Queensland and £31,500 in Western Australia. These limits were extended as from 20th April, 1954 to £150,000 in Queensland and £50,000 in Western Australia.

(g) *Grants to Universities.* The States Grants (Universities) Act 1951 provides for grants to be made to the States for the purpose of financial assistance to Universities during the three years 1950–51 to 1952–53. The Act was superseded by the States Grants (Universities) Act 1953 which came into operation on 1st January, 1953, and which increased the assistance payable.

12. **Other Expenditure.**—Expenditure under this item represents the proceeds of special industry taxes and profits from marketing schemes which are paid to trust funds or other authorities for the purposes of the industries concerned. Advance payments in respect of sales of uranium paid to the Atomic Energy Commission are also included.

Information relating to the taxes levied is given in sub-section II.—Revenue, of this section (see pages 758, 759 and 760). Details of expenditure from the trust funds are given in § 3., Commonwealth Trust Funds. Details of the price stabilization and other assistance schemes for primary industries may be found in Chapter XXII.—Agricultural Production. Details of expenditure from the Consolidated Revenue Fund during the last five years are given in the following table.

**OTHER EXPENDITURE : RECEIPTS AND EXPENDITURE FROM
COMMONWEALTH CONSOLIDATED REVENUE FUND.
(£'000.)**

Receipts from—	Expenditure on—	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
<i>Taxes—</i>						
Export Charges ..	Export Control Boards (a)	..	..	166	168	301
Stevedoring Industry ..	Stevedoring Industry Board ..	420	551	1,144	1,630	998
Charge ..	Wheat Industry Price Stabilization (b) ..	13,353	12,202	8,139	..	5,063
Wheat Export Charge	Wool Use Promotion and Disposals Plan ..	1,654	486	} 28	..	..
Wool Contributory Charge ..	Wool Reserve Prices Fund ..	43,190	1,744		675	772	784
Wool Tax ..	Wool Use Promotion ..	..	..	..	..	..
<i>Total</i> ..	..	<u>58,617</u>	<u>14,983</u>	<u>10,152</u>	<u>2,570</u>	<u>7,146</u>
<i>Other—</i>						
Advance Payments—	Atomic Energy Commission ..	..	..	1,174	2,791	1,082
Sales of Uranium ..	Wool Industry—Distribution of War-time Trading Profits ..	..	..	42,361	..	..
Wool Disposals Profit ..	Australian Wool Bureau ..	..	..	..	730	..
Wool Stores—Moneys paid by Wool Realization Commission	Hide and Leather Industries Trust Fund ..	..	..	..	..	5
Hide and Leather Industries — Moneys paid by Hide and Leather Industries Board	..	..	..	..	..	..
<i>Total</i> ..	..	..	..	<u>43,535</u>	<u>3,521</u>	<u>1,087</u>
<i>Grand Total</i> ..	..	<u>58,617</u>	<u>14,983</u>	<u>53,687</u>	<u>6,091</u>	<u>8,233</u>

(a) Paid to Apple and Pear Export Fund, Canned Fruits Export Fund, Dairy Produce Export Fund, Dried Fruits Export Fund, Egg Export Fund and Wine Export Fund. Prior to 1952–53 these charges were treated as refunds of Revenue and not shown separately. (b) Paid to Wheat Prices Stabilization Fund.

§ 3. Commonwealth Trust Funds.

1. Receipts, Expenditure and Balances, 1954-55.—The following table shows the opening and closing balances, and receipts and expenditure of some of the more important Trust Funds of the Commonwealth for the year ended 30th June, 1955.

COMMONWEALTH TRUST FUNDS : RECEIPTS, EXPENDITURE AND BALANCES, 1954-55.

(£'000.)

Fund.	Balance at 30th June, 1954.	Year ended 30th June, 1955.		Balance at 30th June, 1955.
		Receipts.	Expenditure.	
Australian New Guinea Production ..	1,488	50	..	1,538
Coal Mining Industry Long Service Leave	832	625	530	927
Coinage	3,891	2,142	2,142	3,891
Commonwealth Aid Roads No. 1 ..	1,394	4,087	5,481	..
Commonwealth Aid Roads No. 2 ..	..	18,273	15,682	2,591
Commonwealth Aid Roads (Supplementary)	5,000	..	1,882	3,118
Debt Redemption Reserve	56,271	70,151	..	126,422
Defence Equipment and Supplies ..	12,000	8,000	..	20,000
Defence Forces Retirement Benefits ..	6,119	2,400	1,331	7,188
Enemy Subjects	1,180	318	2	1,496
Insurance Deposits	4,481	639	362	4,758
International Development and Relief ..	1,069	2,576	3,417	228
Korean Operations Pool	10,905	3,542	4,057	10,390
Lend-Lease Settlement	1,560	46	156	1,450
Liquid Fuel Equalization	930	(a) Dr. 930	..	..
National Debt Sinking Fund	190,167	73,303	59,441	204,029
National Welfare	188,930	191,427	189,319	191,038
Parliamentary Retiring Allowances ..	135	46	14	167
Public Trustee and Custodian	3,521	113	3,464	170
Strategic Stores and Equipment Reserve..	48,869	..	Cr. 7	48,876
Superannuation	34,038	9,251	4,487	38,802
Temple Society	636	13	17	632
War Gratuity	264	..	61	203
War Service Homes .. .. .	..	30,901	30,901	..
War Service Homes—Insurance	575	146	394	327
Wheat Industry Stabilization	293	..	..	293
Wheat Prices Stabilization .. .. .	..	5,089	..	5,089
Wool Contributory Charge	8	..	..	8
Wool Disposals Profit	12,323	326	12,481	168
Wool Industry	7,133	209	406	6,936
Wool Research	560	432	713	279
Other	52,718	369,256	369,590	52,384
Total	647,290	792,431	706,323	733,398

(a) Surplus balance, £930,000 transferred to Consolidated Revenue Fund.

2. Summary, 1938-39 and 1950-51 to 1954-55.—In the following table, the balances and total receipts and expenditure of the Trust Funds are shown for each of these years.

COMMONWEALTH TRUST FUNDS.

(£'000.)

Particulars.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Balances brought forward	25,609	278,647	363,051	489,729	566,571	647,290
Receipts	84,167	622,435	725,282	709,973	764,365	792,431
Expenditure	85,550	538,031	598,604	633,131	683,646	706,323
Balance carried forward	24,226	363,051	489,729	566,571	647,290	733,398

§ 4. Commonwealth Loan Fund.

Brief historical notes relating to the Commonwealth Loan Fund are given in earlier issues of the Official Year Book (*see* No. 37, page 640). In the following table, details are given of the net expenditure from the Commonwealth Loan Fund for the years 1938-39 and 1950-51 to 1954-55 and of the aggregate expenditure to 30th June, 1955. The figures shown represent "net" loan expenditure, i.e., after adjustments have been made for refunds of amounts expended in earlier years.

COMMONWEALTH NET EXPENDITURE FROM LOAN FUND.

(£'000.)

Particulars.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.	Total to 30th June, 1955.
War Loans—							
Defence and War (1914-18, 1939-45) Services .. ..	..	a 28,773	a 5,120	a 5,684	a 4,199	a 4,039	2,005,718
Other Loans—							
Capital Works and Services—							
Defence(b)	1,912	-12	..	..	..	..	8,682
Repatriation Services(b)—							
War Service Homes(b) .. ..	..	..	..	..	..	..	7,329
Other .. ..	..	..	..	..	..	..	47
Postmaster-General's Department	-1	-1	-1	-1	..	-2	40,422
Broadcasting Services .. ..	..	..	..	..	..	..	104
Railways .. ..	..	-1	-3	-4	-1	-1	13,749
Territories(c)	-7	-16	-1	-9	-12	-4	8,720
Other—							
Ships, Yards and Docks	-305	..	..	..	..	..	7,694
Civil Aviation .. ..	..	..	..	..	..	..	213
Immigration .. ..	..	..	..	..	..	..	1,681
All other works, buildings, etc.	-1	..	..	..	..	..	4,223
Other Purposes—							
Assistance to States—							
Farmers Debt Adjustment	2,000	..	..	..	..	..	7,967
Housing .. ..	..	21,640	26,547	30,000	37,200	29,150	207,359
Other	-4	..	..	..	..	..	5,976
Wheat Bounty .. ..	..	..	..	..	..	..	3,430
Total Capital Works and Services and Other Purposes	3,594	21,610	26,542	29,986	37,187	29,143	317,596
International Bank Dollar Loan(d) .. ..	..	4,044	23,831	17,935	21,468	23,575	90,853
Swiss Loan(e) .. ..	..	..	..	..	5,792	5,930	11,722
Grand Total	3,594	54,427	55,493	53,605	68,646	62,687	2,425,889

(a) Comprises expenditure under War Service Homes Acts—1950-51, £24,911,000 and financial assistance to the States in connexion with War Service Land Settlement—1950-51, £3,862,000; 1951-52, £5,120,000; 1952-53, £5,684,000; 1953-54, £4,199,000; 1954-55, £4,039,000. (b) Excludes amounts charged to War Loan Fund. (c) Includes administration and other public buildings, Australian Capital Territory. (d) Payment to National Debt Sinking Fund. *See* pages 808 and 809. (e) Payment to Swiss Loan Trust Account. *See* page 808.

NOTE.—Minus sign (–) indicates excess of repayments to Loan Fund.

Information relating to the Public Debt of the Commonwealth is given in Division D, Commonwealth and State Public Debt, of this chapter.

B. STATE FINANCE.

§ 1. General.

1. **Functions of State Governments.**—In comparing the financial returns of the States, allowances must be made for the various functions discharged by the respective Governments, and for local conditions in each case. Direct comparisons of the revenue, expenditure and debt of the individual States are difficult, owing to the fact that functions which in one State are assumed by the Central Government are in another relegated to

municipal or semi-governmental bodies which are vested with certain defined borrowing powers and whose financial transactions are not included with those of the Central Government. Care, therefore, is needed in making comparisons, and the particulars contained in this Chapter should be read with those contained in Chapter XIX.—Local Government. In many respects, moreover, the budgets of the Australian Governments differ materially from those of most European countries, owing to the inclusion therein of the revenue and expenditure of departments concerned in rendering public services, such as railways, tramways, water supply, etc., which in other countries are often left to private enterprise.

2. Accounts of State Governments.—The various financial transactions of the States are in each case mainly concerned with one or other of three Funds—the Consolidated Revenue Fund, the Trust Fund, and the Loan Fund. All revenue (except certain items paid into special funds) collected by the State is paid into its Consolidated Revenue Fund, from which payments are made under the authority of an annual Appropriation Act passed by the Legislature, or by a permanent appropriation under a special act.

Figures in § 2 following relating to New South Wales represent the transactions of the Consolidated Revenue Fund and the business undertakings included in the annual budget papers. These latter are as follows:—Railways, Tramways and Omnibuses, and Sydney Harbour Trust Section of the Maritime Services Board. Adjustments have been made to the Budget figures, however, in order to obviate duplications caused by inter-fund payments and to maintain uniformity from year to year in the presentation of statistics. Particulars for all other States relate to the transactions of the Consolidated Revenue Fund.

The Trust Fund comprises all moneys held in trust by the Government, and includes such items as superannuation funds, road funds, insurance companies' deposits, etc.

The Loan Fund is debited with all loan moneys raised by the State, and credited with the expenditure therefrom on public works or other purposes.

3. Inter-relation of Commonwealth and State Finances.—A statement in some detail, covering the inter-relation of Commonwealth and State Finances during the period from the inception of Federation to the passing of the Financial Agreement Act 1928, was published in Official Year Book No. 22, pages 379–80. Changes in the financial relations between the Commonwealth and States since the passing of the Financial Agreement Act have been described in issues of the Official Year Book from year to year (*see also* pages 795–797).

§ 2. State Consolidated Revenue Funds.

I.—Revenue.

1. General.—The principal sources of State revenue are:—

(a) Taxation; (b) The business undertakings controlled by the State Governments; (c) Sale of and rental from crown lands; (d) Payments by Commonwealth Government under the Financial Agreement, Special Grants and Tax Reimbursement Acts, etc.; (e) Interest on advances; and (f) Miscellaneous sources, comprising fines, fees, etc.

Of these sources, that yielding the largest revenue for the States as a whole is the group of business undertakings, the principal contributors being the government railways and tramways. Next in magnitude are Commonwealth payments under the Tax Reimbursement Acts, followed in order by taxation receipts, Commonwealth special financial assistance and special grants, and lands receipts. With the introduction of uniform taxation by the Commonwealth in 1942–43, the States vacated the fields of income and entertainment taxation, and payments by the Commonwealth under the Income and Entertainments Tax Reimbursements Acts and, from 1946–47, under the Tax Reimbursement Act, replaced revenue previously received from those sources. The Commonwealth, however, ceased to impose Entertainments Tax in 1953–54 and in the same year Victoria, Western Australia and Tasmania re-imposed an Entertainments Tax.

2. Revenue Received.—The following table shows particulars of the total amounts and the amounts per head of consolidated revenue received by the several States during the years 1938–39 and 1950–51 to 1954–55.

STATE CONSOLIDATED REVENUE.

Year.	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL REVENUE. (£'000.)							
1938–39 ..	51,099	26,985	19,330	12,304	10,950	3,615	124,283
1950–51 ..	128,298	63,546	44,723	31,072	28,974	7,819	304,432
1951–52 ..	167,095	81,661	55,753	37,588	33,955	10,469	386,521
1952–53 ..	180,908	96,995	63,171	44,251	38,725	12,061	436,111
1953–54 ..	186,642	106,748	69,696	48,376	43,596	13,285	468,343
1954–55 ..	193,039	116,789	73,820	48,684	46,070	14,495	492,897
PER HEAD OF POPULATION. £ s. d.							
1938–39 ..	18 13 7	14 8 3	19 3 6	20 13 6	23 9 0	15 4 2	17 19 5
1950–51 ..	39 12 4	28 6 8	37 0 11	43 0 11	50 16 0	27 11 7	36 16 9
1951–52 ..	50 9 1	35 7 1	44 19 4	50 11 4	57 11 3	35 13 9	45 10 9
1952–53 ..	53 14 10	40 17 8	49 13 1	57 14 7	63 7 2	39 17 4	50 3 7
1953–54 ..	54 16 2	44 1 2	53 11 10	61 11 0	69 2 5	42 18 8	52 17 10
1954–55 ..	55 16 0	46 18 9	55 14 0	60 5 10	70 19 10	46 6 3	54 10 2

(a) See § 1, para. 2, page 781.

3. Sources of Revenue.—(i) *General.* Classifying the revenue of the several States in the manner indicated in para. 1 above, particulars for the year 1954–55 were as follows:—

STATE CONSOLIDATED REVENUE : SOURCES, 1954-55.

Source of Revenue.	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL REVENUE. (£'000.)							
Taxation(b) ..	21,232	20,861	8,735	7,547	3,757	2,690	64,822
Business Under-takings ..	87,929	44,021	30,805	17,827	16,695	5	197,282
Lands ..	4,431	2,259	3,827	379	1,007	405	12,308
Interest, n.e.i. ..	1,050	3,664	1,720	3,334	1,234	2,349	13,351
Commonwealth Payments—							
Tax Reimbursements ..	50,697	32,397	20,898	11,414	10,238	4,403	130,047
Other(c) ..	10,676	7,087	4,294	4,700	9,490	3,540	39,787
Miscellaneous ..	17,024	6,500	3,541	3,483	3,649	1,103	35,300
Total ..	193,039	116,789	73,820	48,684	46,070	14,495	492,897
PER HEAD OF POPULATION. (£ s. d.)							
Taxation(b) ..	6 2 9	8 7 8	6 11 10	9 6 11	5 15 10	8 11 11	7 3 4
Business Under-takings ..	25 8 4	17 13 10	23 4 10	22 1 7	25 14 7	0 0 4	21 16 4
Lands ..	1 5 7	0 18 2	2 17 9	0 9 5	1 11 0	1 5 10	1 7 3
Interest, n.e.i. ..	0 6 1	1 9 5	1 6 0	4 2 7	1 18 0	7 10 1	1 9 6
Commonwealth Payments—							
Tax Reimbursements ..	14 13 1	13 0 5	15 15 4	14 2 8	15 15 6	14 1 4	14 7 8
Other(c) ..	3 1 9	2 17 0	3 4 10	5 16 5	14 12 6	11 6 3	4 8 0
Miscellaneous ..	4 18 5	2 12 3	2 13 5	4 6 3	5 12 5	3 10 6	3 18 1
Total ..	55 16 0	46 18 9	55 14 0	60 5 10	70 19 10	46 6 3	54 10 2

(a) See § 1, para. 2, page 781. (b) In all States certain taxation collections are not paid into Consolidated Revenue Fund. For total collections see next page. (c) Includes payments under Financial Agreement, Special Grants, Prices Control Reimbursement Grants and Special Financial Assistance.

(ii) *Revenue from Taxation.* (a) *General.* The following table shows, for the year 1954-55, particulars of all State taxation collections irrespective of whether such moneys have been paid into the Consolidated Revenue Funds or not. For this reason, the particulars hereunder differ from those shown in the tables relating to the Consolidated Revenue Funds and represent a comprehensive statement of all taxation collections by the Government in each State. In this and the succeeding statements of taxation, the collections have been grouped according to the nature of the tax rather than the method of collection. For example, stamp duties on betting tickets and bookmakers' licences have been included under "Racing Tax" instead of under "Stamp Duties" and "Licences" respectively. Commonwealth payments under the State Grants (Tax Reimbursement) Act are not included.

STATE REVENUE FROM TAXATION : TOTAL NET COLLECTIONS(a) 1954-55.
(£'000.)

Tax.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Motor Taxes—</i>							
Registration Fees and Taxes	8,702	4,533	4,075	2,841	1,227	600	21,978
Drivers', etc., Licences	783	364	(b) 139	308	112	42	1,748
Other	1,362	1,432	904	89	119	151	4,057
<i>Total Motor</i>	<i>10,847</i>	<i>6,329</i>	<i>5,118</i>	<i>3,238</i>	<i>1,458</i>	<i>793</i>	<i>27,783</i>
<i>Probate and Succession Duties</i>	9,589	6,305	2,513	1,661	1,062	472	21,602
Stamp Duties, n.e.i.	6,314	4,172	2,613	1,227	1,250	451	16,027
Land	2	2,624	1,206	568	391	207	4,998
Income (Arrears)	19	22	9	1	1	..	52
Liquor	2,418	2,108	523	58	287	169	5,563
Lotteries .. .. .	..	2,598	304	..	..	(c) 576	3,478
Racing	2,789	2,100	285	1,070	406	342	6,992
Entertainments .. .. .	..	996	..	..	225	120	1,341
Licences, n.e.i.	101	243	..	55	37	6	..
Other .. .. .	..	..	} 1,073	{ 42	93	..	} 1,650
Grand Total	32,079	27,497	13,644	7,920	5,210	3,136	89,486

(a) From all sources of taxation irrespective of whether paid to Consolidated Revenue or to other funds. (b) As from October, 1952 no charge has been made for drivers' licences. Instead a driving fee is charged upon renewal of registration. (c) Includes income tax £392,000 on lottery prizes.

Of the total taxation collections detailed above, the following were paid into special funds:—

STATE REVENUE FROM TAXATION : PAYMENTS INTO SPECIAL FUNDS,
1954-55.
(£'000.)

Tax.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Motor	10,847	6,327	4,075	..	1,360	270	22,879
Stamp Duties, n.e.i. .. .. .	..	181	..	..	..	..	181
Liquor .. .. .	..	128	80	..	..	..	208
Racing .. .. .	..	..	..	373	..	176	549
Other .. .. .	..	..	754	..	93	..	847
Total	10,847	6,636	4,909	373	1,453	446	24,664

The table hereunder shows, for the year 1954-55, the proportions of collections under individual classes of tax to the total taxation revenue:—

STATE REVENUE FROM TAXATION : PROPORTIONS OF INDIVIDUAL TAXES TO TOTAL, 1954-55.
(Per Cent.)

Tax.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Motor	33.81	22.38	37.67	40.89	27.99	25.29	31.07
Probate and Succession Duties	29.89	23.12	18.50	20.98	20.38	15.04	24.15
Stamp Duties, n.e.i.	19.68	15.30	19.23	15.50	23.98	14.37	17.92
Land	0.01	9.62	8.87	7.17	7.49	6.61	5.59
Income (Arrears)	0.06	0.08	0.07	0.01	0.03	..	0.06
Liquor	7.54	7.73	3.85	0.73	5.51	5.41	6.22
Lotteries .. .. .	..	9.53	2.24	..	..	18.36	3.89
Racing	8.69	7.70	2.10	13.51	7.79	10.91	7.82
Entertainments .. .. .	..	3.65	..	..	4.32	3.82	1.50
Licences, n.e.i.	0.32	0.89	7.47	0.69	0.72	0.19	1.63
Other .. .. .	..	..	..	0.52	1.79	..	0.15
Grand Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(b) 1938-39 and 1950-51 to 1954-55. Prior to federation, customs and excise duties contributed the principal source of revenue from taxation. Thereafter, until the introduction of the uniform income tax scheme in 1942-43, the most productive State taxes were the various income taxes which, in 1941-42, included unemployment relief, State development and hospital taxes. Since 1941-42, the States have been reimbursed by the Commonwealth for the revenue lost by the discontinuance of these taxes. Details of the reimbursement grants are given on pp. 776 and 782. Information relating to the State income taxes which were levied prior to 1942-43 may be found in earlier issues of the Official Year Book.

The total amounts and the amounts per head raised from all sources of taxation by the several State Governments, including amounts not paid into the Consolidated Revenue Fund, during the years 1938-39 and 1950-51 to 1954-55 are shown in the following table:—

STATE REVENUE FROM TAXATION : TOTAL NET COLLECTIONS.(a)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL NET COLLECTIONS. (£'000.)							
1938-39(b) ..	20,263	12,023	8,657	4,199	3,597	1,779	50,518
1950-51 ..	20,850	13,226	7,755	4,347	2,977	2,756	51,911
1951-52 ..	24,840	16,943	9,672	5,151	3,455	3,089	63,150
1952-53 ..	27,678	19,157	11,603	5,341	3,912	3,467	71,158
1953-54 ..	29,749	22,300	12,817	6,911	4,682	3,941	80,400
1954-55 ..	32,079	27,497	13,644	7,920	5,210	3,136	89,486
PER HEAD OF POPULATION. (£ s. d.)							
1938-39(b) ..	7 8 2	6 8 5	8 11 6	7 1 1	7 14 1	7 9 8	7 6 1
1950-51 ..	6 8 9	5 17 11	6 8 6	6 0 5	5 4 5	9 14 4	6 5 8
1951-52 ..	7 10 0	7 6 9	7 16 0	6 18 7	5 17 2	10 10 7	7 8 10
1952-53 ..	8 4 5	8 1 6	9 2 5	6 19 4	6 8 0	11 9 2	8 3 9
1953-54 ..	8 14 9	9 4 1	9 17 1	8 15 10	7 8 5	12 14 9	9 1 7
1954-55 ..	9 5 5	11 1 0	10 5 11	9 16 2	8 0 7	10 0 4	9 17 11

(a) Excluding Commonwealth Tax Reimbursements.

(b) Includes Income Taxes.

The following table shows, for the years 1938-39 and 1950-51 to 1954-55 the aggregate amounts collected by the several State Governments, under the various forms of State taxation and includes amounts paid to funds other than Consolidated Revenue.

STATE REVENUE FROM TAXATION : TOTAL NET COLLECTIONS.(a)
(£'000.)

Tax.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Motor	6,961	15,579	20,523	23,321	25,877	27,783
Probate and Succession Duties	5,000	13,004	15,394	17,756	18,700	21,602
Stamp Duties, n.e.i.	3,466	11,961	12,228	12,297	14,543	16,027
Land	1,408	1,362	2,511	3,416	4,138	4,998
Income Taxes	29,796	(b) 291	(b) 155	(b) 132	(b) 92	(b) 52
Liquor	1,045	2,726	3,681	4,429	5,346	5,563
Lotteries	532	1,502	1,642	1,756	1,804	3,478
Racing	1,251	4,540	5,990	6,794	7,503	6,992
Entertainments	633				906	1,341
Licences and all other	426	946	1,026	1,257	1,491	1,650
Total	50,518	51,911	63,150	71,158	80,400	89,486

(a) From all sources of taxation irrespective of whether paid to Consolidated Revenue or to other funds. Excludes Commonwealth Tax Reimbursements. (b) Arrears of State income taxes.

Details of taxation collections paid into special funds and included in the above table are shown below:—

STATE REVENUE FROM TAXATION : PAYMENTS INTO SPECIAL FUNDS.
(£'000.)

Tax.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Unemployment Relief	1,119	..	..	..	..	..
Hospital	264	..	..	..	..	..
Motor	5,858	13,309	16,934	19,316	20,774	22,879
Stamp Duties, n.e.i. .. .. .	..	125	137	122	155	181
Liquor	92	137	149	173	185	208
Racing	83	562	588	520	554	549
Other	173	294	357	638	765	847
Total	7,589	14,427	18,165	20,769	22,433	24,664

(iii) *Business Undertakings.* (a) 1954-55. A very large proportion of State gross revenue is made up of receipts from business undertakings under the control of the Governments. The principal of these are railways and tramways, harbour works, water supply and sewerage, and electricity supply and, in addition, State batteries for the treatment of auriferous ores in Western Australia and various minor revenue-producing services rendered by the Governments of all States are included. For the year 1954-55 the revenue from these sources was £197,282,000 or 40.0 per cent. of the revenue from all sources. Details of revenue are as follows:—

STATE REVENUE FROM BUSINESS UNDERTAKINGS, 1954-55.
(£'000.)

Source.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Total.
Railways(b)	73,361	(c) 37,695	30,805	13,106	12,470	..	167,437
Tramways and Omnibuses	11,475	..	..	..	986	..	12,461
Harbours, Rivers, Lights	3,093	(d) 561	..	1,804	429	..	5,887
Water Supply, Sewerage, Irrigation and Drainage .. .. .	..	2,745	..	2,691	2,436	..	7,872
Electricity Supply .. .. .	..	1,946	..	..	..	5	1,951
Other .. .. .	..	1,074	..	226	374	..	1,674
Total	87,929	44,021	30,805	17,827	16,695	5	197,282

(a) Tasmanian transport services are under the separate control of the Transport Commission. (b) The following contributions to Railways revenue from Consolidated Revenue Fund are excluded—New South Wales, £1,000,000; Victoria, £2,148,000; South Australia, £3,200,000. (c) Includes electric tramways operated by the Railways Department. (d) Includes Harbour Trust Fund contribution, £394,000.

(b) 1938-39 and 1950-51 to 1954-55. The total revenue from Business Undertakings and the revenue per head in each State are shown in the following table:—

STATE REVENUE FROM BUSINESS UNDERTAKINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL REVENUE. (£'000.)							
1938-39 ..	24,676	11,649	7,642	4,957	5,633	(a) 511	55,068
1950-51 ..	61,675	22,646	18,876	10,120	9,782	4	123,103
1951-52 ..	82,454	29,180	22,391	12,938	12,430	4	159,397
1952-53 ..	86,223	36,845	24,868	15,366	11,475	4	174,781
1953-54 ..	88,616	41,163	28,952	16,753	15,271	4	190,759
1954-55 ..	87,929	44,021	30,805	17,827	16,695	5	197,282

PER HEAD OF POPULATION.

(£ s. d.)

1938-39 ..	9 0 5	6 2 6	7 11 7	8 6 6	12 1 4	(a) 2 3 0	7 19 3
1950-51 ..	19 0 11	10 1 11	15 12 9	14 0 5	17 3 0	0 0 3	14 17 11
1951-52 ..	24 17 11	12 12 8	18 1 2	17 8 2	21 1 6	0 0 3	18 15 7
1952-53 ..	25 12 3	15 10 7	19 10 11	20 0 11	18 15 6	0 0 3	20 2 2
1953-54 ..	26 0 5	16 19 10	22 5 3	21 6 4	24 4 3	0 0 3	21 10 10
1954-55 ..	25 8 4	17 13 10	23 4 10	22 1 7	25 14 7	0 0 4	21 16 4

(a) Includes Tasmanian transport services which were subsequently placed under the control of the Transport Commission.

In the table below, particulars of total State revenue from Business Undertakings for the various types of undertakings are shown for the years 1938-39 and 1950-51 to 1954-55:—

STATE REVENUE FROM BUSINESS UNDERTAKINGS.

(£'000.)

Source.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Railways, Tramways and Omnibuses	48,154	112,396	146,720	161,479	176,147	179,898
Harbour Services	2,357	3,939	4,569	4,058	4,782	5,887
Water Supply, Sewerage, Irrigation and Drainage	2,543	4,745	5,568	6,142	6,535	7,872
Other	2,014	2,023	2,540	3,102	3,295	3,625
Total	55,068	123,103	159,397	174,781	190,759	197,282

(iv) *Lands.* The revenue from the sale and rental of crown lands has, with few exceptions, been treated from the earliest times as forming part of the Consolidated Revenue Funds, and has been applied to meet ordinary expenses. The following table shows the revenue from sales and rentals of crown lands for the year 1954-55.

STATE LAND REVENUE, 1954-55.

(£'000.)

Source.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Sales ..	213	96	..	96	99	14	518
Conditional Purchases ..	292	..	..	3	173	..	468
Rentals(a) ..	2,811	291	2,516	280	173	24	6,095
Forestry ..	1,049	1,774	1,205	..	562	362	4,952
Other ..	66	98	106	..	..	5	275
Total ..	4,431	2,259	3,827	379	1,007	405	12,308

(a) Includes mining royalties, rents, etc.

The total land revenue for all States for the years 1938-39 and 1950-51 to 1954-55 respectively was:—£4,144,000, £7,858,000, £11,722,000, £12,589,000, £11,903,000, and £12,308,000.

(v) *Commonwealth Payments.* Commonwealth payments to the States represent a considerable proportion of the States' Revenue. In 1954-55, the total amount (excluding sundry minor items) paid to the Consolidated Revenue Funds of the States was £169,834,000 (34.5 per cent.). This was made up of the contribution towards interest on States' debts under the Financial Agreement, £7,585,000, special grants to the States of South Australia, Western Australia and Tasmania, £12,300,000, special financial assistance, £19,902,000 and tax reimbursement grants, £130,047,000.

In addition to these, the States receive a number of other payments which are paid to trust funds. The main items in this class are the contribution towards the sinking fund on States' debts (£3,947,000 in 1954-55) paid to the National Debt Sinking Fund and grants for Commonwealth Aid Roads (£21,461,000 in 1954-55) paid to State trust funds.

More detailed information concerning Commonwealth payments to the States is given in § 2 of Division A of this Chapter (page 775).

(vi) *Interest and Miscellaneous.* In addition to the forgoing, there are in each State several miscellaneous sources of revenue, including such items as interest, fines, fees, etc. In 1954-55, interest, mainly from loans to local governing bodies, on public account balances and for soldier land settlement amounted to £13,351,000, whilst "Miscellaneous" revenue which includes fines of the courts and fees for services, amounted to £35,300,000.

II.—Expenditure.

1. *General.*—The principal heads of State expenditure from Consolidated Revenue Funds are:—

(a) Interest, exchange and debt redemption charges in connexion with public debt; (b) Working expenses of railways, tramways and other business and industrial undertakings; (c) Education; (d) Health and charitable expenditure; (e) Justice; (f) Police; (g) Penal establishments; and (h) all other expenditure, under which heading is included public works, lands and surveys, agriculture and forestry, legislative and general administration, pensions and miscellaneous.

In earlier years, the working expenses of railways and tramways were the most important item of State Governmental expenditure but for a period prior to 1941-42 public debt charges were the heaviest item. Since then, however, railways and tramways expenditure has again taken the major place. In the year 1954-55, the working expenses of the railways, tramways and omnibuses were 35.0 per cent. of the total expenditure from the State Consolidated Revenue Funds; next in importance were education, 15.4 per cent.; public debt charges, 14.2 per cent.; charitable, public health and hospitals, 13.1 per cent.; and law, order and public safety, 5.2 per cent.

2. **Total Expenditure.**—The total expenditure from the Consolidated Revenue Funds of the several States and the expenditure per head of population during each of the years 1938–39 and 1950–51 to 1954–55 are shown in the following table:—

STATE EXPENDITURE: CONSOLIDATED REVENUE FUNDS.

Year.	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL EXPENDITURE. (£'000.)							
1938–39 ..	53,558	27,773	19,316	12,701	11,170	3,641	128,159
1950–51 ..	128,265	63,889	44,625	30,842	28,814	8,066	304,501
1951–52 ..	166,997	84,067	55,708	37,499	34,547	10,871	389,689
1952–53 ..	180,811	97,360	62,980	44,226	39,233	11,763	436,373
1953–54 ..	186,514	106,037	69,353	46,566	43,699	13,270	465,439
1954–55 ..	195,187	115,453	73,602	50,918	46,554	14,707	496,421

PER HEAD OF POPULATION.
(£ s. d.)

1938–39 ..	19 11 7	14 16 8	19 3 3	21 6 10	23 18 5	15 6 5	18 10 8
1950–51 ..	39 12 2	28 9 8	36 19 4	42 14 7	50 10 5	28 9 0	36 16 11
1951–52 ..	50 8 6	36 7 11	44 18 7	50 9 0	58 11 4	37 1 2	45 18 3
1952–53 ..	53 14 3	41 0 9	49 10 1	57 13 11	64 3 10	38 17 8	50 4 2
1953–54 ..	54 15 5	43 15 4	53 6 7	59 4 11	69 5 8	42 17 9	52 11 3
1954–55 ..	56 8 5	46 8 0	55 10 8	63 1 2	71 14 9	46 19 9	54 18 0

(a) See § 1, para. 2, page 781.

3. **Details of Expenditure.**—(i) 1954–55. The following table shows the total expenditure and expenditure per head for each of the principal items:—

STATE EXPENDITURE: DETAILS, 1954–55.

Particulars.	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(b)	Total.
TOTAL EXPENDITURE. (£'000.)							
Public Debt (interest, exchange, debt redemption, etc.) ..	22,186	16,782	10,158	9,725	7,327	4,216	70,394
Railways ..	64,562	35,618	30,041	14,556	14,497	..	159,274
Tramways and Omnibuses ..	13,506	..	..	..	1,137	..	14,643
Harbours and Rivers, etc. ..	2,316	441	..	1,299	388	..	4,444
Water Supply, Sewerage, Irrigation and Drainage ..	..	2,628	..	2,364	2,059	..	7,051
Other Business and Industrial Undertakings ..	..	1,064	250	206	1,037	997	3,554
Education ..	32,157	19,423	8,769	6,238	6,568	3,133	76,288
Health and Charitable ..	22,699	19,333	10,183	5,021	5,133	2,568	64,937
Justice ..	2,448	1,235	761	325	375	204	5,348
Police ..	6,199	4,464	2,862	1,203	1,316	635	16,679
Penal establishments ..	1,541	628	208	262	182	106	2,927
Public Safety ..	331	50	267	55	103	46	852
Adjustment of surplus of previous years(c)	..	..	..	..	350	—600	—250
All other expenditure ..	27,242	13,787	10,103	9,664	6,082	3,402	70,280
Total ..	195,187	115,453	73,602	50,918	46,554	14,707	496,421

(a) See § 1, para. 2, page 781.

(b) Tasmanian transport services are under the separate control of the Transport Commission.

(c) Balance of Special Grant, 1952–53. The Special Grant for 1954–55 was brought into the Western Australian Consolidated Revenue Fund as £7,100,000, although the Commonwealth payment was £7,450,000. The Special Grant for 1954–55 taken into Tasmanian Consolidated Revenue Fund was £3,200,000, although the Commonwealth payment was £2,600,000. The difference was offset in the Tasmanian accounts against the adjusted surplus for 1952–53.

STATE EXPENDITURE : DETAILS, 1954-55—continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
PER HEAD OF POPULATION. (£ s. d.)							
Public Debt (interest, exchange, debt redemption, etc.)	6 8 3	6 14 11	7 13 4	12 0 11	11 5 10	13 9 5	7 15 8
Railways	18 13 3	14 6 4	22 13 4	18 0 6	22 6 10	..	17 12 3
Tramways and Omnibuses	3 18 1	..	..	..	1 15 0	..	1 12 5
Harbours and Rivers, etc.	0 13 5	0 3 6	..	1 12 2	0 12 0	..	0 9 10
Water Supply, Sewerage, Irrigation and Drainage	..	1 1 1	..	2 18 6	3 3 6	..	0 15 7
Other Business and Industrial Undertakings	..	0 8 7	0 3 9	0 5 1	1 12 0	3 3 8	0 7 10
Education	9 5 11	7 16 1	6 12 4	7 14 6	10 2 5	10 0 2	8 8 9
Health and Charitable	6 11 2	7 15 5	7 13 8	6 4 4	7 18 1	8 4 1	7 3 8
Justice	0 14 2	0 9 11	0 11 6	0 8 2	0 11 6	0 13 0	0 11 10
Police	1 15 10	1 15 10	2 3 2	1 9 10	2 0 7	2 0 7	1 16 11
Penal establishments	0 8 11	0 5 1	0 3 2	0 6 6	0 5 7	0 6 10	0 6 6
Public safety	0 1 11	0 0 5	0 4 0	0 1 4	0 3 2	0 2 11	0 1 11
Adjustment of surplus of previous years	..	..	..	..	0 10 10	-1 18 4	-0 0 7
All other expenditure	7 17 6	5 10 10	7 12 5	11 19 4	9 7 5	10 17 5	7 15 5
Total	56 8 5	46 8 0	55 10 8	63 1 2	71 14 9	46 19 9	54 18 0

(ii) 1938-39 and 1950-51 to 1954-55. Expenditure by the several States for these years on each of the principal items is shown in the following table:—

STATE EXPENDITURE.
(£'000.)

Particulars.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Public Debt (interest, exchange, debt redemption, etc.)	40,158	46,231	50,545	54,449	61,225	70,394
Railways, Tramways and Omnibuses (working expenses)	38,138	115,366	151,710	165,863	170,209	173,917
Harbours and Rivers, etc.	680	2,155	3,067	3,155	3,916	4,444
Water Supply, Sewerage, Irrigation and Drainage	1,076	4,137	5,233	6,151	6,438	7,051
Other Business and Industrial Undertakings	1,035	2,319	2,809	3,405	3,522	3,554
Education	12,639	39,973	51,025	61,758	67,221	76,288
Health and Charitable	15,307	34,822	48,404	54,797	58,622	64,937
Justice	1,323	3,376	4,240	4,731	5,071	5,348
Police	3,733	9,831	12,575	14,837	15,688	16,679
Penal establishments	646	1,731	2,338	2,537	2,747	2,927
Public Safety	297	711	962	930	867	852
Reduction of previous deficits or adjustment of surpluses	..	1,196	126	-159	300	-250
All other expenditure	13,127	42,653	56,655	63,919	69,613	70,280
Total	128,159	304,501	389,689	436,373	465,439	496,421

Division III.—Surplus Revenue.

The following table shows for each of the years 1938–39 and 1950–51 to 1954–55 the total amount and amount per head of the surplus or deficit of each State:—

STATE SURPLUS REVENUE.

Year.	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL AMOUNT. (£'000.)							
1938–39 ..	–2,459	– 787	14	–397	–221	– 26	–3,876
1950–51 ..	33	– 343	98	230	160	–247	– 69
1951–52 ..	98	–2,406	45	89	–592	–402	–3,168
1952–53 ..	97	– 365	191	25	–508	298	– 262
1953–54 ..	128	711	343	1,810	–103	15	2,904
1954–55 ..	–2,148	1,336	218	–2,234	–484	–212	–3,524
PER HEAD OF POPULATION. (£ s. d.)							
1938–39 ..	–0 18 0	–0 8 5	0 0 3	–0 13 4	–0 9 5	–0 2 3	–0 11 3
1950–51 ..	0 0 2	–0 3 1	0 1 8	0 6 4	0 5 7	–0 17 5	–0 0 2
1951–52 ..	0 0 7	–1 0 10	0 0 9	0 2 5	–1 0 1	–1 7 5	–0 7 6
1952–53 ..	0 0 7	–0 3 1	0 3 0	0 0 8	–0 16 7	0 19 9	–0 0 7
1953–54 ..	0 0 9	0 5 10	0 5 3	2 6 1	–0 3 3	0 1 0	0 6 7
1954–55 ..	–0 12 5	0 10 9	0 3 3	–2 15 4	–0 14 11	–0 13 6	–0 7 10

(a) See § 1, para. 2, page 781.

NOTE.—Minus sign (–) indicates deficit.

§ 3. State Trust Funds.

In addition to the moneys received as revenue and paid to the credit of the Consolidated Revenue Funds, considerable sums are held by the State Governments in trust for various purposes. The balances of trust funds held at 30th June of the years 1939 and 1951 to 1955 were as follows:—

STATE TRUST FUND BALANCES.
(£'000.)

At 30th June—	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
1939	15,684	8,189	3,062	1,448	3,744	530	32,657
1951	43,169	18,725	33,907	6,184	12,090	360	114,435
1952	39,419	20,084	35,097	1,896	10,537	625	107,658
1953	53,240	22,456	38,652	2,573	11,646	1,320	129,887
1954	63,284	29,023	47,518	4,131	12,957	1,671	158,584
1955	63,435	30,649	50,235	4,127	10,667	739	159,852

(a) Special Deposits Account and Special Accounts.

§ 4. State Loan Funds.

1. General.—As far back as 1842, revenue collections were supplemented by borrowed moneys, the earliest loan being raised by New South Wales for the purpose of assisting immigration, at rates of interest varying from 2½d. to 5½d. per £100 per diem, or approximately

from 4½ per cent. to 8 per cent. per annum. Australian public borrowing however is mainly due to the fact that the State Governments, in addition to ordinary administrative duties, undertake functions which in other countries are usually entrusted to local authorities or left to private enterprise. Foremost amongst these are the construction and control of the railway systems. Loan moneys have also been largely used for improvements to harbours and rivers, and for the construction of roads, water supply and sewerage works. The State loan expenditure and public debt thus differ very materially from those of most European countries, and from those of the Commonwealth, where such expenditure was very largely incurred for defence or war purposes. As shown above, the State debts consist chiefly of moneys raised and expended with the object of assisting the development of the resources of the country, and are to a very large extent represented by tangible assets.

Statements relating to "gross" loan expenditure are shown below. The gross expenditure represents the amounts disbursed during each year. Details of "net" loan expenditure, i.e., gross expenditure less any credits to the Loan Fund during the year on account of repayments of advances to local governing bodies, settlers, etc., the sale of assets, and transfers from other funds may be found in *Finance*, Bulletin No. 46, 1954-55. Such moneys are credited to the Loan Fund in the year of repayment irrespective of when the advance was made. (See also following page).

2. Gross Loan Expenditure.—(i) 1954-55. Particulars of gross loan expenditure on works, services, etc., are shown in the following table:—

STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC., 1954-55.

(£'000.)

Particulars.	N.S.W.	Vic.(a)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Public Works and Services—</i>							
Railways	12,500	8,183	4,202	1,867	5,881	295	32,928
Tramways and Omnibuses	350	..	..	700	67	131	1,248
Roads	200	{ 1,107	{ -204	200	..	..	..
Bridges .. .. .	..	{ 19	..	..	..	..	..
Harbours and Rivers	1,850	288	16	824	{ 1,213	740	6,253
Lights and Lighthouses .. .. .	..	..	..	..	..	..	..
Water Supply	2,349	{ 9,312	{ 1,253	6,225	2,125	291	23,190
Sewerage .. .. .	..	252	..	988	395	..	..
Electricity Supply	11,500	2,000	..	5,000	705	7,530	26,735
Public Buildings	12,389	11,234	3,271	2,353	2,036	2,324	33,607
Loans and Grants to Local Bodies	149	86	6,571	..	..	..	6,806
Unemployment Relief Works .. .. .	..	..	..	..	..	..	..
Housing(h)	501	147	890	2,441	1,575	3,706	9,260
Other Public Works, etc.	281	199	..	107	228	473	1,288
<i>Primary Production—</i>							
Soldier Settlement	3,550	4,999	427	2	..	248	9,226
Land for Settlement .. .. .	..	..	220	58	..	3	281
Advances to Settlers .. .. .	..	..	..	304	..	227	531
Water Conservation	6,189	..	1,955	{ 261	229	..	9,520
Irrigation and Drainage .. .. .	..	..	..	{ 773	113	..	..
Vermin-proof Fencing .. .. .	..	..	(c) 112	(d) ..	..	..	112
Agriculture	421	..	..	..	43	..	464
Agricultural Bank .. .. .	..	..	455	..	..	..	455
Forestry	130	899	1,381	1,397	108	311	4,226
Mines and Mineral Resources	415	7	-51	2,282	230	..	2,883
Other	562	70	..	95	25	1	753
<i>Other Purposes</i> .. .. .	..	(e) 2,150	..	1,020	1,460	931	5,561
Total Public Works, Services, etc.	53,336	40,952	20,498	26,897	16,433	17,211	175,327
Per Head of Population	£15 8 4	£16 9 2	£15 9 4	£33 6 2	£25 6 6	£54 19 10	£19 7 9

(a) Expenditure from Loan Funds and on account of Loans; includes expenditure from Loan Funds, from Treasurer's Advance Account and from State Loans Repayment Fund. (b) Excludes expenditure from Commonwealth loans under Commonwealth-State Housing Agreement. (c) £112,000 transferred to Barrier Fences Trust Fund. (d) Included with Advances to Settlers. (e) Includes Gas and Fuel Corporation advances and share capital, £1,195,000, and Rural Finance Corporation, for advances to rural industries, £800,000.

NOTE.—Minus sign (—) indicates excess of repayments to Loan Fund.

(ii) 1938-39 and 1950-51 to 1954-55. Particulars of gross loan expenditure on works, etc., for these years are shown in the following table :—

STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC.							
Year.	N.S.W.	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
GROSS LOAN EXPENDITURE. (£'000.)							
1938-39 ..	8,789	3,218	3,393	2,529	1,783	1,687	21,399
1950-51 ..	41,168	35,309	17,698	20,601	11,404	15,200	141,380
1951-52 ..	65,354	55,084	23,662	31,198	18,758	16,882	210,938
1952-53 ..	54,551	41,575	21,854	25,393	19,012	19,830	182,215
1953-54 ..	60,021	45,665	20,630	25,452	15,824	15,356	182,948
1954-55 ..	53,336	40,952	20,498	26,897	16,433	17,211	175,327
PER HEAD OF POPULATION. (£ s. d.)							
1938-39 ..	3 4 3	1 14 5	3 7 4	4 5 0	3 16 4	7 2 0	3 1 11
1950-51 ..	12 14 3	15 14 10	14 13 2	28 10 10	19 19 11	53 12 2	17 2 2
1951-52 ..	19 14 8	23 17 0	19 1 8	41 19 5	31 16 0	57 11 0	24 17 0
1952-53 ..	16 4 1	17 10 6	17 3 7	33 2 6	31 2 2	65 10 11	20 19 4
1953-54 ..	17 12 6	18 16 11	15 17 3	32 7 8	25 1 10	49 12 7	20 13 3
1954-55 ..	15 8 4	16 9 2	15 9 4	33 6 2	25 6 6	54 19 10	19 7 9

(a) See footnote (a) to previous table.

The above tables do not include particulars of expenditure on loan discounts and flotations, the funding of deficits, the retirement of treasury bills, and similar items of a nature other than works, services, etc. Summaries of the gross and net expenditure and repayments in respect of all loan purposes for the years 1952-53 to 1954-55 are shown in paragraph 3 following.

3. Total Loan Expenditure.—The following table shows particulars, in summary form, of the total loan expenditure in each State during each of the years, 1952-53 to 1954-55.

STATE LOAN EXPENDITURE : SUMMARY.
(£'000.)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
1952-53.							
<i>Works and Services—</i>							
Gross Expenditure ..	54,551	41,575	21,854	25,393	19,012	19,830	182,215
Net Expenditure ..	51,547	37,763	19,382	21,981	17,606	12,822	161,101
Repayments ..	3,004	3,812	2,472	3,412	1,406	7,008	21,114
<i>Other than Works, etc.(a)—</i>							
Gross Expenditure ..	596	2,510	150	9	42	247	3,554
Net Expenditure ..	596	2,510	150	9	36	247	3,548
Repayments ..	..	..	..	..	(b) 6	..	6
Total Loan Expenditure—							
Gross	55,147	44,085	22,004	25,402	19,054	20,077	185,769
Net	52,143	40,273	19,532	21,990	17,642	13,069	164,649
Repayments	3,004	3,812	2,472	3,412	1,412	7,008	21,120

For footnotes see next page.

STATE LOAN EXPENDITURE : SUMMARY—*continued.*
(£'000.)

Particulars.	N.S.W.	Victoria.	O'land.	S. Aust.	W. Aust.	Tas.	Total.
1953-54.							
<i>Works and Services—</i>							
Gross Expenditure ..	60,021	45,665	20,630	25,452	15,824	15,356	182,948
Net Expenditure ..	56,727	42,510	18,451	22,061	14,194	13,437	167,380
Repayments ..	3,294	3,155	2,179	3,391	1,630	1,919	15,568
<i>Other than Works, etc.(a)—</i>							
Gross Expenditure ..	367	139	..	61	111	552	1,230
Net Expenditure ..	367	139	..	61	101	335	1,003
Repayments ..	..	..	..	..	(b) 10	217	227
Total Loan Expenditure—							
Gross	60,388	45,804	20,630	25,513	15,935	15,908	184,178
Net	57,094	42,649	18,451	22,122	14,295	13,772	168,383
Repayments ..	3,294	3,155	2,179	3,391	1,640	2,136	15,795
1954-55.							
<i>Works and Services—</i>							
Gross Expenditure ..	53,336	40,952	20,498	26,897	16,433	17,211	175,327
Net Expenditure ..	51,314	38,780	18,024	23,444	14,731	14,252	160,545
Repayments ..	2,022	2,172	2,474	3,453	1,702	2,959	14,782
<i>Other than Works, etc.(a)—</i>							
Gross Expenditure ..	349	242	..	100	128	444	1,263
Net Expenditure ..	349	242	..	62	117	437	1,207
Repayments ..	..	..	..	38	(b) 11	7	56
Total Loan Expenditure—							
Gross	53,685	41,194	20,498	26,997	16,561	17,655	176,590
Net	51,663	39,022	18,024	23,506	14,848	14,689	161,752
Repayments ..	2,022	2,172	2,474	3,491	1,713	2,966	14,838

(a) Includes exchange, discounts and flotation expenses, revenue and general cash deficits.

(b) From Consolidated Revenue Fund.

Information relating to the State Public Debt is given in division D. Commonwealth and State Public Debt (pages 797 and 799).

C. COMMONWEALTH AND STATE FINANCE.

1. Revenue and Expenditure.—(i) *Consolidated Revenue Funds.* The following tables show the aggregate revenue and expenditure of the Consolidated Revenue Funds of the Commonwealth and States for each of the years 1938-39 and 1950-51 to 1954-55. In these tables the combined Commonwealth and State totals have been adjusted to exclude major duplications, but the separate Commonwealth and State figures are as shown in other divisions of this Chapter. The items excluded from the total figures are :—payments made by the Commonwealth to the States on account of tax reimbursements, interest under the Financial Agreement, special grants, special financial assistance, coal strike emergency grants, price control reimbursements and estimated payments of pay-roll tax by the States to the Commonwealth.

COMMONWEALTH AND STATES : REVENUE AND EXPENDITURE.

Year ended 30th June—	Revenue.			Expenditure.		
	Commonwealth.	States.	Total.	Commonwealth.	States.	Total.
	£'000.	£'000.	£m.	£'000.	£'000.	£m.
1939.. ..	95,065	124,283	209.6	94,437	128,159	212.8
1951.. ..	841,792	304,432	1,032.0	841,792	304,501	1,032.0
1952.. ..	1,016,828	386,521	1,260.1	1,016,828	389,689	1,263.3
1953.. ..	1,040,067	436,111	1,310.7	1,026,667	436,373	1,297.6
1954.. ..	1,022,790	468,343	1,320.3	966,519	465,439	1,261.1
1955.. ..	1,067,441	492,897	1,384.8	997,290	496,421	1,318.2

(ii) *Loan Expenditure.* The aggregate gross loan expenditures of the Commonwealth and States on works and services for the years 1938–39 and 1950–51 to 1954–55 are shown in the following table :—

COMMONWEALTH AND STATE GROSS LOAN EXPENDITURE : WORKS AND SERVICES.(a)
(£'000.)

Gross Loan Expenditure.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Commonwealth(b)	3,913	50,413	31,667	35,684	41,399	33,189
State	21,399	141,380	210,938	182,215	182,948	175,327
Total	25,312	191,793	242,605	217,899	224,347	208,516

(a) Excludes expenditure on loan flotations, funding deficits, etc. (b) Includes expenditure on Defence, War (1939–45) and Repatriation Services. Excludes payments to National Debt Sinking Fund from proceeds of loan from International Bank of Reconstruction and Development and payments to Swiss Loan Trust account from proceeds of Swiss Loan (see page 808).

2. *Taxation.*—The following table shows the combined Commonwealth and State taxation, and the amount per head of population, for the years 1938–39 and 1950–51 to 1954–55. Taxation collections by the State Governments which are not paid into the Consolidated Revenue Funds have been included.

COMMONWEALTH AND STATE TAXATION : TOTAL NET COLLECTIONS.(a)

Particulars.	1938–39.	1950–51	1951–52.	1952–53.	1953–54.	1954–55.
NET COLLECTIONS. (£'000.)						
Customs and Excise Duties ..	47,632	165,004	213,917	183,824	220,217	244,403
Sales Tax	9,308	57,173	95,459	89,067	95,689	100,446
Land Tax	2,897	4,953	8,710	4,666	4,359	5,011
Pay-roll Tax		28,721	37,170	40,171	40,384	41,455
Income Taxes (b)	41,679	451,779	551,297	554,869	528,273	532,968
Probate and Succession Duties	6,916	19,405	23,172	26,149	28,525	31,216
Stamp Duties n.e.i.	3,466	11,961	12,228	12,297	14,543	16,027
Motor Taxes	6,961	15,579	20,523	23,321	25,877	27,783
Liquor Taxes	1,045	2,726	3,681	4,429	5,346	5,563
Racing	1,251	4,540	5,990	6,794	7,503	6,992
Entertainments Tax	633	5,148	6,161	6,708	2,883	1,339
Licences, n.e.i., and other Taxes	2,841	62,109	18,853	14,327	7,251	13,891
Total	124,629	829,098	997,161	966,622	980,850	1,027,094

PER HEAD OF POPULATION.
(£ s. d.)

Customs and Excise Duties ..	6 17 5	19 17 5	25 1 8	21 0 11	24 14 10	26 17 9
Sales Tax	1 6 10	6 17 9	11 3 10	10 3 11	10 15 0	11 1 0
Land Tax	0 8 4	0 11 11	1 0 5	0 10 8	0 9 10	0 11 0
Pay-roll Tax		3 9 2	4 7 2	4 12 0	4 10 9	4 11 2
Income Taxes(b)	6 0 3	54 8 3	64 12 10	63 10 7	59 7 1	58 12 7
Probate and Succession Duties	0 19 11	2 6 9	2 14 4	2 19 10	3 4 1	3 8 8
Stamp Duties n.e.i.	0 10 0	1 8 10	1 8 8	1 8 2	1 12 8	1 15 3
Motor Taxes	1 0 1	1 17 6	2 8 2	2 13 5	2 18 2	3 1 2
Liquor Taxes	0 3 0	0 6 7	0 8 8	0 10 2	0 12 0	0 12 3
Racing		0 10 11	0 14 1	0 15 7	0 16 10	0 15 5
Entertainments Tax	0 5 6	0 12 5	0 14 5	0 15 4	0 6 6	0 3 0
Licences, n.e.i., and other Taxes	0 8 1	7 9 7	2 4 2	1 12 10	0 16 4	1 10 7
Total	17 19 5	99 17 1	116 18 5	110 13 5	110 4 1	112 19 10

(a) For separate details of Commonwealth and State taxation collections, see pages 755 and 783. (b) Includes Wool Deduction, 1950–51, £109,531,000 (£13 3s. 10d. per head); 1951–52, £5,963,000 (14s. per head); 1952–53, —£2,223,000 (—5s. 1d. per head); 1953–54, —£239,000 (—6d. per head).

D. COMMONWEALTH AND STATE PUBLIC DEBT.

§ 1. General.

Under the Financial Agreement between the Commonwealth and the States in 1927, the Commonwealth and State Public Debts were amalgamated and the Commonwealth Government accepted responsibility for the State Public Debts. The Commonwealth is reimbursed by the States for interest, exchange, etc., paid on their behalf and the debt is redeemed from the National Debt Sinking Fund to which both the Commonwealth and the States make contributions. Under the agreement, the Commonwealth arranges for all borrowings on behalf of the Commonwealth and the States, and Commonwealth securities are issued for all money borrowed.

In the statistical tables relating to Public Debt, the units of currency for debt outstanding and interest payable, except in § 3, para. 5, are :—Debt in Australia—£ Australian ; Debt in London—£ Sterling ; Debt in New York—£ (converted from dollars at the rate of \$4.8665 to £1) ; Debt in Switzerland—£ (converted from Swiss francs at the rate of 1,000 Swiss francs = £A.102 1s. 10d.).

The totals shown represent the total "face" or "book" value of the debt without adjustment on account of the difference in currency mentioned above.

In § 3, para. 5 only, details of the debt for the Commonwealth and each State are given in Australian currency.

§ 2. The Financial Agreement between the Commonwealth and the States.

1. **General.**—Full details of the Financial Agreement between the Commonwealth and the States are given in earlier issues of the Official Year Book (*see* No. 37, pp. 685–690). In this issue, a summary of the main provisions only is given.

2. **Australian Loan Council.**—The Australian Loan Council was set up to co-ordinate the public borrowings of the Commonwealth and the States. It consists of the Prime Minister of the Commonwealth, or another Minister nominated by him in writing, as Chairman, and the Premier of each State, or Ministers nominated by them in writing. Each year the Loan Council examines the loan programmes of the Commonwealth and the States and determines the total amount to be borrowed during the year. Borrowings by the Commonwealth for defence purposes are not subject to decisions of the Loan Council.

3. **Loan Raisings for the Commonwealth and States.**—Subject to the decisions of the Loan Council, the Commonwealth arranges for all borrowings for or on behalf of the Commonwealth or any State, and for all conversions, renewals, redemptions, and consolidations of the Public Debts of the Commonwealth and of the States.

If the Loan Council unanimously decides, however, a State may borrow outside Australia in the name of the State, and may issue securities for the amount so borrowed. The Commonwealth then guarantees that the State will fulfil all its obligations to bondholders in respect of the money so borrowed and the money is deemed to be borrowed by the Commonwealth for and on behalf of the State.

Subject to any maximum limits decided upon by the Loan Council for interest, brokerage, discount and other charges, the Commonwealth or any State may—

- (i) borrow within its own territory, for any purpose, money from any authorities, bodies, funds or institutions (including Savings Banks) constituted or established under Commonwealth or State law or practice ;
- (ii) borrow from the public by means of counter sales of securities ; and
- (iii) use any available public moneys.

However, any securities issued for money so borrowed or used must be Commonwealth securities on terms approved by the Loan Council.

4. **Taking over of State Public Debts.**—The Commonwealth took over on 1st July, 1929—

- (a) the balance then unpaid of the gross public debt of each State existing on 30th June, 1927 ; and
- (b) all other debts of each State existing on 1st July, 1929, for money borrowed by that State deemed by the Agreement to be money borrowed by the Commonwealth for and on behalf of the State,

and in respect of these debts assumed, as between the Commonwealth and the States the liabilities of the States to bond holders.

5. **Transferred Properties.**—In relation to State properties transferred to the Commonwealth under Section 85 of the Constitution, the States as from 1st July, 1929, were discharged from any liability in respect of principal, interest or debt redemption on so much of the debts bearing interest at 5 per cent. per annum, taken over by the Commonwealth as amounted to the agreed value of these properties, namely £10,924,323.

6. **Payment of Interest.**—For a period of 58 years from 1st July, 1927, the Commonwealth agreed to contribute the sum of £7,584,912 each year towards the interest payable on the State debts. The balance of the interest payable on the State debts is paid to the Commonwealth by the States.

7. **Sinking Fund.**—(i) *State Public Debt existing at 30th June, 1927.* A sinking fund at the rate of 7s. 6d. per annum for each £100 of the net public debts of the States existing on 30th June, 1927, and conversions thereof, was established under the terms of the Agreement. The Commonwealth contributes annually from revenue 2s. 6d. per cent. on the net public debts of the States existing at 30th June, 1927, and each State contributes annually 5s. per cent. on the net public debt of such State at 30th June, 1927. The payments of the Commonwealth and of all States except New South Wales will continue for a period of 58 years from 1st July, 1927, and those of New South Wales for a similar period from 1st July, 1928.

(ii) *New Borrowings.* On new borrowings after 1st July, 1927, (except those for redemptions or conversions, or funding a State deficit) a sinking fund at the rate of 10s. per cent. per annum was established and the State and the Commonwealth contribute from revenue equal shares for a period of 53 years from the date of raising. (New South Wales did not commence sinking fund contributions in respect of new loans raised in the financial year 1927–28 until 1st July, 1928.)

(iii) *Loans raised to meet a Revenue Deficit.* In respect of any loan (except any of the loans referred to in para. (iv) below) raised after 30th June, 1927, by a State to meet a revenue deficit accruing after that date, no sinking fund contribution is made by the Commonwealth, but the State makes a sinking fund contribution at the rate of not less than 4 per cent. per annum of the loan for a period sufficient to provide for the redemption of the loan, the contributions being deemed to accumulate at the rate of 4½ per cent. per annum compound interest.

(iv) *Loans raised to meet Revenue Deficits between 30th June, 1927 and 1st July, 1935.* In respect of loans raised by a State or by the Commonwealth on behalf of a State, on the security of Commonwealth Treasury Bills, to meet a revenue deficit accruing after 30th June, 1927, and before 1st July, 1935, special contributions are payable. Details of these contributions are given in Official Year Book No. 37, pp. 688 and 689.

(v) *National Debt Commission.* The sinking funds established are controlled by the National Debt Commission, which may arrange with any State to act as its agent in connexion with payments due to bond holders. Except where the conditions relating to sinking funds, redemption funds, and funds of a like nature held by a State on 30th June, 1929, precluded such transfer, all such funds were transferred to the National Debt Commission.

(vi) *Operation of Sinking Fund.* Sinking fund contributions made in respect of the debts of a State, and funds of that State transferred to the National Debt Commission, are not accumulated but must be applied, whenever expedient, to the redemption and repurchase of loan securities. When such a loan security is repurchased or redeemed by the National Debt Commission, it is cancelled, and the State, in addition to sinking fund contributions otherwise payable, pays a further annual sinking fund contribution at the rate of 4½ per cent. on the face value of the cancelled security.

(vii) *Oversea Debt.* Sinking fund contributions in respect of oversea debt shall be calculated at the mint par of exchange prevailing on 1st July, 1927.

8 **Borrowing by Semi-Governmental Authorities.**—It was realized at the inception of the Loan Council that, in the interests of co-ordinated borrowing, the Council should be advised of borrowing of large amounts by semi-governmental authorities. In May, 1936, all resolutions passed by the Loan Council in connexion with semi-governmental borrowings were consolidated into one set of rules, which superseded all previous resolutions. This set of rules provides, *inter alia*, for the submission of annual loan programmes in respect of semi-governmental authorities proposing to raise £100,000 or more in a year, for the consideration of such programmes in conjunction with the loan programme of the Government concerned, and for the fixing of the terms of individual semi-governmental loans coming within the scope of the annual programme.

§ 3. Commonwealth and State Public Debt Outstanding.

1. **Public Debt, Annual Interest Payable and Average Rate of Interest at 30th June, 1955.**—In the following table, details are given of the Commonwealth and State Public Debt, annual interest payable and average rate of interest at 30th June, 1955.

COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE, 1955.

Particulars.	Maturing in—				Total.
	Australia.	London.	New York.	Switzerland.	
DEBT.					
<i>Commonwealth Debt—</i>	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)
War (1914–18) Debt(b)—					
Stock and Bonds	126,444	7,534	..	..	133,978
Other Debt(c)	101	..	..	..	101
<i>Total War (1914–18) Debt</i> ..	<i>126,545</i>	<i>7,534</i>	<i>..</i>	<i>..</i>	<i>134,079</i>
War (1939–45) Debt—					
Stock and Bonds	1,018,173	5,725	..	..	1,023,898
Treasury Bills, Internal	228,990	..	..	..	228,990
Treasury Bills, Public	160,000	..	..	..	160,000
Other Debt(d)	31,944	..	..	..	31,944
<i>Total War (1939–45) Debt</i> ..	<i>1,439,107</i>	<i>5,725</i>	<i>..</i>	<i>..</i>	<i>1,444,832</i>
Works and Other Purposes—					
Stock and Bonds	221,987	48,816	8,880	12,251	291,934
Treasury Bills and Debentures .. .. .	..	220	..	..	220
Treasury Bills, Internal	10,810	..	..	..	10,810
International Bank Dollar Loan .. .. .	..	..	41,842	..	41,842
<i>Total Works and Other Purposes</i>	<i>232,797</i>	<i>49,036</i>	<i>50,722</i>	<i>12,251</i>	<i>344,806</i>
<i>Total Commonwealth Debt</i> ..	<i>1,798,449</i>	<i>62,295</i>	<i>50,722</i>	<i>12,251</i>	<i>1,923,717</i>
<i>State Debt—</i>					
Stock and Bonds	1,478,419	258,415	21,520	..	1,758,354
Debentures	37,064	4,691	..	..	41,755
Treasury Bills and Debentures—Short-term .. .. .	..	21,377	..	..	21,377
Balance of Debts of States taken over by Commonwealth and still represented by State Securities .. .. .	..	4,241	..	..	4,241
<i>Total State Debt</i>	<i>1,515,483</i>	<i>288,724</i>	<i>21,520</i>	<i>..</i>	<i>1,825,727</i>
<i>Grand Total Commonwealth and State Debt</i>	<i>3,313,932</i>	<i>351,019</i>	<i>72,242</i>	<i>12,251</i>	<i>3,749,444</i>

(a) See § 1, page 795. (b) Excludes War (1914–18) Debt due to United Kingdom Government (£79,724,220). Repayment of this debt and interest thereon (£3,919,774) was suspended in 1931. (c) War and Peace Savings Certificates and Stamps and War Gratuity Bonds. (d) Advance Loan Subscriptions, National Savings Bonds, War Savings and Savings Certificates. War Savings and National Savings Stamps.

**COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST
PAYABLE AT 30TH JUNE, 1955—continued.**

Particulars.	Maturing in—				Total.
	Australia.	London.	New York.	Switzer-land.	
DEBT PER HEAD OF POPULATION.					
	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
<i>Commonwealth Debt—</i>					
War (1914–18) Debt(b)	13 15 1	0 16 5	..	..	14 11 6
War (1939–45) Debt	156 8 3	0 12 5	..	..	157 0 8
Works and Other Purposes	25 6 0	5 6 7	5 10 3	1 6 8	37 9 6
<i>Total Commonwealth Debt</i>	<i>195 9 4</i>	<i>6 15 5</i>	<i>5 10 3</i>	<i>1 6 8</i>	<i>209 1 8</i>
<i>Total State Debt</i>	<i>165 12 3</i>	<i>31 11 1</i>	<i>2 7 0</i>	<i>..</i>	<i>199 10 4</i>
Grand Total Commonwealth and State Debt	360 3 8	38 3 0	7 17 0	1 6 8	407 10 4

ANNUAL INTEREST PAYABLE.

	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)
<i>Commonwealth Debt—</i>					
War (1914–18) Debt(b)	4,273	228	..	..	4,501
War (1939–45) Debt	38,351	229	..	..	38,580
Works and Other Purposes	8,183	1,634	2,196	475	12,488
<i>Total Commonwealth Debt</i>	<i>50,807</i>	<i>2,091</i>	<i>2,196</i>	<i>475</i>	<i>55,569</i>
<i>Total State Debt</i>	<i>54,033</i>	<i>9,272</i>	<i>741</i>	<i>..</i>	<i>64,046</i>
Grand Total Commonwealth and State Debt	104,840	11,363	2,937	475	119,615

ANNUAL INTEREST PAYABLE PER HEAD OF POPULATION.

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
<i>Commonwealth Debt—</i>					
War (1914–18) Debt(b)	0 9 3	0 0 6	..	..	0 9 9
War (1939–45) Debt	4 3 4	0 0 6	..	..	4 3 10
Works and Other Purposes	0 17 9	0 3 7	0 4 9	0 1 0	1 7 1
<i>Total Commonwealth Debt</i>	<i>5 10 4</i>	<i>0 4 7</i>	<i>0 4 9</i>	<i>0 1 0</i>	<i>6 0 8</i>
<i>Total State Debt</i>	<i>5 18 2</i>	<i>1 0 3</i>	<i>0 1 7</i>	<i>..</i>	<i>7 0 0</i>
Grand Total Commonwealth and State Debt	11 7 11	1 4 8	0 6 5	0 1 0	13 0 0

AVERAGE RATE OF INTEREST PAYABLE (PER £100 PER ANNUM).

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
<i>Commonwealth Debt—</i>					
War (1914–18) Debt(b)	3 7 9	3 0 5	..	..	3 7 5
War (1939–45) Debt	2 13 4	4 0 0	..	..	2 13 5
Works and Other Purposes	3 10 4	3 6 8	4 6 7	3 17 6	3 12 6
<i>Total Commonwealth Debt</i>	<i>2 16 6</i>	<i>3 7 2</i>	<i>4 6 7</i>	<i>3 17 6</i>	<i>2 17 10</i>
<i>Total State Debt</i>	<i>3 11 4</i>	<i>3 4 3</i>	<i>3 8 11</i>	<i>..</i>	<i>3 10 2</i>
Grand Total Commonwealth and State Debt	3 3 3	3 4 9	4 1 4	3 17 6	3 3 10

(a) See § 1, page 795. (b) Excludes War (1914–18) Debt due to United Kingdom Government (£79,724,220). Repayment of this debt and interest thereon (£3,919,774) was suspended in 1931.

2. Public Debt and Annual Interest Payable, 1939 and 1951 to 1955.—In the following table, details are given of the Public Debt and annual interest payable, including the average rate of interest, at 30th June, 1939 and 1951 to 1955. A dissection of debt for these years into debt payable in Australia, London, New York and Switzerland may be found in the annual bulletin *Finance*.

COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE.

Particulars.	1939.	1951.	1952.	1953.	1954.	1955.
DEBT. (£'000.) (a)						
<i>Commonwealth Debt</i> —						
War (1914–18) Debt ..	186,214	157,360	156,095	152,333	145,964	134,079
War (1939–45) Debt ..	131,313	1,505,176	1,484,915	1,472,777	1,464,767	1,444,832
Works and Other Purposes ..		189,613	227,809	263,105	307,124	344,806
<i>Total Commonwealth Debt</i>	317,527	1,852,149	1,868,819	1,888,215	1,917,855	1,923,717
<i>State Debt</i>	897,772	1,208,338	1,395,676	1,543,648	1,688,948	1,825,727
<i>Grand Total Commonwealth and State Debt</i>	1,215,299	3,060,487	3,264,495	3,431,863	3,606,803	3,749,444

ANNUAL INTEREST PAYABLE.
(£'000.) (a)

<i>Commonwealth Debt</i> —						
War (1914–18) Debt ..	7,376	5,043	5,022	4,884	4,851	4,501
War (1939–45) Debt ..		38,284	37,509	38,853	38,758	38,580
Works and Other Purposes ..	5,150	6,017	7,159	8,507	10,490	12,488
<i>Total Commonwealth Debt</i>	12,526	49,344	49,690	52,244	54,099	55,569
<i>State Debt</i>	33,644	37,100	41,631	48,140	55,022	64,046
<i>Grand Total Commonwealth and State Debt</i>	46,170	86,444	91,321	100,384	109,121	119,615

AVERAGE RATE OF INTEREST PAYABLE (PER £100 PER ANNUM).
(£ s. d.) (a)

<i>Commonwealth Debt</i> —						
War (1914–18) Debt ..	3 19 3	3 4 5	3 4 5	3 4 2	3 6 6	3 7 5
War (1939–45) Debt ..		2 10 11	2 10 7	2 12 9	2 12 11	2 13 5
Works and Other Purposes ..	3 18 5	3 3 6	3 2 11	3 4 8	3 8 4	3 12 6
<i>Total Commonwealth Debt</i>	3 18 11	2 13 4	2 13 3	2 15 4	2 16 5	2 17 10
<i>State Debt</i>	3 14 11	3 1 5	2 19 8	3 2 4	3 5 2	3 10 2
<i>Grand Total Commonwealth and State Debt</i>	3 16 0	2 16 6	2 16 0	2 18 6	3 0 6	3 3 10

(a) See § 1, page 795.

3. State Public Debt and Annual Interest Payable at 30th June, 1955.—In paragraphs 1 and 2, totals only of the States' Public Debt are given. In the following table the total debt of each State and the amounts outstanding per head of population at 30th June, 1955, the annual interest payable and the average rate of interest payable are shown according to the place of flotation.

STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE, 1955.

State.	Maturing in Australia.	Maturing Oversea.			Grand Total.
		London.	New York.	Total Oversea.	
DEBT.					
	£A.'000.	£Stg.'000.	£'000.(a)	£'000.(a)	£'000.(a)
New South Wales	522,978	122,141	10,480	132,621	655,599
Victoria	363,246	44,777	3,176	47,953	411,199
Queensland	188,735	43,583	4,156	47,739	236,474
South Australia	196,858	35,461	2,450	37,911	234,769
Western Australia	141,073	35,770	1,038	36,808	177,881
Tasmania	102,593	6,992	220	7,212	109,805
Total	1,515,483	288,724	21,520	310,244	1,825,727

DEBT PER HEAD OF POPULATION.

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
New South Wales	149 16 9	34 19 11	3 0 0	37 19 11	187 16 8
Victoria	143 19 6	17 14 11	1 5 2	19 0 1	162 19 7
Queensland	140 7 4	32 8 3	3 1 10	35 10 1	175 17 5
South Australia	240 4 1	43 5 4	2 19 10	46 5 2	286 9 3
Western Australia	214 4 5	54 6 4	1 11 6	55 17 10	270 2 3
Tasmania	326 0 6	22 4 4	0 14 0	22 18 4	348 18 10
Total	165 12 3	31 11 1	2 7 0	33 18 1	199 10 4

ANNUAL INTEREST PAYABLE.

	£A.'000.	£Stg.'000.	£'000. (a)	£'000. (a)	£'000. (a)
New South Wales	18,381	3,915	353	4,268	22,649
Victoria	13,254	1,448	110	1,558	14,812
Queensland	6,631	1,446	143	1,589	8,220
South Australia	7,058	1,123	91	1,214	8,272
Western Australia	4,940	1,108	37	1,145	6,085
Tasmania	3,769	232	7	239	4,008
Total	54,033	9,272	741	10,013	64,046

AVERAGE RATE OF INTEREST PAYABLE (PER £100 PER ANNUM).

	£ s. d. (Aust.)	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (a)	£ s. d. (a)
New South Wales	3 10 4	3 4 1	3 7 4	3 4 4	3 9 1
Victoria	3 12 11	3 4 8	3 9 1	3 4 11	3 12 0
Queensland	3 10 3	3 6 4	3 8 10	3 6 7	3 9 6
South Australia	3 11 9	3 3 4	3 14 6	3 4 0	3 10 6
Western Australia	3 10 0	3 1 11	3 11 5	3 2 3	3 8 5
Tasmania	3 13 6	3 6 1	3 7 6	3 6 2	3 13 0
Total	3 11 4	3 4 3	3 8 11	3 4 7	3 10 2

(a) See § 1, page 795.

4. State Public Debt, 1939 and 1951 to 1955.—In the following table, the debt of each State and the amounts outstanding per head of population at 30th June, 1939 and 1951 to 1955 are shown.

STATE PUBLIC DEBT.

30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
DEBT. (£'000.)(a)							
1939	359,844	179,698	127,503	108,887	95,473	26,367	897,772
1951	462,241	250,933	166,157	148,388	123,186	57,433	1,208,338
1952	522,491	302,499	187,310	173,436	138,288	71,652	1,395,676
1953	568,923	339,520	204,255	193,750	153,072	84,128	1,543,648
1954	614,495	376,964	220,396	213,619	165,783	97,691	1,688,948
1955	655,599	411,199	236,474	234,769	177,881	109,805	1,825,727

DEBT PER HEAD OF POPULATION.
(£ s. d.)(a)

30th June—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
1939	130 18 7	95 13 3	125 4 11	182 10 6	203 2 4	111 1 2	129 3 11
1951	139 6 11	110 11 7	137 3 7	206 1 8	211 17 0	197 9 6	144 0 5
1952	154 4 0	129 10 6	151 5 0	234 10 3	229 19 11	237 3 5	162 3 9
1953	165 5 4	142 7 11	161 7 10	255 17 7	246 0 4	270 9 2	175 15 2
1954	179 9 8	153 14 4	167 3 5	267 19 6	259 3 0	316 7 6	188 18 4
1955	187 16 8	162 19 7	175 17 5	286 9 3	270 2 3	348 18 10	199 10 4

(a) See § 1, page 795.

In some States, certain public utilities such as tramways, water supply and sewerage, harbour services, etc., are controlled by boards or trusts, which, in addition to receiving advances from the central Government, raise loans by public borrowing on their own behalf, while in other States these services are controlled by the central Government. Comparison of the debts of the States is therefore difficult, but on page 804 figures showing the aggregate debts of the States, including these local and semi-governmental authorities, are shown for the years 1938-39 and 1951-52 to 1954-55.

5. Public Debt and Interest Payable in Australian Currency.—In the foregoing tables relating to Commonwealth and State public debt, the debt outstanding in London is expressed in sterling, debt outstanding in New York is expressed in pounds converted from dollars at the rate of \$4.8665 to £1 and debt outstanding in Switzerland is expressed in pounds converted from Swiss francs at the rate of 1,000 Swiss francs = £A.102 1s. 10d. This method of showing the debt gives no indication to the amount that the Australian Government would have to find to repay the debt. In the following tables, the public debt and the interest payable are shown in terms of Australian currency throughout. Debt in London, New York and Switzerland has been converted to Australian currency at the selling rate of exchange on 30th June, 1955.

COMMONWEALTH AND STATE PUBLIC DEBT AND INTEREST PAYABLE
AT 30th JUNE, 1955 : AUSTRALIAN CURRENCY.
(£A.'000.)

Particulars.	Maturing in—				Total.
	Australia.	London. (a)	New York. (b)	Switzer- land. (c)	
DEBT.					
<i>Commonwealth Debt—</i>					
War (1914-18) Debt	126,545	9,455	..	..	136,000
War (1939-45) Debt	1,439,107	7,185	..	..	1,446,292
Works and Other Purposes	232,797	61,540	111,396	12,398	418,131
<i>Total Commonwealth Debt</i>	<i>1,798,449</i>	<i>78,180</i>	<i>111,396</i>	<i>12,398</i>	<i>2,000,423</i>
<i>State Debt—</i>					
New South Wales	522,978	153,287	23,015	..	699,280
Victoria	363,246	56,195	6,975	..	426,416
Queensland	188,735	54,696	9,128	..	252,559
South Australia	196,858	44,504	5,381	..	246,743
Western Australia	141,073	44,891	2,280	..	188,244
Tasmania	102,593	8,775	484	..	111,852
<i>Total State Debt</i>	<i>1,515,483</i>	<i>362,348</i>	<i>47,263</i>	<i>..</i>	<i>1,925,094</i>
<i>Commonwealth and State Debt—</i>					
Short-term Debt	399,800	32,991	..	..	432,791
Other Debt	2,914,132	407,537	158,659	12,398	3,492,726
<i>Grand Total Commonwealth and State Debt</i>	<i>3,313,932</i>	<i>440,528</i>	<i>158,659</i>	<i>12,398</i>	<i>3,925,517</i>

(a) Converted at rate of £Stg.100 = £A.125 10s.

(b) Converted at rate of \$2.2159 = £A.1

(c) Converted at rate of 9.678 francs = £A.1.

COMMONWEALTH AND STATE PUBLIC DEBT AND INTEREST PAYABLE
AT 30TH JUNE, 1955 : AUSTRALIAN CURRENCY—*continued.*
(£A.'000.)

Particulars.	Maturing in—				Total.
	Australia.	London. (a)	New York. (b)	Switzer- land. (c)	
ANNUAL INTEREST PAYABLE.					
<i>Commonwealth Debt—</i>					
War (1914-18) Debt	4,273	286	..	..	4,559
War (1939-45) Debt	38,351	287	..	..	38,638
Works and Other Purposes	8,183	2,052	4,823	480	15,538
<i>Total Commonwealth Debt</i>	<i>50,807</i>	<i>2,625</i>	<i>4,823</i>	<i>480</i>	<i>58,735</i>
<i>State Debt—</i>					
New South Wales	18,381	4,914	775	..	24,070
Victoria	13,254	1,817	241	..	15,312
Queensland	6,631	1,815	314	..	8,760
South Australia	7,058	1,410	201	..	8,668
Western Australia	4,940	1,390	81	..	6,412
Tasmania	3,769	290	16	..	4,075
<i>Total State Debt</i>	<i>54,033</i>	<i>11,636</i>	<i>1,628</i>	<i>..</i>	<i>67,297</i>
Grand Total Commonwealth and State Debt	104,840	14,261	6,451	480	126,032

(a) Converted at rate of £Stg.100 = £A.125 10s.

(b) Converted at rate of \$2.2159 = £A.1.

(c) Converted at rate of 9.678 francs = £A.1.

6. **Public Debt at each Rate of Interest.**—The following table shows particulars of the amounts of debt for Commonwealth and State purposes at 30th June, 1955, at each rate of interest :—

COMMONWEALTH AND STATE PUBLIC DEBT AT 30TH JUNE, 1955 : AMOUNTS AT EACH RATE OF INTEREST.

Rate of Interest.	Maturing in—								Total.
	Australia.		London.		New York.		Switzer- land.	Total.	
	Com- mon- wealth.	State.	Com- mon- wealth. (a)	State.	Com- mon- wealth.	State.	Com- mon- wealth.			Com- mon- wealth.	State.
Per cent. ..	£A.'000.	£A.'000.	£Stg.'000	£Stg.'000	£'000.(b)	£'000.(b)	£'000.(b)	£'000.(b)	£'000.(b)
5.0 ..	..	..	..	1	..	..	..	..	1
4.75 ..	..	..	..	..	20,182	..	..	20,182	..
4.625 ..	..	..	..	..	1,112	..	..	1,112	..
4.5 ..	148,893	509,572	..	11,790	..	..	..	148,893	521,362
4.2625 ..	77	..	..	..	..	..	..	77	..
4.25 ..	45	..	..	..	20,548	..	..	20,593	..
4.0 ..	..	568	5,725	22,798	..	1,220	6,126	11,851	24,586
3.875 ..	..	1,789	..	..	..	..	..	1,789	22,698
3.8 ..	..	..	..	3,200	..	..	..	..	3,200
3.75 ..	13,751	66,838	6,951	..	3,417	1,721	6,125	30,244	68,559
3.625 ..	..	107	..	..	..	..	..	..	107
3.5 ..	..	2,388	5,842	46,158	1,105	7,140	..	6,947	55,686
3.4875 ..	..	2	..	..	..	..	..	..	2
3.375 ..	..	..	..	..	3,244	5,193	..	3,244	5,193
3.25 ..	859,532	113,412	33,767	56,848	1,114	6,246	..	894,413	176,506
3.2391 ..	17,514	..	..	..	..	..	..	17,514	..
3.125 ..	263,852	530,078	..	..	..	..	..	263,852	530,078
3.1 ..	..	3,857	..	..	..	..	..	..	3,857
3.0 ..	83,323	223,180	9,790	90,669	..	..	..	93,113	313,849
2.8347 ..	9,102	..	..	..	..	..	..	9,102	..
2.75 ..	..	..	220	37,326	..	..	..	220	37,326
2.7125 ..	..	417	..	..	..	..	..	..	417
2.5 ..	..	2	..	19,932	..	..	..	..	19,934
2.325 ..	..	1,728	..	..	..	..	..	..	1,728
1.5 ..	..	3,572	..	..	..	..	..	..	3,572
1.0 ..	399,800	37,064	..	..	..	..	..	399,800	37,064
Miscellaneous (c)	771	..	..	2	..	..	..	771	2
Total Debt ..	1,798,449	1,515,483	62,295	288,724	50,722	21,520	12,251	1,923,717	1,825,727

(a) Excludes War (1914-18) Debt due to United Kingdom Government, £79,724,000 (rate of interest 4.91667 per cent.). (b) See § 1, page 795. (c) Consists of overdue debt, War (1914-18) and (1939-45) Savings Stamps and National Savings Stamps, etc.

7. **Dates of Maturity.**—(i) *Commonwealth.* In the following table, the Commonwealth Public Debt at 30th June, 1955 is classified according to the earliest and the latest years of maturity.

COMMONWEALTH PUBLIC DEBT AT 30th JUNE, 1955(a) : CLASSIFIED ACCORDING TO EARLIEST AND LATEST YEARS OF MATURITY.

Year of Maturity.	Earliest Year.					Latest Year.				
	Maturing in—				Total.	Maturing in—				Total.
	Aus- tralia.	Lon- don.	New York.	Switzer- land.		Aus- tralia.	Lon- don.	New York.	Switzer- land.	
£A.'000.	£Stg. '000.	£'000b	£'000.(b)	£'000.(b)	£A.'000.	£Stg. '000.	£'000.b	£'000.(b)	£'000.(b)	
Before 30th June, 1955 ..	737,389	6,951	1,114	..	745,454	..	..	..	..	..
1955-56(c) ..	563,438	16,386	..	..	579,824	441,296	220	..	..	441,516
1956-57 ..	118,236	17,309	4,349	..	139,894	81,099	6,951	1,114	..	89,164
1957-58 ..	9,872	..	..	..	9,872	43,479	..	..	..	43,479
1958-59 ..	..	..	..	..	..	237,221	..	..	..	237,221
1959-60 ..	..	..	..	..	..	240,034	..	..	..	240,034
1960-61 ..	72,433	5,725	..	..	78,158	227,752	16,166	..	..	243,918
1961-62 ..	72,005	5,842	..	..	77,847	77,847	..	3,244	..	167,757
1962-63 ..	78,319	..	..	..	78,319	64,525	..	..	..	64,525
1963-64 ..	..	..	..	..	..	72,433	5,725	..	..	78,158
1964-65 ..	..	292	..	6,125	6,417	65,545	..	..	..	65,545
1965-66 ..	..	..	..	6,126	6,126	13,795	..	..	..	13,795
1966-67 ..	11,671	..	..	..	11,671	11,671	5,842	1,105	..	18,618
1967-68 ..	30,877	..	..	..	30,877	30,877	..	..	..	30,877
1968-69 and later ..	76,629	9,790	3,416	..	89,835	76,629	27,391	3,416	12,251	119,687
Miscellaneous (d) ..	27,580	..	e41843	..	69,423	27,580	..	e41843	..	69,423
Total ..	1,798,449	62,295	50,722	12,251	1,923,717	1,798,449	62,295	50,722	12,251	1,923,717

(a) See note (a) to previous table. (b) See § 1, page 795. (c) Includes Short-term Debt. (d) Consists of advance loan subscriptions, overdue debt, debt repayable in half-yearly instalments, War Savings and Savings Certificates, War Savings Stamps, National Savings Stamps and Peace Savings Certificates. (e) International Bank Dollar Loans to be repaid in half-yearly instalments from 1st September, 1955 to 1st September, 1975, 1st June, 1957 to 1st December, 1972, 1st March, 1957 to 1st March, 1969, and from 15th September, 1957 to 15th March, 1970.

(ii) States. Particulars of State Public Debt at 30th June, 1955 have been classified in the following table according to the earliest and the latest years of maturity.

STATE PUBLIC DEBT AT 30th JUNE, 1955 : CLASSIFIED ACCORDING TO EARLIEST AND LATEST YEARS OF MATURITY.

Year of Maturity.	Earliest Year.				Latest Year.			
	Maturing in—			Total.	Maturing in—			Total.
	Aus- tralia.	London.	New York.		Aus- tralia.	London.	New York.	
£A.'000.	£Stg. '000.	£'000.(a)	£'000.(a)	£A.'000.	£Stg. '000.	£'000.(a)	£'000.(a)	
Before 30th June, 1955 ..	142,469	42,740	6,246	191,455	..	..	..
1955-56 ..	83,720	(b)41,606	..	125,326	95,791	(b)26,068	..	
1956-57 ..	185,611	39,448	12,333	237,392	124,252	..	6,246	
1957-58 ..	38,854	..	..	38,854	37,110	20,090	..
1958-59 ..	1,669	13,935	..	15,604	34,413	20,809	..	
1959-60 ..	2,732	..	..	2,732	74,981	..	..
1960-61 ..	108,071	11,790	..	119,861	64,413	18,438	..	
1961-62 ..	196,424	23,509	..	219,933	48,382	..	5,193	
1962-63 ..	266,916	12,871	..	279,787	159,849	11,790	..	
1963-64 ..	4,076	10,000	..	14,076	107,868	..	..
1964-65 ..	2,105	12,896	..	15,001	178,521	12,870	..	
1965-66 ..	1,084	25,549	..	26,633	108,151	10,000	..	
1966-67 ..	63,100	..	..	63,100	63,100	23,509	7,140
1967-68 ..	130,173	15,950	..	146,123	130,173	25,549	..	
1968-69 ..	205,117	..	..	205,117	205,117	..	..
1969-70 ..	3,242	18,441	1,721	23,404	3,242	41,289	1,721	
1970-71 ..	2,369	..	..	2,369	2,369	11,036	..
1971-72 ..	2,177	12,175	..	14,352	2,177	15,950	..	
1972-73 ..	2,711	..	..	2,711	2,711	..	..
1973-74 ..	3,336	..	..	3,336	3,336	12,175	..
1974-75 ..	4,378	..	..	4,378	4,378	31,337	..
1975-76 ..	7,338	4,351	..	11,689	7,338	..	..
1976-77 ..	6,001	..	..	6,001	6,001	..	..
1977-78 and later ..	26,747	..	..	26,747	26,747	4,351	..
Miscellaneous (c) ..	25,063	3,463	1,220	29,746	25,063	3,463	1,220	
Total ..	1,515,483	288,724	21,520	1,825,727	1,515,483	288,724	21,520	1,825,727

(a) See § 1, page 795. (b) Includes short-term debt, £26,068,000. (c) Consists of overdue indefinite and interminable debt, debt due at Treasurer's option and half-yearly drawings.

8. **Short-term Debt.**—(i) *Amount.* Particulars of the short-term debt (Treasury Bills and Debentures) of the Commonwealth and States in London and in Australia at 30th June, 1939 and at intervals from 30th June, 1951, to 30th June, 1955, are shown in the following table. This debt is included in the public debt as shown elsewhere.

COMMONWEALTH AND STATE SHORT-TERM DEBT.(a)

Date.	Maturing in Australia. (£A.'000.)			Maturing in London. (£Stg.'000.)		
	Commonwealth.	States.	Total.	Commonwealth.	States.	Total.
30th June, 1939 ..	..	50,228	50,228	4,220	23,155	27,375
„ „ 1951 ..	108,280	2,400	110,680	1,220	22,868	24,088
„ „ 1952 ..	153,280	..	153,280	970	22,868	23,838
„ „ 1953 ..	225,000	..	225,000	720	22,868	23,588
„ „ 1954 ..	190,000	..	190,000	470	22,868	23,338
30th September, 1954 ..	185,000	..	185,000	470	22,868	23,338
31st December, 1954 ..	215,000	..	215,000	220	22,868	23,088
31st March, 1955 ..	220,000	..	220,000	220	22,868	23,088
30th June, 1955 ..	160,000	..	160,000	220	26,068	26,288

(a) Excludes Overdrafts and Internal Treasury Bills.

(ii) *Interest Rates.* (a) *London.* The rates of interest payable on Treasury Bills and Debentures in London during the following periods were : 1938-39—minimum rate, 2 per cent., maximum rate, 2½ per cent. ; 1949-50 to 1950-51—minimum rate, 2 per cent., maximum rate, 2½ per cent. On 8th November, 1951, the rates were increased to—minimum rate, 2½ per cent., maximum rate, 2¾ per cent.

(b) *Australia.* The Treasury Bill rates in Australia were as follows :—1½ per cent. from 1st January, 1935 ; 1½ per cent. from 1st May, 1940 ; 1½ per cent. from 1st May, 1943 ; 1 per cent. from 1st March, 1945 ; ¾ per cent. from 1st May, 1949 ; 1 per cent. from 1st August, 1952.

9. **State and Municipal and Semi-Governmental Authority Public Debt.**—For the reasons indicated on page 801, direct comparisons of the debts of the several States should be made with caution. The table following shows, for 1938-39 and 1950-51 to 1953-54, particulars of the debts of the States and the debts due to the public by municipal and semi-governmental authorities in each State.

STATE AND MUNICIPAL AND SEMI-GOVERNMENTAL AUTHORITY PUBLIC DEBT.

State.	State.	Municipal. (a)	Semi-Gov- ernmental. (a)	Total.	
DEBT. (£'000.) (b) 1954-55.					
New South Wales	655,599	62,146	163,663	881,408	
Victoria	411,199	24,337	259,626	695,162	
Queensland	236,474	58,166	44,536	339,176	
South Australia	234,769	2,047	18,429	255,245	
Western Australia	177,881	5,340	9,011	192,232	
Tasmania	109,805	7,661	9,460	126,926	
Total	1954-55	1,825,727	159,697	504,725	2,490,149
	1953-54	1,688,948	142,628	439,616	2,271,192
	1952-53	1,543,648	127,041	381,880	2,052,569
	1951-52	1,395,676	112,176	316,381	1,824,233
	1938-39	897,772	78,126	120,512	1,096,410

(a) Due to the public and excludes amounts due to Central Government. Includes bank overdrafts.
(b) See § 1, page 795.

STATE AND MUNICIPAL AND SEMI-GOVERNMENTAL AUTHORITY
PUBLIC DEBT—*continued.*

State.	State.	Municipal. (a)	Semi-Gov- ernmental. (a)	Total.
DEBT PER HEAD OF POPULATION. (£.) (b) 1954-55.				
New South Wales	187.8	17.8	46.9	252.5
Victoria	163.0	9.6	102.9	275.5
Queensland	175.9	43.3	33.1	252.3
South Australia	286.5	2.5	22.4	311.4
Western Australia	270.1	8.2	13.6	291.9
Tasmania	348.9	24.3	30.2	403.4
Total	1954-55	199.5	17.4	217.0
	1953-54	188.9	16.0	204.9
	1952-53	175.8	14.4	190.2
	1951-52	162.2	13.0	175.2
	1938-39	129.2	11.2	140.4

(a) Due to the public and excludes amounts due to Central Government. Includes bank overdrafts.

(b) See § 1, page 795.

§ 4. Commonwealth Loan Raisings.

1. **New Loans Raised, 1952-53 to 1954-55.**—Under the Financial Agreement between the Commonwealth and the States, the Commonwealth is responsible for raising all loan moneys required by both the Commonwealth and the State Governments. Details of loan transactions given in this section relate, therefore, to all loans raised for the Commonwealth and the States. The following table shows details of new loans raised in Australia by the Commonwealth during the three years 1952-53 to 1954-55. No new loans were raised in London during this period, and the only new loans raised in New York were those from the International Bank for Reconstruction and Development. Details of these loans are given in para. 3, below.

COMMONWEALTH NEW LOANS(a) RAISED IN AUSTRALIA.

Month of Raising.	Amount Invited.	Amount Sub- scribed.	Rate of In- terest per annum.	Year of Maturity.	Price of Issue per £100.	Allocation of Proceeds.		
						Commonwealth.		States.
						War (1952- 45) etc.	Other Pur- poses.	
	£'000.	£'000.	%		£	£'000.	£'000.	£'000.
1952-53—								
November (Sixteenth Security Loan)	20,000	20,269	4½	1961	100	..	2,459	17,810
March (Seventeenth Security Loan)	29,789	13,981	3	1955	99 10s.	} 92	3,595	28,331
		18,037	4½	1962	100			
June(b)	123,000	35,000	3	1955	99 10s.	..	15,327	107,673
		88,000	4½	1962	100			
1953-54—								
September (Eighteenth Security Loan)	50,000	11,313	3	1955	100	..	6,850	59,468
March (Nineteenth Security Loan)	35,000	55,005	4½	1966	100	} ..	65	52,000
		8,603	3	1957	98 10s.			
June(b)	80,000	43,462	4½	1967	100	..	..	..
		16,000	3	1957	98 10s.	5,407	30,475	44,118
		64,000	4½	1967	100			
1954-55—								
August (Twentieth Security Loan)	37,594	7,180	3	1957	98 10s.	..	..	46,500
November (Twenty-first Security Loan)	50,106	39,320	4½	1967	100	..	..	..
March (Twenty-second Security Loan)	40,000	5,698	3	1957	98 15s.	..	..	37,159
June(b)	48,000	31,461	4½	1968	100	..	..	..
		12,526	3	1957	99 5s.	..	..	..
		31,570	4½	1968	100	..	..	..
		10,000	3	1957	99 5s.	3,452	29,201	15,347
		38,000	4½	1968	100			

(a) Includes loans raised for redemption of Treasury Bills, but excludes conversion loans, loans for redemption of debt maturing in London, short-term debt and certain miscellaneous debt (see below).

(b) Special issue. For details see following paragraph.

The loans of £123,000,000, £80,000,000 and £48,000,000 issued in June, 1953, 1954 and 1955 respectively were for the purpose of fulfilling an undertaking given by the Commonwealth that the States would have access to loan funds for their works programmes up to the approved Loan Council borrowing programmes. These programmes totalled £190,182,000 in 1952-53, £200,000,000 in 1953-54 and £180,000,000 in 1954-55. Subscriptions to these special loans came from the following sources :—

—	1952-53.	1953-54.	1954-55.
	£	£	£
National Debt Commission—			
Investment of surplus received from Commonwealth Revenue .. .. .	..	..	..
Investment of Australian currency proceeds of International Bank Loan	18,500,000	18,000,000	22,150,000
Swiss Loan Trust Account .. .. .	..	5,750,000	6,150,000
Commonwealth Trust Moneys—Investment	104,500,000	56,250,000	19,700,000
Total	123,000,000	80,000,000	48,000,000

Finance for the approved Loan Council programmes from 1952-53 to 1954-55 was provided from the following sources—

—	1952-53.	1953-54.	1954-55.
	£	£	£
Public Loans, domestic raisings, etc.	67,357,000	125,647,000	135,527,000
Special Commonwealth Loan	122,825,000	74,353,000	44,473,000
Total	190,182,000	200,000,000	180,000,000

In addition to the new loans raised shown in the foregoing table, and the redemption and conversion loans shown in the following table, there were other miscellaneous debt operations during 1954-55, namely :—Savings Certificates and War Saving Certificates (Five and Seven Years' Series), decrease of £3,693,000 ; War Savings and Savings Stamps, decrease of £1,000 ; National Savings Bonds and Stamps, decrease of £13,000 ; "Over the Counter Sales" (small amounts borrowed by virtue of certain statutory rights) £8,138,900. Advance loan subscriptions in hand decreased from £9,894,000 at the end of 1953-54 to £5,175,000 at the end of 1954-55.

2. Conversion and Redemption Loans, 1952-53 to 1954-55.—(i) *Australia*. Particulars of conversion loans raised in Australia during the three years 1952-53 to 1954-55 are given in the following table :—

COMMONWEALTH CONVERSION AND REDEMPTION LOANS RAISED IN AUSTRALIA.

Month of Raising.	Old Loan.		New Loan.				Increase in Annual Liability for Interest.
	Amount.	Rate of Interest per annum.	Amount.	Rate of Interest per annum.	Price of Issue per £100.	Year of Maturity.	
	£A.'000.	%	£A.'000.	%	£		£A.'000.
1952-53—							
March ..	47,211	2	{ 30,196 17,015	{ 3 4½	{ 99 10s. 100	{ 1955 1962	{ 727
1953-54—							
September ..	32,926	2	{ 12,235 16,739	{ 3 4½	{ 100 100	{ 1955 1966	{ 541
March ..	15,188	2	{ 6,563 7,634	{ 3 4½	{ 98 10s. 100	{ 1957 1967	{ 256
1954-55—							
August ..	12,406	3½	{ 686 4,273	{ 3 4½	{ 98 10s. 100	{ 1957 1967	{ 27
November ..	{ 11,871 63,023	{ 2 3¾	{ 11,657 48,303	{ 3 4½	{ 98 15s. 100	{ 1957 1968	{ 418
March ..	198,942	2	{ 64,652 124,222	{ 3 4½	{ 99 5s. 100	{ 1957 1968	{ 3,752

(ii) *London*. The following table shows particulars of loans raised in Australia and London during the years 1952-53 and 1953-54 for the purpose of redeeming and converting London loans. There were no loans raised for this purpose in 1954-55.

COMMONWEALTH LOANS RAISED FOR THE CONVERSION AND REDEMPTION OF LOANS MATURING IN LONDON.

Month of Raising.	Old Loan.		New Loan.				Increase in Annual Liability for Interest and Exchange. (a)	
	Amount.	Rate of Interest per annum.	Amount raised in—		Rate of Interest per annum.	Price of Issue per £100.		Year of Maturity.
			Australia.	London.				
	£Stg. '000.	%	£A. '000.	£Stg. '000.	%	£	£A. '000.	
1952-53—								
July ..	11,790	3½	..	11,790	4½	98	1960-62 148	
1953-54—								
November ..	10,796	3½	..	10,796	4	99 10s.	1966-68 68	

(a) No account has been taken of cost of issuing the conversion loans at a discount. Exchange calculated at £A.125.375 = £Stg.100.

(iii) *New York*. During 1946-47, four loans totalling \$128,000,000 were raised in New York to redeem loans which became due for redemption or which the Commonwealth had the option of redeeming. No further loans were raised in New York for this purpose until December, 1954. The following table shows particulars of that redemption loan.

COMMONWEALTH LOANS RAISED IN NEW YORK FOR REDEMPTION OF EXISTING LOANS.

Month of Raising.	Old Loan.		New Loan.				Reduction in Annual Liability for Interest.(a)	
	Amount.	Rate of Interest per annum.	Amount.	Rate of Interest per annum.	Price of Issue per \$100.	Year of Maturity.	United States of America Currency.	Australian Currency.
	\$'000.	%	\$'000.	%	\$.		\$'000.	£A.'000.
1954-55—								
December ..	25,000	5	25,000	3½	99	1969	312½	(b) 141

(a) The cost of issuing the new loans at a discount has not been taken into account. (b) Converted at selling rate of exchange on 30th June, 1955, \$2.2159 = £A.1.

3. *International Bank for Reconstruction and Development Loans*.—To provide dollar funds for the purchase of certain types of capital equipment and plant which were indispensable to the furtherance of development in Australia and which could be obtained only in the United States of America and Canada, the Commonwealth Government, in August, 1950, arranged a loan of \$100,000,000 from the International Bank for Reconstruction and Development. The loan is for a term of 25 years with interest at 4½ per cent. per annum on the amount of the loan withdrawn and outstanding from time to time. In addition, there is a commitment charge of ¾ per cent. per annum on the amount of the loan not withdrawn from time to time. Repayment of the loan is to be made in half-yearly instalments commencing on 1st September, 1955. The last instalment is payable on 1st September, 1975. At the 31st December, 1953, the whole of the loan had been drawn.

In July, 1952, a further loan of \$50,000,000 was arranged. This loan is for a term of 20 years with interest at 4½ per cent. per annum on the amount of the loan withdrawn and outstanding from time to time. There is also a commitment charge of ¾ per cent. per annum similar to that of the previous loan. Repayment of the loan is to be made in half-yearly instalments from 1st June, 1957 to 1st December, 1972. At 30th September, 1954, the whole of the loan had been drawn.

In March, 1954, a third loan of \$54,000,000 was arranged. This loan is for a term of 15 years with interest and commitment charges similar to those for the previous loan for \$50,000,000. Repayment of the loan will be made in half-yearly instalments from 1st March, 1957 to 1st March, 1969. Up to 30th June, 1955, \$48,214,957 had been drawn on the loan.

In March, 1955, a fourth loan of \$54,500,000 was arranged. This loan is for a term of 15 years with interest at 4½ per cent. per annum. There is also a commitment charge of ¾ per cent. per annum similar to that of previous loans. Repayment is to be made in half-yearly instalments from 15th March, 1958 to 15th March, 1970. Up to 30th June, 1955, \$5,411,552 had been drawn on the loan.

The capital equipment and plant purchased from the proceeds of these loans are made available to Commonwealth and State Government departments and agencies and private firms and individuals for use in the development of Australian resources. Subject to a special import licence being obtained, the goods are imported and distributed through normal channels and payment made through the Australian banking system. Periodically, schedules of dollar payments for goods imported against loan licences are submitted to the International Bank for Reconstruction and Development. These schedules form the basis for periodical drawings by the Commonwealth against the loan. The amounts drawn are paid to the Commonwealth Bank to replace the dollar funds used in making the purchases. In return, the Commonwealth Government receives Australian currency from the Commonwealth Bank. This is paid to the Commonwealth National Debt Sinking Fund out of which the loans will subsequently be redeemed.

4. **Swiss Loan.**—To foster industrial development in Australia and to stimulate trade relations between the two countries, the Commonwealth Government arranged for the issue in Switzerland in November, 1953, and February, 1955, of two public loans each of 60,000,000 Swiss francs. The loans were underwritten by a Swiss banking group headed by the Swiss Bank Corporation, the Crédit Suisse and the Union Bank of Switzerland. Certain Swiss taxes connected with the issue and servicing of the loan were paid on an agreed basis by the Australian Government.

The first loan was for a period of 15 years with an option on the part of the Australian Government to repay the loan in whole or in part after 12 years. The rate of interest was 4 per cent. and the issue price £99. Bondholders have the option of requiring payment either in Australian pounds or in the foreign currency equivalent of Australian pounds.

The second Swiss loan was for a period of 15 years with an option to redeem after 10 years. The rate of interest was 3½ per cent. and the issue price £99 10s. Bonds and interest are payable only in Swiss francs.

The loans were both fully subscribed and Swiss franc proceeds, after deducting borrowing expenses, were sold by the Commonwealth Government to the Commonwealth Bank in return for an equivalent amount of Australian currency. A trust account, named the Swiss Loan Trust Account, was opened and the proceeds from the two loans were transferred to this account and were used in assisting the Loan Council borrowing programmes for the 1953–54 and 1954–55 financial years. The Swiss Loan Trust Account will also be used as a sinking fund for the loans, and, when the time comes for repayment, the trust account investments can be realized. The provisions of the National Debt Sinking Fund Act do not apply to the loans.

5. **Summary of Loan Transactions, 1950–51 to 1954–55.**—The following table contains a summary of loan transactions on behalf of the Commonwealth and State Governments during the five years 1950–51 to 1954–55.

COMMONWEALTH LOAN TRANSACTIONS : SUMMARY.

Details.	Year ended 30th June—				
	1951.	1952.	1953.	1954.	1955.
New Loans—					
New Loans (a) raised in—					
Australia .. £A.'000.	127,567	223,695	175,287	198,387	175,755
New York(b) .. \$'000.	9,059	53,380	40,223	48,144	52,821
Switzerland Francs '000.	..	..	..	60,000	60,000
Miscellaneous Debt in Australia (c) .. £A.'000.	-16,443	7,405	24,512	13,273	3,429
Net Increase in Short Term Debt—					
Australia—Public .. £A.'000.	2,400	42,600	71,720	-35,000	-30,000
Internal .. £A.'000.	87,000	-37,000	-75,610	29,000	34,600
London .. £Stg.'000.	-250	-250	-250	-250	2,950
Loans raised for Conversion or Redemption of existing Debt maturing in—					
Australia .. £A.'000.	153,928	71,234	47,211	43,171	253,793
London—					
Raised in Australia £A.'000.	11,785	..	..	..	..
London £Stg.'000.	..	..	11,790	10,796	..
New York .. \$'000.	..	..	..	..	25,000

(a) Includes loans raised for redemption of Treasury Bills. No new loans were raised in London during this period. (b) Amounts drawn of \$100,000,000, \$50,000,000, \$54,000,000 and \$54,500,000 loans from International Bank for Reconstruction and Development. (c) "Over the Counter Sales", Instalment Stock, National Savings Bonds, War Savings and Savings Certificates and net increase in debt on account of advance loan subscriptions and, until the discontinuance of sales, War Savings and Savings Stamps and National Savings Stamps.

NOTE.—Minus sign (-) denotes a decrease in debt.

§ 5. National Debt Sinking Fund.

1. Commonwealth Public Debt.—Particulars relating to the creation of sinking funds are included in issues of the Official Year Book prior to No. 23.

The old sinking funds were merged in the National Debt Sinking Fund on 11th August, 1923. Particulars of receipts and expenditure of the Commonwealth Account for the years 1938-39 and 1950-51 to 1954-55 were as follows:—

NATIONAL DEBT SINKING FUND: COMMONWEALTH ACCOUNT.
(£'000.)

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Receipts—</i>						
From Consolidated Revenue	3,918	17,225	(a) 116,928	18,471	18,154	14,115
Loans and Advances Repaid	17	4,381	2,094	2,508	2,276	2,007
War Service Homes Money Repaid	629	3,147	4,046	4,050	5,326	5,734
Half Net Profit Commonwealth Bank	321	1,140	1,336	1,764	2,127	2,835
Reparation Moneys	..	..	..	..	..	2,662
Interest on Investments	32	70	76	(b) 2,144	(c) 3,371	(d) 4,621
Loan (International Bank for Reconstruction and Development) Act	..	4,044	23,831	17,935	21,467	23,575
Other Contributions	14	12	12	10	6	3
<i>Total Receipts</i>	<i>4,931</i>	<i>30,019</i>	<i>148,323</i>	<i>46,882</i>	<i>52,727</i>	<i>55,552</i>
<i>Expenditure—</i>						
Securities Repurchased and Redeemed in—						
Australia	4,230	28,762	25,382	16,011	16,993	36,218
London	608	1,688	411	436	722	609
New York	214	449	448	455	8,998	4,488
<i>Total Expenditure</i>	<i>5,052</i>	<i>30,899</i>	<i>26,241</i>	<i>16,902</i>	<i>26,713</i>	<i>41,315</i>
Balance at 30th June	1,131	9,997	132,079	162,059	188,073	202,310
<i>Face Value of Securities Repurchased and Redeemed in—</i>						
Australia	4,199	28,828	26,882	16,860	18,561	37,312
London	498	1,409	335	363	593	492
New York	167	210	211	212	4,152	2,065
<i>Total Face Value</i>	<i>4,864</i>	<i>30,447</i>	<i>27,428</i>	<i>17,435</i>	<i>23,306</i>	<i>39,869</i>

(a) Includes £98,500,000 Consolidated Revenue Fund surplus. (b) Includes £1,562,000 interest received under National Debt Sinking Fund (Special Payment) Act 1951. (c) Includes £1,970,000 interest received under National Debt Sinking Fund (Special Payment) Act 1951. (d) Includes £2,149,000 interest received under National Debt Sinking Fund (Special Payment) Act 1951.

2. State Public Debt.—(i) States, 1954-55. A sinking fund for the redemption of the debt of the States was established under the Financial Agreement. Details of contributions to be made to this fund are given on page 796. Particulars of the transactions of the National Debt Sinking Fund (States' Account) for each State during the year 1954-55 are shown below.

NATIONAL DEBT SINKING FUND: STATE ACCOUNT, 1954-55.
(£'000.)

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>Receipts—</i>							
Contributions under Financial Agreement—							
Commonwealth	1,429	880	497	504	397	240	3,947
States	5,045	3,181	1,776	1,733	1,303	642	13,680
Interest from States on cancelled Securities	8	3	3	1	2	1	18
Special Contributions by States	81	5	..	2	1	1	90
Interest on Investments, etc.	6	5	1	2	1	1	16
<i>Total Receipts</i>	<i>6,569</i>	<i>4,074</i>	<i>2,277</i>	<i>2,242</i>	<i>1,704</i>	<i>885</i>	<i>17,751</i>
<i>Expenditure—</i>							
Securities Repurchased and Redeemed in—							
Australia	6,176	3,176	1,444	1,764	1,136	844	14,540
London	174	160	363	127	59	15	898
New York	268	922	429	363	699	7	2,688
<i>Total Expenditure</i>	<i>6,618</i>	<i>4,258</i>	<i>2,236</i>	<i>2,254</i>	<i>1,894</i>	<i>866</i>	<i>18,126</i>
Balance at 30th June, 1955	508	409	307	222	221	52	1,719
<i>Face Value of Securities Repurchased and Redeemed in—</i>							
Australia	6,282	3,242	1,449	1,780	1,167	860	14,780
London	140	131	295	104	49	13	732
New York	123	424	197	167	322	3	1,236
<i>Total Face Value</i>	<i>6,545</i>	<i>3,797</i>	<i>1,941</i>	<i>2,051</i>	<i>1,538</i>	<i>876</i>	<i>16,748</i>

(ii) *All States, 1938-39 and 1950-51 to 1954-55.* The following table is a summary of the transactions of the National Debt Sinking Fund (State Account) for the years 1938-39 and 1950-51 to 1954-55:—

NATIONAL DEBT SINKING FUND: STATE ACCOUNT.

(£'000.)

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Receipts—</i>						
<i>Contributions under Financial Agreement—</i>						
Commonwealth ..	1,478	2,241	2,557	3,011	3,463	3,947
States ..	4,327	9,418	10,325	11,362	12,357	13,680
Interest from States on cancelled Securities ..	15	25	41	49	45	18
<i>Commonwealth Contributions under Federal Aid Roads and Works Act ..</i>						
Special Contributions by States ..	61	147	151	155	203	90
Interest on Investments, etc.	56	8	4	25	33	16
<i>Total Receipts ..</i>	<i>6,006</i>	<i>11,839</i>	<i>13,078</i>	<i>14,602</i>	<i>16,101</i>	<i>17,751</i>
<i>Expenditure—</i>						
<i>Securities Repurchased and Redeemed in—</i>						
Australia ..	4,008	8,877	9,280	10,602	13,576	14,540
London ..	1,722	5,307	474	973	1,362	898
New York ..	347	462	430	483	4,792	2,688
<i>Total Expenditure ..</i>	<i>6,077</i>	<i>14,646</i>	<i>10,184</i>	<i>12,058</i>	<i>19,730</i>	<i>18,126</i>
<i>Balance at 30th June ..</i>	<i>1,885</i>	<i>285</i>	<i>3,179</i>	<i>5,723</i>	<i>2,094</i>	<i>1,719</i>
<i>Face Value of Securities Repurchased and Redeemed in—</i>						
Australia ..	3,996	8,859	9,661	11,644	14,445	14,780
London ..	1,561	4,345	420	838	1,154	732
New York ..	285	229	220	241	2,214	1,236
<i>Total Face Value ..</i>	<i>5,842</i>	<i>13,433</i>	<i>10,301</i>	<i>12,723</i>	<i>17,813</i>	<i>16,748</i>

E. TAXES ON INCOME.

NOTE.—The following section contains details of taxes on individuals and companies for the 1956-57 financial year.

1. **General.**—A description of the development of income taxes in Australia appeared in Official Year Book No. 35, p. 926. Since July, 1942, the Commonwealth, under the uniform tax arrangement, has been the only authority imposing taxes on income. Taxes on income are assessed and imposed under the Income Tax and Social Services Contribution Assessment Act 1936-1956 and the Income Tax and Social Services Contribution Act 1956. The latter Act is an annual measure and its primary purpose is to declare the rates of tax and contribution payable for the financial year. The rates for the financial year are levied, in the case of individuals, on the income of that year and, in the case of companies, on the income of the preceding year. Thus tax for the financial year 1956-57 is levied on the income of individuals in 1956-57 and on the income of companies in 1955-56.

2. **Present Taxes.**—For individuals, a single tax known as the Income Tax and Social Services Contribution is levied. All companies are liable for primary income tax and in addition, private companies are subject to tax on undistributed income.

3. **Assessable Income.**—Income taxes in Australia are levied, primarily, on all income derived from Australian sources by any person, rather than on income derived from all sources by Australian residents. Thus a non-resident is taxed on income derived in Australia, while a resident is, in general, not taxed on income other than dividends derived from overseas, if the income is taxed in the country in which it is derived.

Certain types of Australian income are exempt from tax in Australia, the more important being (i) pensions, child endowment and other payments under the Social Services Act 1947-1955 and the Tuberculosis Act 1948, (ii) income from gold-mining and uranium mining, (iii) twenty per cent. of certain mining profits, (iv) dividends paid out of exempt mining profits, (v) pay and allowances earned by a member of the Defence Forces while serving in Korea after 26th June, 1950, and Malaya after 28th June, 1950, and (vi) income received from a scholarship, bursary or other education allowance.

No amount is included in assessable income on account of a house occupied by its owner. Profits derived from the sale of property are not assessable income if such property was not purchased with a view to resale at a profit.

Assessable income is divided into two main groups—personal exertion and property. Personal exertion income includes all wage, salary, business and professional incomes, while property income includes all rents, dividends and interest. No distinction between personal exertion and property income is made for companies. The further tax on property income imposed on individuals in cases where the total taxable income exceeded £400 and the amount of property income exceeded £100 was discontinued from the 1953–54 financial year.

Expenses incurred in earning income, certain subscriptions to business associations, and trade union dues, are allowable deductions. Losses incurred in previous years may be carried forward as a deduction.

Because of uncongenial climatic conditions, isolation and high cost of living, taxpayers living in certain areas are allowed an additional deduction. Two zones have been prescribed, and the allowances are Zone A, £180 and Zone B, £30.

Income Tax and Social Services Contribution is levied on the taxable income remaining after making these deductions and the concessional deductions to which reference is made in paragraph 4 following.

4. Concessional Deductions.—Concessional allowances for dependants, medical expenses, life assurance and superannuation contributions, etc., are made by way of a deduction from income. The maximum deduction allowed for each dependant, for a parent, or for a housekeeper employed by the taxpayer for the financial year 1956–57 is shown in the following table.

CONCESSIONAL DEDUCTIONS FOR DEPENDANTS, ETC.

(£.)

Dependant, etc. (Resident).	Maximum Deduction. (a)
Spouse	130
Daughter-housekeeper (b)	130
Housekeeper (b) having care of taxpayer's children under 16 years of age	130
Parent	130
One child under 16 years of age	78
Other children under 16 years of age	52
Invalid relative(c)	78
Child 16 to 21 years receiving full-time education (d)	78

(a) These deductions are allowed only if the dependant or parent is a resident of Australia. If the dependant is maintained for part only of the year a partial deduction is allowed. (b) Of a widower or widow. (c) Child, step-child, brother or sister over 16 years of age. The amount of the deduction is reduced by any invalid pension received. (d) The amount of the deduction is reduced by the value of any assistance provided by the Commonwealth or a State.

When the dependant or person maintained derives separate income, the amount of the concessional deduction allowable is reduced as follows :—

In the case of a spouse or daughter-housekeeper, by £2 for every £1 by which the separate net income exceeds £65 ; for each parent maintained, by £1 for each £1 of separate income ; and for each dependent child or invalid relative, by £2 for every £1 by which the separate net income exceeds £52.

For the 1956–57 financial year, medical expenses paid by a taxpayer who is a resident, in respect of himself or dependants, including children under 21 years of age, up to £150 for each person, are allowed as a concessional deduction. Medical expenses include payments made to a legally qualified medical practitioner, nurse or chemist, or a hospital, in respect of an illness or operation, payments for dental services not exceeding £30 for any one person, payment for therapeutic treatment and eye tests, expenditure on medical or surgical appliances, artificial limbs or eyes, hearing aids and spectacles, and the remuneration of an attendant of a person who is blind or confined to bed or invalid chair.

Other concessional deductions allowed to resident taxpayers include, (i) payments of life, etc., insurance premiums and contributions to superannuation, medical, hospital and similar funds and friendly societies, not exceeding an aggregate of £300, (ii) funeral expenses of a dependant not exceeding £30, and (iii) expenditure incurred for the full-time education of children or dependants who are less than 21 years of age (maximum £100 per child or dependant).

In addition to concessional deductions, all taxpayers (residents and non-residents) are allowed a deduction from income of rates and taxes on land which are annually assessed, gifts to charitable, benevolent or patriotic funds and one-third of amounts paid as calls to certain mining, forestry and oil-prospecting companies.

5. **Effective Exemptions from Tax.**—For the financial years 1950–51 to 1956–57, resident taxpayers without dependants were exempt from Income Tax and Social Services Contribution if their income did not exceed £104. The effect of the deductions for dependants was to exempt taxpayers up to the incomes shown hereunder.

RESIDENT TAXPAYERS : EFFECTIVE EXEMPTIONS FROM TAX.
(£.)

Taxpayer with—	Income Tax and Social Services Contribution— Financial Years 1950–51 to 1952–53.	Income Tax and Social Services Contribution— Financial Years 1953–54 to 1956–57.
No dependants	104	104
Wife	208	234
Wife and one child	286	312
„ „ two children	338	364
„ „ three children	390	416
„ „ four children	442	468

For the 1956–57 financial year, an aged person (i.e., a man who has attained the age of 65 years or a woman who has attained the age of 60 years) is exempt from Income Tax and Social Services Contribution if his net income (i.e., gross income less expenses of earning that income) does not exceed £390. A married couple both of whom qualify by age for the concession, are exempt from tax if their combined net incomes do not exceed £780.

6. **Rates of Income Tax and Social Services Contribution on Individuals.**—The following table shows the rates of income tax and social services contribution for the financial years 1953–54 to 1956–57.

INCOME TAX AND SOCIAL SERVICES CONTRIBUTION—INDIVIDUALS : RATES OF INCOME TAX AND SOCIAL SERVICES CONTRIBUTION—1953-54 TO 1956-57.

Total Taxable Income.		1953-54.		1954-55 to 1956-57.	
Column 1.	Column 2.	Tax and Contribution on Amount in Column 1.	Tax and Contribution on each £1 of Balance of Income.	Tax and Contribution on Amount in Column 1.	Tax and Contribution on each £1 of Balance of Income.
Exceeding—	Not Exceeding—				
£	£	£ s. d.	d.	£ s. d.	d.
Nil	100	Nil	1	Nil	1
100	150	0 8 4	4	0 8 4	3
150	200	1 5 0	9	1 0 10	7
200	250	3 2 6	13	2 10 0	11
250	300	5 16 8	17	4 15 10	15
300	400	9 7 6	22	7 18 4	20
400	500	18 10 10	28	16 5 0	26
500	600	30 4 2	33	27 1 8	30
600	700	43 19 2	38	39 11 8	34
700	800	59 15 10	42	53 15 0	38
800	900	77 5 10	46	69 11 8	42
900	1,000	96 9 2	50	87 1 8	46
1,000	1,200	117 5 10	56	106 5 0	52
1,200	1,400	163 19 2	64	149 11 8	59
1,400	1,600	217 5 10	71	198 15 0	65
1,600	1,800	276 9 2	78	252 18 4	71
1,800	2,000	341 9 2	85	312 1 8	77
2,000	2,400	412 5 10	93	376 5 0	85
2,400	2,800	567 5 10	100	517 18 4	92
2,800	3,200	733 19 2	107	671 5 0	99
3,200	3,600	912 5 10	114	836 5 0	105
3,600	4,000	1,102 5 10	121	1,011 5 0	111
4,000	4,400	1,303 19 2	128	1,196 5 0	117
4,400	5,000	1,517 5 10	136	1,391 5 0	124
5,000	6,000	1,857 5 10	144	1,701 5 0	132
6,000	8,000	2,457 5 10	151	2,251 5 0	139
8,000	10,000	3,715 12 6	158	3,409 11 8	145
10,000	16,000	5,032 5 10	165	4,617 18 4	152
16,000	upwards	9,157 5 10	168	8,417 18 4	160.

For primary producers, the rate of Income Tax and Social Services Contribution for the current year is determined by the average of the taxable incomes for the five years up to and including the current year. A taxpayer may elect not to have these averaging provisions applied to his assessment, but the election once made, is irrevocable. The application of the averaging provisions is limited to that part of the taxable income which does not exceed £4,000, and when the taxable income exceeds £4,000, the balance is taxed at ordinary rates. When the taxable income is less than £4,000, the rate of tax for averaging purposes is limited to the rate on a taxable income of £4,000.

Commencing with 1953-54, the taxable income, including any abnormal receipts, of actors, artists, composers and inventors, is taxed at the rate appropriate to the normal taxable income plus one-third of the abnormal receipts.

Interest on Commonwealth Loans issued prior to 1st January, 1940, is subject to the condition that it shall not be taxed at rates higher than those for 1930-31. Interest on Commonwealth Loans issued after 1st January, 1940, and interest on certain State semi-governmental loans issued free of State income tax receive a rebate of 2s. in the £1.

The minimum amount of Income Tax and Social Services Contribution payable is 10s. and the amounts payable and rebates are calculated to the nearest shilling.

7. **The Income Tax (International Agreements) Act 1953.**—This Act provided for relief from double taxation of incomes flowing between Australia and the United States of America. It also provided similar relief in respect of the United Kingdom, which had been covered by the Income Tax Assessment Act since 1947.

8. **Taxes on Specified Incomes.**—The following table shows the Income Tax and Social Services Contribution payable by taxpayers, with various incomes and numbers of dependants, on income derived in each year from 1950-51 to 1956-57 :—

COMMONWEALTH TAXES ON INCOME.

(£.)

Income.	Income Tax and Social Services Contribution.				
	1950-51 Financial Year.	1951-52 Financial Year.	1952-53 Financial Year.	1953-54 Financial Year.	1954-55 to 1956-57 Financial Years.
INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH NO DEPENDANTS.					
150	1.65	1.80	1.65	1.25	1.05
200	3.95	4.35	3.95	3.10	2.50
250	7.30	8.05	7.30	5.85	4.80
300	11.65	12.80	11.65	9.35	7.90
350	17.10	18.80	17.10	13.95	12.10
400	22.50	24.75	22.50	18.55	16.25
500	35.85	39.45	35.85	30.20	27.10
600	51.65	56.80	51.65	43.95	39.60
800	90.00	99.00	90.00	77.30	69.60
1,000	135.00	148.50	135.00	117.30	106.25
1,500	281.65	309.80	281.65	246.85	225.85
2,000	468.35	515.20	468.35	412.30	376.25
3,000	928.35	1,021.20	928.35	823.10	753.75
5,000	2,088.35	2,297.20	2,088.35	1,857.30	1,701.25
INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH DEPENDENT WIFE.					
150 .. .. .	..	..	..	..	..
200 .. .. .	..	..	..	..	..
250	1.55	1.70	1.55	0.75	0.65
300	3.75	4.10	3.75	2.00	1.60
350	7.00	7.70	7.00	4.20	3.60
400	11.30	12.45	11.30	7.25	6.05
500	22.05	24.25	22.05	15.80	13.75
600	35.30	38.85	35.30	26.70	23.85
800	69.25	76.15	69.25	55.05	49.50
1,000	110.80	121.90	110.80	90.70	81.85
1,500	247.15	271.85	247.15	209.30	191.35
2,000	426.75	469.40	426.75	366.25	334.55
3,000	876.35	964.00	876.35	765.15	700.10
5,000	2,022.45	2,224.70	2,022.45	1,783.60	1,634.10

COMMONWEALTH TAXES ON INCOME—*continued.*

(£.)

Income.	Income Tax and Social Services Contribution.				
	1950-51 Financial Year.	1951-52 Financial Year.	1952-53 Financial Year.	1953-54 Financial Year.	1954-55 to 1956-57 Financial Years.
INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH DEPENDENT WIFE AND ONE CHILD.					
150 .. .. .	..	..	..	..	..
200 .. .. .	..	..	..	..	..
250 .. .. .	..	..	..	..	..
300	0.85	0.95	0.85	..	..
350	2.50	2.75	2.50	1.10	0.95
400	5.15	5.65	5.15	2.80	2.25
500	13.60	14.95	13.60	8.80	7.40
600	24.90	27.40	24.90	17.80	15.60
800	54.95	60.45	54.95	42.85	38.60
1,000	93.90	103.30	93.90	75.90	68.30
1,500	223.75	246.10	223.75	188.50	172.20
2,000	395.55	435.10	395.55	338.85	309.70
3,000	837.35	921.10	837.35	730.60	668.20
5,000	1,973.05	2,170.35	1,973.05	1,739.40	1,593.80
INCOME FROM PERSONAL EXERTION.—TAXPAYER WITH DEPENDENT WIFE AND TWO CHILDREN.					
150 .. .. .	..	..	..	..	..
200 .. .. .	..	..	..	..	..
250 .. .. .	..	..	..	..	..
300 .. .. .	..	..	..	..	..
350	0.80	0.90	0.80	..	..
400	2.40	2.65	2.40	1.10	0.90
500	8.70	9.55	8.70	5.30	4.35
600	18.80	20.70	18.80	13.05	11.25
800	46.30	50.90	46.30	35.70	32.10
1,000	83.20	91.50	83.20	66.80	60.10
1,500	208.15	228.90	208.15	174.60	159.40
2,000	375.85	413.45	375.85	321.95	294.35
3,000	812.45	893.70	812.45	708.95	648.25
5,000	1,940.15	2,134.15	1,940.15	1,709.95	1,566.90
INCOME FROM PROPERTY.—TAXPAYER WITH NO DEPENDANTS.					
150	1.65	1.80	1.65	1.25	1.05
200	3.95	4.35	3.95	3.10	2.50
250	7.30	8.05	7.30	5.85	4.80
300	11.65	12.80	11.65	9.35	7.90
350	17.10	18.80	17.10	13.95	12.10
400	22.50	24.75	22.50	18.55	16.25
500	40.85	44.95	40.85	30.20	27.10
600	61.65	67.80	61.65	43.95	39.60
800	110.00	121.00	110.00	77.30	69.60
1,000	165.00	181.50	165.00	117.30	106.25
1,500	345.00	379.50	345.00	246.85	225.85
2,000	565.00	621.50	565.00	412.30	376.25
3,000	1,091.70	1,200.85	1,091.70	823.10	753.75
5,000	2,351.70	2,586.85	2,351.70	1,857.30	1,701.25

9. **Pay-as-you-earn.**—Individual taxpayers pay tax on a pay-as-you-earn basis. A similar scheme does not operate for companies.

(a) *Salary and Wage Earners.* Salary and wage earners are subject to instalment deductions for payment of tax at current rates out of weekly (or fortnightly) earnings. Employers are required to deduct tax and contribution from each payment of wages and salary to an employee at the appropriate rate in accordance with a prescribed instalment scale. This scale shows the amount to be deducted according to the income and number of dependants of the employee.

Under the group scheme of deduction, which covers most employers of more than ten persons, the amount deducted is remitted to the Taxation Department, and after 30th June each year each employee is given a group certificate by his employer showing the amount of deductions made during the year. This certificate is forwarded to the Taxation Department with the employee's return of income for the year. If the tax assessed on the basis of this return is less than the amount shown on the group certificate a refund is forwarded to the employee with his assessment. If the tax assessed is greater than the amount shown on the group certificate the employee is required to pay the balance.

Under the stamp scheme used by small employers, a stamp deduction sheet in two parts is used. Each four weeks the employer purchases stamps (also in two parts) for the amount of the deductions made each pay day and sticks one part on each half of the sheet. At the end of the year, the employer gives the employee one half of the sheet and sends the other half to the Taxation Department. The employee's half is then used in the same way as a group certificate.

(b) *Taxpayers with Income other than Salary and Wages.* These taxpayers pay provisional tax in respect of income other than salary and wages. Collection of tax and contribution for the current year is made at the same time as collection and assessment for the previous year is adjusted. The notice of assessment shows an amount of provisional tax and contribution for the current year. This provisional amount is an approximation to the tax and contribution which will be payable after the return of income for the current year has been lodged. It is ascertained by assuming that the income of the current year will be the same as that for the previous year (for which a return has already been lodged) but the rates for the current year are applied to the income and not the rates for the year in which it was derived. The assessment notice shows the provisional tax and contribution paid in the previous year as a credit against the tax and contribution assessed on the basis of the return for that year. On receipt of his assessment the taxpayer may elect to substitute his estimate of income for the current year and pay tax on the basis of this estimate. To protect the revenue, a penalty is imposed if the taxpayer elects to pay provisional tax on an estimate of income more than 20 per cent. lower than the income of the previous year and he underestimates his income by more than 20 per cent.

Employees with income of £100 or more from sources other than salaries and wages are required to pay provisional tax in respect of that income.

10. **Lodgment of Returns and Assessment of Tax.**—All persons with assessable income in excess of £104 are required to lodge returns by the 31st July each year (31st August for business incomes). Income Tax and Social Services Contribution payable is assessed, and assessment notices showing the amount payable are issued, during the year following the year of income (in most cases from September to June following the lodgment of the return). The approximate amount payable, however, has already been collected during the income year—from employees by deductions from wages and from non-employees by a provisional tax. The amount shown on the assessment notice is therefore adjusted against the amount already collected and any difference either collected or refunded.

11. **Company Income Taxes.**—(i) *General.* For taxation purposes, companies are divided into two main groups—public and private. A private company is defined as a company in which all the issued shares are held by not more than twenty persons or which is capable of being controlled by not more than seven persons, and which is not a company in which the public is substantially interested or a subsidiary of a public company. All other companies are regarded as public companies. Both public and private companies pay primary Income Tax and Social Services Contribution assessed on a taxable income ascertained by the same principles as for individuals.

Dividends received are assessable income, but resident companies receive a rebate at the average rate on the amount of dividends included in the taxable income. This rebate is not allowed to non-resident companies.

(ii) *Rates of Tax.* The rates of Primary Tax, in the case of public companies, and Primary and Additional Tax for private companies, for the financial years 1953-54 to 1956-57, are shown in the table below.

Super Tax and Undistributed Income Tax ceased to be levied on public companies in the 1951-52 financial year and Additional Income Tax and Social Services Contribution ceased in the 1953-54 financial year. For details see Official Year Book No. 39, p. 846 and No. 40, p. 743.

RATES OF TAX : COMPANIES, 1953-54 TO 1956-57 FINANCIAL YEARS.
(Pence per £.)

Type of Company.	Rate of Tax—				
	1953-54 to 1955-56.		1956-57.		1953-54 to 1956-57.
	Up to £5,000.	On Remainder of Taxable Income.	Up to £5,000.	On Remainder of Taxable Income.	
Private	48	72	60	84	120
Co-operative and Non-profit(a)	60	84	72	96	..
Life Assurance—					
Mutual	48	72	60	84	..
Other—					
(1) Mutual Income ..	48	72	60	84	..
(2) Other Income(b) ..	(c) 72	84	(c) 84	96	..
Other	(c) 72	84	(c) 84	96	..
Interest paid to a Non-resident ^d	84	84	96	96	..

(a) Non Profit companies with taxable incomes not exceeding £104 are exempted from tax and if the taxable income does not exceed £208 the tax may not exceed one-half (1953-54 to 1955-56) or eleventh-twentieths (1956-57) of the amount by which the taxable income exceeds £104. (b) The rate of 72d. (1953-54 to 1955-56) or 84d. (1956-57) is levied on the amount by which the £5,000 exceeds the mutual income. (c) For non-resident companies dividends included in this part of the taxable income are taxed at 60d. (1953-54 to 1955-56) and 72d. per £1 (1956-57). (A resident company is allowed a rebate of tax in respect of dividends received.) (d) If the non-resident is not a company, tax is paid only on income in excess of £104.

A private company incurs liability for additional tax on its undistributed income if it fails to make a sufficient distribution of income within a specified period after the close of the year of income. The tax is levied on the undistributed amount which, for practical purposes, is the taxable income less—

- (a) Primary income tax and social services contribution payable ;
- (b) Retention allowance (i.e., the proportion of the reduced distributable income which a company may retain without incurring liability for undistributed income tax) ; and
- (c) Certain dividends paid by the company.

For the financial years 1953-54 to 1956-57, the retention allowance is the following proportion of the reduced distributable income :—

- On first £1,000 or part, 50 per cent.
- On next £1,000 or part, 40 per cent.
- On next £1,000 or part, 35 per cent.
- On next £1,000 or part, 30 per cent.
- On balance, 25 per cent., and
- Ten per cent. of distributable income from property, except dividends from other private companies.

For the financial years 1953-54 to 1956-57, the reduced distributable income is calculated by deducting from the taxable income the primary tax payable and the amount of all property income included in taxable income. The additional tax imposed on undistributed income was imposed at a flat rate of 10s. in the £1 on the undistributed amount.

12. Yield of Income Taxes.—(i) *Collections from Income Taxes.* The following table shows the collections of taxes imposed on income for the years 1938-39 and 1950-51 to 1954-55 :—

INCOME TAX COLLECTIONS.
(£'000.)

Year.	Total.		
	Commonwealth.(a)	State.(b)	Total.
1938-39	11,883	29,796	41,679
1950-51	451,488	291	451,779
1951-52	551,142	155	551,297
1952-53	554,737	132	554,869
1953-54	528,181	92	528,273
1954-55	532,916	52	532,968

(a) Includes Social Services Contribution, War Time (Company) Tax, Super Tax, Undistributed Profits Tax and Wool Deduction. (b) Amounts shown for years other than 1938-39 are arrears of State Income Taxes.

(ii) *Commonwealth Income Tax Assessed.* The amounts of Commonwealth Taxes assessed on the income of recent years are shown in the following table. The amounts are shown under the year in which most of the assessments were made, i.e., the year following the income year. Income taxes assessed on income for past years and for the years shown after the close of the normal assessing period, are not included.

COMMONWEALTH INCOME TAXES ASSESSED.
(£'000.)

Tax.	1939-40.	1950-51.	1951-52. (a)	1952-53.	1953-54.	1954-55.
Individuals—						
Income Tax	7,423	b 98,178.	} 332,956	340,175	351,147	320,174
Social Services Contribution .. .. .	..	b 100,057				
Companies—						
Income Tax	8,041	74,770	156,163	151,246	119,348	158,887
Super Tax .. .. .	..	7,040	..	..	..	..
Undistributed Income Taxes(c)						
Private Companies	688	8,253	11,219	5,824	4,266	4,001
Non-Private Companies .. .. .	..	4,847	..	..	..	..
Total	16,152	293,145	500,338	497,245	474,761	483,062

(a) Income Tax and Social Services Contributions were consolidated in 1951-52. (b) Includes assessments issued to 30th June, 1954. (c) Approximate.

(iii) *Commonwealth Income Tax and Social Services Contribution, 1954-55 Assessment Year.* The following tables show, for the 1954-55 assessment year, details of the number of taxpayers, income, and net income tax and social services contribution assessed for individuals and resident and non-resident companies.

**COMMONWEALTH INCOME TAX AND SOCIAL SERVICES CONTRIBUTION :
1954-55 ASSESSMENT(a)—NUMBER OF TAXPAYERS, ACTUAL INCOME,
TAXABLE INCOME AND NET INCOME TAX AND SOCIAL SERVICES CON-
TRIBUTION ASSESSED—INDIVIDUALS.**

(Incomes derived in year 1953-54.)

Grade of Actual Income(b) and State or Territory of Assessment.	Number of Taxpayers.			Actual Income. Total.	Taxable Income.				Net Income Tax and Social Ser- vices Contri- bution As- sessed.	
	Males.	Fe- males.	Total.		Personal Exertion.		Pro- perty.	Total.		
					Salary and Wages.	Total.				
£	£	No.	No.	No.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
105- 200 ..	60,071	106,478	166,549	25,837	20,798	23,144	1,726	24,870	258	
201- 300 ..	88,436	131,802	220,238	55,468	43,542	49,094	2,821	51,915	1,181	
301- 400 ..	106,717	140,933	247,650	86,938	66,333	75,757	3,782	79,539	2,903	
401- 500 ..	122,888	158,568	281,456	127,263	94,966	108,903	4,831	113,734	5,614	
501- 600 ..	147,582	182,285	329,867	181,160	136,057	154,240	4,883	159,123	9,645	
601- 700 ..	242,025	97,283	339,308	221,359	155,378	177,300	4,831	182,131	12,540	
701- 800 ..	425,361	47,569	472,930	355,466	250,260	274,746	5,011	279,757	23,229	
801- 900 ..	405,212	22,989	428,201	362,936	250,039	275,062	5,013	280,075	23,229	
901- 1,000 ..	295,035	13,429	308,464	292,231	195,899	220,282	4,786	225,068	20,564	
1,001- 1,250 ..	365,028	17,700	382,728	421,095	257,501	312,568	10,053	322,621	33,422	
1,251- 1,500 ..	125,517	8,868	134,385	182,232	87,750	135,088	7,990	143,078	17,922	
1,501- 2,000 ..	91,265	9,865	101,130	172,527	54,395	129,094	12,122	141,216	21,930	
2,001- 3,000 ..	61,745	8,298	70,043	168,702	29,609	128,647	16,110	144,757	30,330	
3,001- 4,000 ..	24,381	3,381	27,762	95,414	12,340	74,101	10,590	84,691	22,690	
4,001- 5,000 ..	11,551	1,604	13,155	58,379	7,001	45,111	7,647	52,758	16,681	
5,001-10,000 ..	14,699	2,296	16,995	112,677	12,607	85,499	17,931	103,430	42,617	
10,001-15,000 ..	2,349	446	2,795	2,795	2,724	24,819	6,339	31,158	16,212	
15,001 and over ..	1,295	233	1,528	36,476	2,265	25,691	7,778	33,469	20,241	
<i>Total Residents</i>	<i>2,591,157</i>	<i>954,027</i>	<i>3,545,184</i>	<i>2,989,511</i>	<i>1,679,464</i>	<i>2,319,146</i>	<i>134,244</i>	<i>2,453,390</i>	<i>319,108</i>	
Central Office ..	8,172	4,459	12,631	38,900	5,238	23,251	11,595	34,846	13,826	
New South Wales	962,772	368,470	1,331,242	1,129,790	665,404	881,594	46,187	927,781	118,700	
Victoria ..	729,707	295,999	1,025,706	846,543	495,387	659,711	39,997	699,708	85,287	
Queensland ..	366,470	115,242	481,712	391,042	196,564	301,985	12,822	314,807	41,793	
South Australia ..	240,958	80,481	321,439	271,416	144,239	209,710	12,673	222,383	27,639	
Western Australia	184,606	58,127	242,733	207,868	109,806	162,732	7,479	170,211	22,628	
Tasmania ..	83,424	26,657	110,081	85,945	50,672	65,952	3,147	69,099	7,448	
Northern Territory	4,490	1,047	5,537	5,226	3,411	4,085	53	4,138	484	
Aust. Cap. Terr. ..	10,558	3,545	14,103	12,781	8,743	10,126	291	10,417	1,303	
<i>Total Residents</i>	<i>2,591,157</i>	<i>954,027</i>	<i>3,545,184</i>	<i>2,989,511</i>	<i>1,679,464</i>	<i>2,319,146</i>	<i>134,244</i>	<i>2,453,390</i>	<i>319,108</i>	
<i>Total Non-Resi- dents</i>	<i>1,913</i>	<i>2,040</i>	<i>3,953</i>	<i>4,781</i>	<i>189</i>	<i>1,143</i>	<i>3,342</i>	<i>4,485</i>	<i>1,066</i>	
<i>Grand Total</i> ..	<i>2,593,070</i>	<i>956,067</i>	<i>3,549,137</i>	<i>2,994,292</i>	<i>1,679,653</i>	<i>2,320,289</i>	<i>137,586</i>	<i>2,457,875</i>	<i>320,174</i>	

(a) Assessments in respect of 1953-54 incomes issued to 30th September, 1955. Assessments issued after that date are not included. (b) Actual income is the total income (less any expenses of earning the income) and includes any exempt income and any concessional deductions or expenses of a capital nature which are allowed as a deduction for the purpose of assessing taxable income.

COMMONWEALTH INCOME TAX AND SOCIAL SERVICES CONTRIBUTION,
1954-55 ASSESSMENT(a)—NUMBER OF TAXPAYERS, ACTUAL INCOME,
TAXABLE INCOME AND NET TAX ASSESSED—RESIDENT AND NON-
RESIDENT COMPANIES.

(Incomes derived in 1953-54.)

Grade of Taxable Income (b) and State or Territory of Assessment.	Number of Taxpayers.	Actual Income.	Taxable Income.	Net Tax Assessed.(c)
£ £	No.	£'000.	£'000.	£'000.
1- 5,000	17,916	32,813	26,043	5,278
5,001- 10,000	3,716	27,759	26,158	6,001
10,001- 20,000	2,590	38,062	36,474	9,433
20,001- 50,000	2,031	64,881	63,018	17,564
50,001-100,000	858	61,787	59,871	17,400
100,001-200,000	469	67,908	65,857	19,788
200,001-500,000	264	90,640	80,478	23,819
500,001 and over	134	213,937	191,176	59,604
<i>Total</i>	<i>27,978</i>	<i>597,787</i>	<i>549,075</i>	<i>158,887</i>
Central Office	2,943	309,545	271,317	82,697
New South Wales	11,096	122,019	118,294	32,570
Victoria	7,510	82,876	80,407	21,377
Queensland	1,936	28,884	27,553	8,143
South Australia	2,525	28,296	27,648	7,193
Western Australia	1,215	18,841	16,664	4,894
Tasmania	622	6,586	6,527	1,897
Northern Territory	28	164	137	31
Australian Capital Territory	103	576	528	85
<i>Total</i>	<i>27,978</i>	<i>597,787</i>	<i>549,075</i>	<i>158,887</i>

(a) Assessments in respect of 1953-54 incomes issued to 31st December, 1955. Assessments issued after that date are not included.

(b) Taxable income is the income remaining after deducting from assessable income all allowable deductions.

(c) Excludes additional tax levied on the undistributed income of Private Companies £4,001,000.

(iv) *Commonwealth Income Tax on Residents—Grades of Income.*—Individual income taxes assessed on residents are distributed according to grades of actual income in the following table. The year shown in each case refers to the year in which assessment was made, i.e., the year following the income year. The figures relate only to assessments made on the income of the previous year during the normal assessing period. Assessments issued after the normal assessing period are not included.

COMMONWEALTH INCOME TAXES ON RESIDENT INDIVIDUALS IN GRADES OF ACTUAL INCOME.

Grade of Actual Income.(b)	1939-40.		1951-52.(a)		1952-53.(a)		1953-54.(a)		1954-55.(a)	
	No. of Tax-payers.	Tax.	No. of Tax-payers.	Tax.	No. of Tax-payers.	Tax.	No. of Tax-payers.	Tax.	No. of Tax-payers.	Tax.
£ £		£'000.		£'000.		£'000.		£'000.		£'000.
105- 200			266,134	517	200,711	434	171,542	333	166,549	258
201- 300	(c) 47,732	27	351,062	2,282	270,729	1,985	236,185	1,545	220,238	1,181
301- 400	104,210	126	412,396	5,778	307,080	4,860	267,598	3,790	247,650	2,903
401- 500	68,168	182	440,555	9,176	363,271	9,569	309,511	7,403	281,456	5,614
501- 600	38,939	197	551,803	15,008	371,461	13,350	338,499	11,574	329,867	9,645
601- 700	} d 29,912	294	427,288	15,406	486,388	22,031	386,310	16,830	339,308	12,540
701- 800			262,954	12,398	434,711	24,955	512,708	27,291	472,930	21,129
801- 900	} e 23,070	460	145,231	8,721	306,206	21,846	387,149	25,140	428,201	23,229
901- 1,000			83,028	6,340	196,872	17,093	248,599	19,636	308,464	20,564
1,001- 1,250	10,922	372	101,209	10,921	214,482	25,203	290,659	30,365	382,728	33,422
1,251- 1,500	6,281	306	48,123	7,823	80,306	14,657	106,361	16,915	134,385	17,922
1,501- 2,000	7,987	691	49,840	12,618	72,535	21,019	86,565	22,042	101,130	21,930
2,001- 3,000	4,549	686	47,681	22,152	56,460	31,511	65,865	32,713	70,043	30,330
3,001- 4,000	2,045	615	24,374	19,662	23,868	24,598	27,722	25,628	27,762	22,690
4,001- 5,000	984	484	14,102	17,761	12,018	19,168	13,877	19,983	13,155	16,681
5,001-10,000	1,298	1,321	23,366	66,729	15,086	47,391	17,527	49,956	16,995	42,617
10,001-15,000	205	504	4,917	33,056	2,354	17,027	2,624	17,022	2,795	16,212
15,001-30,000	(f) 92	393	3,124	38,841	1,091	14,357	1,302	15,094	1,286	13,716
30,001-50,000	(g) 39	316	612	15,255	164	4,196	200	4,383	185	3,993
50,001 and over	8	141	216	11,263	68	3,680	63	2,412	57	2,532
Total ..	346,441	7,115	3,260,015	331,707	3,415,861	338,930	3,470,866	350,055	3,545,184	319,108

(a) Includes Social Services Contribution. (b) Actual income is the total income (less any expenses of earning the income) and includes any exempt income and any concessional deductions or expenses of a capital nature which are allowed as a deduction for the purpose of assessing taxable income. (c) Grade £251-£300. (d) Grade £601-£750. (e) Grade £751-£1,000. (f) Grade £15,001-£25,000. (g) Grade £25,001-£50,000.

CHAPTER XXII.

AGRICULTURAL PRODUCTION.

NOTE.—Values of Australian oversea trade shown throughout this chapter are expressed as £A. f.o.b. Port of Shipment, except where otherwise indicated.

§ 1. Introductory.

Chapter XXI, Agricultural Production, of Official Year Book No. 42, the latest statistics included were, in general, for the year 1953-54. In this issue, it has been possible in most cases, to provide details for the year 1955-56. Full details for 1954-55 have not been included owing to limitations of space, but these are available in the bulletin *Primary Industry Parts I and II* for 1954-55. Beginning with 1954-55, detailed information on Northern Territory agriculture has been available and, where applicable, this has been included in the tables and text of this chapter.

In general, statistics in this chapter relating to agricultural production are derived from "census" returns supplied by approximately 250,000 farmers who utilize one acre or more of land for agricultural or pastoral purposes. The returns are collected by the Statisticians of each State and by the Commonwealth Statistician in respect of the Northern Territory and the Australian Capital Territory. The returns are collected on a substantially uniform basis in all States at 31st March, each year, and relate to areas sown and crops produced in the previous twelve months. Where harvests are not completed by March (e.g. potatoes) provision is made in some States for a special collection after the harvest is completed and in others for the inclusion of the total estimated yield expected from the complete harvest. In cases where additional data are available from marketing authorities or other sources, these are used in conjunction with the "census" returns. The statistics published in this Chapter are therefore shown in agricultural years. For most purposes there will be little error involved in considering them to apply to years ending on 30th June.

In 1955-56, the lists of land holdings used in the collection of agricultural and pastoral statistics in New South Wales were reconciled with lists of ratable land of one acre or more in extent recorded by country shires for rating purposes. After elimination of ratable lands not used for agricultural and pastoral purposes, this reconciliation led to the addition of 4,784 land holdings, totalling 3,131,462 acres, to the annual collection. As a high proportion of the additional holdings from which returns were obtained in 1955-56 were used for grazing, either full-time or part-time, and were on the whole lightly stocked, the only statistics appreciably affected were number and area of rural holdings, and persons engaged on rural holdings. For these statistics, the extent of the increase due to the inclusion of the additional land holdings is shown in § 28, Number and Area of Rural Holdings and Employment thereon. As regards other items, continuity of the series was not materially affected by the inclusion of the additional land holdings.

§ 2. Progress of Agriculture.

1. **Early Records.**—In an "Account of Live Stock and Ground under Crop in New South Wales, 19th August, 1797", Governor Hunter gives the acreage of crops as follows:—Wheat, 3,361 acres; maize, 1,527 acres; barley, 26 acres; potatoes, 11 acres; and vines 8 acres.

The following details of crops were collected in 1808:—Wheat, 6,874 acres; maize, 3,389 acres; barley, 544 acres; oats, 92 acres; peas and beans, 100 acres; potatoes, 301 acres; turnips, 13 acres; orchards, 546 acres; and flax and hemp, 37 acres.

A brief reference to the attempts at cultivation by the first settlers in New South Wales and to the discovery of suitable agricultural land on the Parramatta and Hawkesbury Rivers prior to the year 1813 and west of the Blue Mountains thereafter is contained in early issues of the Official Year Book. (*See No. 22, p. 670.*)

By the year 1850, the area of crops had increased to 491,000 acres, of which 198,000 acres were cultivated in what is now the State of New South Wales, and 169,000 acres in Tasmania. At the end of 1850, the area under cultivation in Victoria, which was then the Port Phillip District of New South Wales, was 52,190 acres.

The gold discoveries of 1851 and subsequent years had at first a very disturbing effect on agricultural progress, the area of crops declining from 491,000 acres in 1850 to 458,000

acres in 1854. The demand for agricultural products occasioned by the large influx of population was, however, soon reflected in the increased area cultivated, for at the end of 1858 the land under crop in Australia exceeded a million acres.

2. **Progress of Cultivation.**—The following table shows the area of crops in each of the States and Territories of Australia at decennial intervals since 1860–61 and during each of the eleven seasons ended 1955–56, and on page 831 there is a graph showing the area of crops in Australia from 1860 onward.

AREA OF CROPS.

(’000 Acres.)

Season.	N.S.W.	Vic.	Q’land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1860–61 ..	246	387	4	359	25	153	..	..	1,174
1870–71 ..	385	693	52	802	55	157	..	..	2,144
1880–81 ..	606	1,549	114	2,087	64	141	..	..	4,561
1890–91 ..	853	2,032	225	2,093	70	157	..	..	5,430
1900–01 ..	2,447	3,114	458	2,370	201	224	..	..	8,814
1910–11 ..	3,386	3,952	667	2,747	855	287	..	..	11,894
1920–21 ..	4,465	4,490	780	3,231	1,805	297	..	2	15,070
1930–31 ..	6,811	6,716	1,144	5,426	4,792	268	2	5	25,164
1940–41 ..	6,375	4,467	1,734	4,255	4,027	254	..	6	21,118
1945–46 ..	6,087	5,327	1,822	3,824	2,945	412	(a)	9	20,426
1946–47 ..	6,512	5,103	1,617	3,885	3,590	361	(a)	9	21,077
1947–48 ..	7,168	5,023	1,849	3,852	4,026	342	(a)	11	22,271
1948–49 ..	5,711	4,645	1,953	3,757	4,215	345	(a)	10	20,636
1949–50 ..	5,670	4,480	2,057	3,617	4,399	368	(a)	10	20,601
1950–51 ..	4,761	4,351	2,077	3,676	4,650	290	(a)	6	19,811
1951–52 ..	4,704	4,271	2,022	3,696	3,693	291	(a)	6	19,683
1952–53 ..	4,837	4,286	2,422	3,581	4,816	303	(a)	6	20,251
1953–54 ..	5,425	4,480	2,361	3,778	4,633	330	(a)	6	21,013
1954–55 ..	5,394	4,394	2,593	3,895	5,112	301	1	5	21,695
1955–56 ..	5,660	4,542	2,604	3,972	5,342	326	1	7	22,454

(a) Not available.

The progress of agriculture was practically uninterrupted from 1860–61 to 1915–16, when, as the result of a special effort to raise wheat during the 1914–18 War, 18.5 million acres were cultivated in Australia. Four years later the area of crops declined to 13.3 million acres owing to the accumulation of wheat stocks consequent upon the difficulty of securing freight space during the war years. After the termination of hostilities, the area again began to expand and rose steadily to the record area of 25.2 million acres in 1930–31. Thereafter, the slump in wheat prices seriously depressed the agricultural industry and the area of crops receded to just under 20 million acres in 1935–36.

By 1938–39, the industry had recovered from the depression and the total area under cultivation reached the high level of 23.5 million acres. Thereafter, as a result of war-time man-power shortages and shipping difficulties, the area declined to less than 16 million acres in 1943–44. After 1943–44, production gradually increased again until, in 1947–48, 22.3 million acres were sown to crops. This upward trend was reversed after 1948–49, largely as a result of the transfer of many primary producers from agricultural to pastoral production following on high prices for wool. In recent years, the area sown has again increased from 19.7 million acres in 1951–52 to 21.7 million acres in 1954–55 and 22.5 million acres in 1955–56. As the area under wheat in Australia constitutes a large proportion of the total area cropped (56 per cent. during the ten years ended 1954–55) fluctuations in the latter follow broadly the same pattern as changes in wheat areas.

3. **Area under Sown Pastures.**—In all the States, there are considerable areas of grasses mainly sown on land from which scrub has been cleared or on land which it is desired to rest from cultivation. These areas, which are not included in “area of crops”, have expanded from about 5.3 million acres in 1929–30 to about 28.4 million acres in 1955–56.

4. **Australian Agricultural Council.**—Arising out of a conference of Commonwealth and State Ministers on agricultural and marketing matters, held at Canberra in December, 1934, a permanent organization known as the Australian Agricultural Council was formed. The Council consists of the Commonwealth Ministers for Primary Industry and for Territories and the State Ministers of Agriculture, with power to co-opt the services of other Commonwealth and State Ministers as required. The principal functions of the Council are:—(i) the promotion of the welfare and development of agricultural industries generally; (ii) exchange of information on agricultural production and marketing; (iii) the improvement

of the quality of agricultural products and the maintenance of high grade standards; (iv) to ensure, as far as possible, balance between production and available markets; and (v) organized marketing, etc.

In addition, a permanent Standing Committee on Agriculture was formed to advise the Council; to secure co-operation and co-ordination in agricultural research; to advise State and Commonwealth Governments on the initiation and development of agricultural research; and to secure co-operation between all Governments in respect of quarantine measures against pests and diseases of plants and animals.

§ 3. Distribution, Production and Value of Crops.

1. Area of Crops in States and Territories.—The following tables show the areas in the several States, the Northern Territory and the Australian Capital Territory of each of the crops for the seasons 1954-55 and 1955-56.

AREA OF CROPS, 1954-55.

(Acres.)

Crop.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Cereals for Grain—									
Barley—									
2 Row	26,382	261,206	72,383	969,138	55,300	6,909	..	..	1,391,318
6 Row	10,484	19,389	14,914	50,535	204,388	347	..	..	300,057
Maize	50,617	4,379	114,673	2	8	8	..	..	169,687
Oats	657,292	644,444	36,432	339,640	873,588	22,621	..	208	2,574,225
Panicum, Millet and Setaria .. .. .	..	1,231	45,842	..	..	..	..	..	47,073
Rice	38,688	..	2	..	..	..	..	..	38,690
Rye	2,164	21,880	308	37,891	6,345	355	..	..	68,943
Sorghum	13,069	..	202,532	..	30	..	57	..	215,688
Wheat	2,918,670	2,390,173	687,402	1,689,103	2,979,151	7,302	..	782	10,672,583
Hay	523,776	739,099	76,049	256,525	289,329	96,496	..	3,101	1,984,375
Green Fodder	934,395 (a)	77,135	649,607 (b)	360,359	639,086	70,945	32	988	2,732,547
Other Stock Fodder	7,462	16,803	11,845	38,319	6,027	27,522	1	..	107,979
Grass Seed—									
Lucerne	8,827	(c)	1,061	25,328	16	3	..	.. (d)	35,235
Clover	8,616	2,787	..	13,399	9,479	1,171	..	25	35,477
Other	3,613	9,143	6,836	6,613	623	1,966	..	20	28,814
Industrial Crops—									
Broom Millet	1,315	78	79	..	..	..	..	..	1,472
Canary Seed	340	..	23,294	..	..	..	..	..	23,634
Cotton .. .. .	..	..	8,377	..	..	..	..	..	8,377
Flax—									
For Fibre .. .. .	..	5,878	..	1,314	464	..	..	..	7,656
For Linseed	1,826	..	15,569	171	..	8	..	..	19,403
Hops .. .. .	..	384	..	..	(e)	1,367	..	.. (d)	1,751
Peanuts	769	..	37,971	..	(e)	..	780	.. (d)	39,520
Sugar-cane—									
For Crushing	6,566	..	367,640	..	..	..	..	..	374,206
Other (excluding fodder)	8,552	..	119,101	..	..	..	..	..	127,653
Sunflower Seed	119	77	2,886	..	..	..	10	..	3,092
Tobacco	635	2,471	5,135	..	1,418	..	2	..	9,661
Other	78	222	374	..	..	591	..	..	1,265
Vegetables for Human Consumption—									
Onions	285	3,970	2,807	512	390	21	..	9	7,994
Potatoes	13,897	44,075	9,621	6,037	7,563	26,209	5	71	107,478
Other Vegetables	44,599	31,225	30,893	9,030	7,490	12,196	78	72	135,583
Vineyards—									
Bearing	16,485	42,929	2,607	57,106	8,034	..	..	..	127,161
Not Bearing	1,720	2,828	289	3,506	981	..	..	..	9,324
Orchards and other Fruit Gardens—									
Bearing	74,163	52,468	29,219	23,868	18,937	22,349	39	104	221,147
Not Bearing	16,961	13,623	13,298	6,639	2,538	1,338	63	18	54,478
Nurseries and Cut Flowers	1,005	3,138	256	101	216	151	..	11	4,878
All other Crops	642	1,587	3,808	100	160	766	2	4	7,069
Total Area	5,394,012	4,394,481	2,593,110	3,895,236	5,111,561	300,641	1,069	5,413	21,695,493

(a) Excludes pasture land sown to lucerne and oats for grazing. (b) Excludes pasture land sown to lucerne for grazing. (c) Not available. Included in "All other Crops". (d) Incomplete. See footnotes to individual States. (e) Not available for publication. Included in "All other Crops".

AREA OF CROPS, 1955-56.

(Acres.)

Crop.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Cereals for Grain—									
Barley—									
2 Row	37,072	290,716	124,829	980,962	70,300	5,939	..	6	1,509,824
6 Row	17,116	18,395	20,697	60,844	266,666	381	..	..	384,099
Maize	55,678	3,333	108,146	6	6	65	3	2	167,441
Oats	902,192	871,068	35,638	425,026	1,090,901	28,675	..	313	3,353,813
Panicum, Millet and Setaria	33	894	49,508	..	..	..	..	..	50,435
Rice	41,182	..	..	..	..	..	..	..	41,182
Rye	3,447	20,043	797	37,418	6,662	798	..	..	69,165
Sorghum	23,697	..	155,527	24	..	..	50	..	179,298
Wheat	2,937,281	2,141,410	581,732	1,609,029	2,889,585	6,224	..	739	10,166,000
Hay	561,472	879,288	63,104	325,673	269,439	137,157	1	4,727	2,240,861
Green Fodder	826,789	(a) 75,815	689,469	(b) 334,957	666,398	54,401	..	970	2,648,799
Other Stock Fodder	4,990	16,996	10,765	38,520	5,418	24,789	..	5	101,483
Grass Seed—									
Lucerne	19,131	(c)	763	26,357	16	47	..	..	(d) 46,314
Clover	18,622	9,988	..	14,839	23,876	1,183	..	..	68,508
Other	7,211	17,147	7,041	6,530	3,878	4,728	..	95	46,630
Industrial Crops—									
Broom Millet	2,649	68	212	..	..	..	..	..	2,929
Canary Seed	840	..	73,469	6	..	..	..	..	74,315
Cotton .. .. .	..	..	13,290	..	..	..	..	..	13,290
Flax—									
For Fibre .. .. .	..	2,550	..	526	1,594	..	..	..	4,670
For Linseed	1,817	580	45,202	128	..	..	..	..	47,727
Hops .. .. .	..	388	..	..	(e)	1,377	..	..	(d) 1,765
Peanuts	414	..	31,493	..	(e)	..	544	..	(d) 32,451
Sugar-cane—									
For Crushing	7,522	..	365,252	..	..	..	..	..	372,774
Other (excluding fodder)	9,398	..	116,893	..	..	..	..	..	126,291
Sunflower Seed	95	93	6,910	..	..	..	5	..	7,103
Tobacco	893	2,876	6,301	..	1,235	..	1	..	11,306
Other	69	301	339	45	..	666	..	..	1,420
Vegetables for Human Consumption—									
Onions	318	3,337	2,480	524	321	22	..	8	7,010
Potatoes	13,270	37,020	10,202	5,373	6,826	20,842	..	74	93,607
Other Vegetables	53,330	34,893	33,760	11,071	7,852	14,219	65	108	155,298
Vineyards—									
Bearing	16,626	42,295	2,614	57,328	8,269	..	..	..	127,132
Not Bearing	1,473	2,522	302	2,534	838	..	..	..	7,669
Orchards and other Fruit Gardens—									
Bearing	77,289	50,913	29,290	24,900	19,118	22,369	50	103	224,032
Not Bearing	16,193	14,301	11,963	8,098	2,825	1,426	54	15	54,875
Nurseries and Cut									
Flowers	935	2,670	226	183	266	151	..	11	4,442
All other Crops	957	1,994	5,446	736	300	876	16	7	10,332
Total Area	5,660,001	4,542,096	2,603,660	3,971,613	5,342,613	326,335	789	7,183	22,454,290

(a) Excludes pasture land sown to lucerne and oats for grazing. (b) Excludes pasture land sown to lucerne for grazing.
(c) Not available. Included in "All other Crops". (d) Incomplete. See footnotes to individual States.
(e) Not available for publication. Included in "All other Crops".

2. **Relative Areas of Crops in States and Territories.**—The proportion of each of the major crops cultivated in the various States and Territories to the total area of crops for the season 1955-56 is shown in the next table. In four of the States, namely, New South Wales, Victoria, South Australia and Western Australia, wheat-growing for grain is by far the most extensive crop. In Queensland the most extensive crops are green fodder, wheat, and sugar-cane, and in Tasmania, hay, green fodder, and oats.

As pointed out previously, wheat is the main crop in Australia, the area thereof, for grain only, representing 45 per cent. of the total area of crops in 1955-56.

RELATIVE AREAS OF CROPS, 1955-56.

(Per cent.)

Crop.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Wheat (Grain) ..	51.9	47.1	22.3	40.5	54.1	1.9	..	10.3	45.3
Green Fodder(a) ..	14.6	1.7	26.5	8.4	12.5	16.7	..	13.5	11.8
Oats (Grain) ..	15.9	19.2	1.4	10.7	20.4	8.8	..	4.4	14.9
Hay ..	9.9	19.3	2.4	8.2	5.0	42.0	0.1	65.8	10.0
Barley (Grain) ..	1.0	6.8	5.6	26.2	6.3	1.9	..	0.1	8.4
Sugar-cane, Crushed ..	0.1	..	14.0	..	..	..	..	..	1.7
Total Orchards and Fruit Gardens ..	1.7	1.4	1.6	0.8	0.4	7.3	13.2	1.6	1.2
Sorghum ..	0.4	..	6.0	..	..	..	6.3	..	0.8
Maize (Grain) ..	1.0	0.1	4.1	..	..	..	0.4	..	0.8
Total Vineyards ..	0.3	1.0	0.1	1.5	0.2	..	..	..	0.6
Potatoes ..	0.2	0.8	0.4	0.2	0.1	6.4	..	1.0	0.4
All other ..	3.0	2.6	15.6	3.5	1.0	15.0	80.0	3.3	4.1
Total ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Includes green forage except in Victoria and in South Australia where pasture land sown to lucerne is excluded.

3. Area of Principal Crops in Australia.—The area of the principal crops during each of the five seasons ended 1955-56, compared with the average for the decennium ended 1938-39 is shown hereunder:—

AREA OF PRINCIPAL CROPS: AUSTRALIA.

('000 Acres.)

Crop.	Average, ten years ended 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Cereals for Grain—						
Barley, 2 Row ..	428	965	1,123	1,482	1,391	1,510
Maize ..	295	170	174	179	170	168
Oats ..	1,393	2,365	2,764	2,137	2,574	3,354
Rice ..	22	36	35	39	39	41
Wheat ..	14,345	10,384	10,209	10,751	10,673	10,166
Hay ..	2,994	1,549	1,761	1,935	1,984	2,241
Green Fodder ..	1,272	2,403	2,196	2,415	2,733	2,649
Vegetables for Human Consumption—						
Onions ..	8	9	8	7	8	7
Potatoes ..	130	118	135	128	107	94
Other vegetables for human consumption ..	(a) 83	162	152	131	136	155
Industrial Crops—						
Cotton ..	43	4	6	9	8	13
Hops ..	1	2	2	2	2	2
Sugar-cane ..	332	403	434	482	502	499
Tobacco ..	12	8	8	8	10	11
Vineyards ..	118	136	137	138	136	135
Orchards ..	276	271	271	273	276	279
All other Crops ..	206	698	836	897	946	1,130
Total ..	21,958	19,683	20,251	21,013	21,695	22,454

(a) Incomplete. Market gardens and pulse only.

4. Weights and Measures.—Details of the weights and measures used in recording production of agricultural commodities appear in the introduction to the bulletin *Primary Industries—Part I.—Rural Industries*.

5. Production of Crops in States and Territories.—The following tables show production of crops in the various States and Territories for the seasons 1954-55 and 1955-56.

PRODUCTION OF CROPS.

Crop.	Unit of Quantity.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1954-55.										
Cereals for Grain—										
Barley—										
2 Row	'000 bus.	355	4,609	2,139	17,703	626	190	..	..	25,622
6 Row	" "	146	337	434	673	2,179	9	..	..	3,778
Maize	" "	1,767	229	3,080	..	..	..	..	..	5,076
Oats	" "	7,667	10,021	597	4,508	9,585	452	..	4	32,834
Panicum, Millet and Setaria	" "	..	28	803	..	..	..	..	..	831
Rice	" "	5,080	..	..	(a)	..	..	..	(b)	5,080
Rye	" "	13	141	5	179	39	6	..	..	383
Sorghum	" "	272	..	5,083	..	..	..	1	..	5,356
Wheat	" "	37,718	48,484	16,478	31,463	34,300	159	..	15	168,617
Hay	" tons	680	1,208	171	330	305	158	..	4	2,856
Grass Seed—										
Lucerne	cwt.	4,304	..	1,055	14,693	4	1	..	..	20,057
Clover	" "	15,494	5,518	..	21,028	17,224	956	..	11	60,231
Other	" "	4,662	13,532	25,415	7,706	2,575	2,535	..	5	56,430
Industrial Crops—										
Broom Millet—										
Fibre	" "	7,691	372	336	..	..	..	..	..	8,399
Grain	bus.	7,584	198	..	..	..	..	..	..	7,782
Canary Seed	" "	1,800	..	377,706	..	..	..	..	..	379,506
Cotton, Unginned	'000 lb.	..	..	3,597	..	..	..	..	..	3,597
Flax—										
Straw	ton	..	7,799	..	1,888	500	..	..	..	10,187
Linseed	" "	355	358	4,705	28	..	2	..	..	5,448
Hops (Dry Weight)	cwt.	..	7,440	..	(a)	26,635	..	..	(b)	34,075
Peanuts	" "	6,916	..	280,019	..	..	..	2,708	..	289,643
Sugar-cane for Crushing	'000 tons	222	..	9,865	..	..	..	..	..	10,087
Sunflower Seed	cwt.	1,066	410	12,352	..	..	..	43	..	13,871
Tobacco, Dried Leaf	'000 lb.	618	868	4,332	..	1,003	..	1	..	6,822
Vegetables for Human Consumption—										
Onions	ton	1,340	26,091	12,243	4,790	4,322	107	..	71	48,964
Potatoes	" "	47,700	206,577	30,651	38,362	43,565	101,000	4	330	468,189
Vineyards—										
Grapes—										
For Drying	" "	34,144	216,344	..	55,794	9,300	..	..	..	315,582
Table	" "	3,627	4,838	2,878	1,104	2,380	..	..	..	14,827
Wine	" "	13,544	8,290	126	103,652	3,562	..	..	..	129,174
1955-56.										
Cereals for Grain—										
Barley—										
2 Row	'000 bus.	764	6,488	3,648	23,397	994	178	..	..	35,469
6 Row	" "	356	389	568	1,201	3,659	13	..	..	6,186
Maize	" "	1,868	176	2,710	..	..	1	..	..	4,755
Oats	" "	16,537	14,858	743	7,280	16,516	548	..	5	56,487
Panicum, Millet and Setaria	" "	..	6	747	..	..	..	..	..	753
Rice	" "	4,725	..	..	..	(a)	..	..	(b)	4,725
Rye	" "	34	111	10	193	54	14	..	..	416
Sorghum	" "	663	..	3,960	..	..	..	1	..	4,624
Wheat	" "	57,149	41,083	14,922	28,891	53,250	129	..	19	195,443
Hay	" tons	846	1,526	137	461	384	261	..	10	3,625
Grass Seed—										
Lucerne	cwt.	7,050	..	1,707	13,445	3	54	..	..	22,259
Clover	" "	37,467	15,370	..	21,691	52,603	988	..	..	128,119
Other	" "	4,527	26,825	20,627	8,586	9,945	6,921	..	17	77,448
Industrial Crops—										
Broom Millet—										
Fibre	" "	12,502	374	1,070	..	..	..	..	..	13,946
Grain	bus.	8,943	336	..	..	..	..	..	..	9,279
Canary Seed	" "	11,279	..	894,633	60	..	..	..	..	905,972
Cotton, Unginned	'000 lb.	..	..	5,359	..	..	..	..	..	5,359
Flax—										
Straw	ton	..	4,637	..	1,150	1,875	..	..	..	7,662
Linseed	" "	400	94	12,738	15	..	..	..	..	13,247
Hops (Dry Weight)	cwt.	..	6,084	..	(a)	28,290	..	..	(b)	34,374
Peanuts	" "	3,480	..	172,663	..	..	..	787	..	176,930
Sugar-cane for Crushing	'000 tons	285	..	8,616	..	..	..	..	..	8,901
Sunflower Seed	cwt.	655	274	33,501	..	..	..	37	..	34,467
Tobacco, Dried Leaf	'000 lb.	547	1,135	3,702	..	721	..	..	..	6,105
Vegetables for Human Consumption—										
Onions	ton	1,759	20,299	9,157	4,911	3,547	140	..	42	39,855
Potatoes	" "	44,162	163,239	37,561	36,460	42,079	77,930	..	439	401,870
Vineyards—										
Grapes—										
For Drying	" "	21,120	143,195	..	64,596	10,568	..	..	..	239,479
Table	" "	3,327	3,633	2,267	942	2,609	..	..	..	12,778
Wine	" "	14,371	7,544	143	100,446	4,141	..	..	..	126,645

(a) Not available for publication.

(b) Incomplete.

6. **Production of Principal Crops in Australia.**—The following table shows the production of the principal crops for the five years ended 1955-56, and the average for the decennium ended 1938-39:—

PRODUCTION OF PRINCIPAL CROPS : AUSTRALIA.

Crop.	Unit of Quantity.	Average, ten years ended 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Cereals for Grain—							
Barley, 2 Row ..	'000 bus.	7,480	19,476	29,633	35,923	25,622	35,469
Maize	" "	7,228	4,018	4,967	5,079	5,076	4,755
Oats	" "	16,437	34,506	43,623	32,961	32,834	56,487
Rice	" "	2,005	3,048	3,964	4,069	5,080	4,725
Wheat	" "	169,398	159,725	195,208	197,960	168,617	195,443
Hay	" tons	3,490	2,345	2,765	3,049	2,856	3,625
Vegetables for Human Consumption—							
Onions	" "	43	53	48	46	49	40
Potatoes	" "	351	509	431	548	468	402
Industrial Crops—							
Cotton, Unginned ..	" lb.	15,667	1,406	2,184	5,132	3,597	5,359
Hops, (dry weight) ..	cwt.	18,989	(a)17,914	(a)32,116	(a)24,666	(a)34,075	(a)34,374
Sugar-cane for Crushing	'000 tons	4,588	5,327	6,967	9,014	10,087	8,901
Tobacco (Dried leaf) ..	" lb.	5,113	7,553	6,485	7,669	6,822	6,105
Vineyards—							
Grapes	" tons	381	475	560	529	460	379
Wine made(b)	" gals.	16,104	35,255	30,023	31,666	23,964	22,896
Dried Vine Fruits ..	" tons	70	72	101	90	81	59

(a) Excludes Western Australia. (b) Net factory and farm production of beverage and distillation wine excluding the liquid gallonage of spirits added in wine fortifying.

7. **Yield per Acre of Principal Crops in Australia.**—The following table shows the yield per acre for Australia of the principal crops for the five years ended 1955-56 and the average for the decennium ended 1938-39.

YIELD PER ACRE OF PRINCIPAL CROPS: AUSTRALIA.

Crop.	Unit of Quantity.	Average, ten years ended 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Cereals for Grain—							
Barley, 2 Row ..	bushel.	17.5	20.2	26.4	24.2	18.4	23.5
Maize	" "	24.5	23.7	28.5	28.4	29.9	28.4
Oats	" "	11.8	14.6	15.8	15.4	12.8	16.8
Rice	" "	93.0	85.5	114.8	104.6	131.3	114.7
Wheat	" "	11.8	15.4	19.1	18.4	15.8	19.2
Hay	ton	1.17	1.51	1.57	1.58	1.44	1.62
Vegetables for Human Consumption—							
Onions	" "	5.54	6.13	5.90	6.29	6.13	5.69
Potatoes	" "	2.71	4.31	3.18	4.27	4.36	4.29
Industrial Crops—							
Cotton, Unginned ..	lb.	366	314	372	572	429	403
Hops (dry weight)(a) ..	cwt.	17.88	10.79	19.31	15.18	19.87	20.22
Sugar-cane for Crushing(a)	ton	19.24	18.91	24.89	26.47	26.95	23.88
Tobacco (Dried leaf) ..	lb.	463	921	819	930	706	540
Vineyards—							
Grapes(a)	ton	3.45	3.78	4.49	4.15	3.68	2.98

(a) Per acre of productive crops.

8. **Gross Value of Principal Crops in Australia.**—The following table shows the gross value of principal crops at the principal markets in Australia for the five years ended 1954-55 and the average for the decennium ended 1938-39.

GROSS VALUE OF PRINCIPAL CROPS: AUSTRALIA.

(£'000.)

Crop.	Average ten years ended 1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Cereals for Grain—						
Barley	1,214	13,339	17,739	27,512	21,011	18,257
Maize	1,537	3,048	3,809	4,039	3,868	3,615
Oats	1,937	10,293	19,005	15,301	12,345	14,066
Rice	392	2,171	2,108	3,338	3,198	3,430
Wheat(a)	30,125	124,740	120,734	154,656	138,135	107,528
Hay	11,413	17,931	26,193	29,249	33,230	30,878
Green Fodder	2,775	(b) 5,001	(b) 6,934	(b) 6,209	(b) 7,720	(b) 6,436
Vegetables for Human Consumption—						
Onions	245	1,086	2,019	1,106	1,662	1,586
Potatoes	2,314	10,265	15,982	14,706	12,075	13,449
Other vegetables for human consumption	(c) 2,203	20,200	27,123	24,543	22,915	23,385
Industrial Crops—						
Cotton, Unginned	(a) 298	54	127	107	316	208
Hops	157	(b) 620	(b) 517	(b) 1,021	(b) 802	(b) 1,106
Sugar-cane	7,895	19,046	19,635	30,495	39,619	39,706
Tobacco (Dried leaf)	474	1,622	2,379	2,578	3,816	3,823
Vineyards	3,907	10,125	14,084	15,751	13,488	12,293
Orchards	(a) 7,953	30,656	43,838	42,032	46,415	46,568
All other Crops	2,651	8,441	10,098	10,465	11,520	13,301
Total Gross Value	77,490	278,638	332,324	383,108	372,135	339,635

(a) Includes Government assistance. (b) Incomplete, excludes Western Australia. (c) Incomplete. Market gardens and pulse only.

9. Value of Production and Indexes of Price and Quantum of Production.—(i) *Gross and Net Values*, 1954-55. Values of agricultural production for each State are shown for 1954-55 in the following table. A more detailed reference to the value of production of agriculture and other industries in Australia as well as a brief explanation of the terms used will be found in Chapter XXX.—Miscellaneous.

In computing the net value of production, no deduction has been made for the cost of maintenance of farm buildings and fences, nor for the depreciation of farm plant; consequently, the figures stated are inflated to that extent.

GROSS, FARM AND NET VALUES OF AGRICULTURAL PRODUCTION, 1954-55.

(£'000.)

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Value of Materials Used in Process of Production.		Net value of Production. (a)
				Seed used and Fodder for Farm Stock.	Value of other Materials used.	
New South Wales	70,588	13,726	56,862	5,267	(b) 2,884	48,711
Victoria	84,305	14,005	70,300	4,290	4,494	61,516
Queensland	77,931	8,753	69,178	3,021	6,501	59,656
South Australia	52,457	7,287	45,170	2,684	3,306	39,180
Western Australia	38,582	5,470	33,112	2,471	7,158	23,483
Tasmania	15,607	2,773	12,834	1,082	(b) 512	11,240
Northern Territory	54	2	52	3	4	45
Australian Capital Territory	111	16	95	2	5	88
Australia	339,635	52,032	287,603	18,820	24,864	243,919

(a) No deduction has been made for depreciation and maintenance. (b) No allowance made for costs of power, power kerosene, petrol and other oils.

(ii) *Net Values, 1929-30 to 1954-55.* In the following table, the net value of agricultural production and the net value per head of population are shown by States for the years 1950-51 to 1954-55 in comparison with the averages for the decennial period ended 1938-39:—

NET VALUE OF AGRICULTURAL PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Total.
NET VALUE.(a) (£'000.)									
Average, ten years 1929-30 to 1938-39	13,304	10,508	10,189	6,540	4,903	1,824	(b)	(b)	47,268
1950-51	44,492	53,465	32,001	36,402	33,126	8,644	(b)	(b)	208,130
1951-52	58,333	64,084	35,622	46,903	31,027	10,716	(b)	(b)	246,685
1952-53	66,623	65,067	53,684	51,244	28,977	10,803	(b)	(b)	276,398
1953-54	68,342	65,624	55,471	41,700	28,119	9,204	(b)	(b)	268,460
1954-55	48,711	61,516	59,656	39,180	23,483	11,240	45	88	243,919

NET VALUE PER HEAD OF POPULATION. (£ s. d.)

Average, ten years 1929-30 to 1938-39	5 1 2	5 14 11	10 13 0	11 3 10	11 0 9	7 18 5	(b)	(b)	7 1 4
1950-51	13 14 9	23 16 9	26 10 2	50 8 7	58 1 7	30 9 9	(b)	(b)	25 3 8
1951-52	17 12 3	27 15 0	28 14 6	63 2 0	52 11 11	36 10 8	(b)	(b)	29 1 3
1952-53	19 15 10	27 8 7	42 3 11	66 17 1	47 8 2	35 14 2	(b)	(b)	31 16 1
1953-54	20 1 4	27 1 8	42 13 1	53 1 1	44 11 8	29 14 11	(b)	(b)	30 6 4
1954-55	14 1 7	24 14 6	45 0 3	48 10 5	36 3 9	35 18 3	2 14 6	2 16 4	26 16 8

(a) No deduction has been made for depreciation and maintenance.

(b) Not available.

(iii) *Quantum and Price Indexes of Agricultural Production.* Quantum and price indexes of agricultural production shown in the following table have been calculated by the fixed-base weighted aggregative method. Further details on weights used, &c., are to be found in Chapter XXX.—Miscellaneous.

INDEXES OF QUANTUM(a) AND PRICE OF AGRICULTURAL PRODUCTION.

(Base : Average 3 years ended June, 1939 = 100.)

Particulars.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Quantum Produced—					
Wheat	112	97	119	120	102
Other Crops	105	107	123	134	131
<i>Total, All Crops</i>	<i>108</i>	<i>103</i>	<i>121</i>	<i>129</i>	<i>120</i>
Total per Head of Population	89	83	95	99	91
Price—					
Wheat	338	378	397	349	319
Other Crops	255	338	337	305	314
<i>Total, All Crops</i>	<i>291</i>	<i>355</i>	<i>364</i>	<i>324</i>	<i>316</i>

(a) Indexes of value at constant prices, i.e. quantities revalued at average unit values of the base years (1936-37 to 1938-39.)

§ 4. Wheat.

1. *Royal Commission on the Wheat Industry.*—A Royal Commission was appointed in January, 1934 to inquire into and report upon the economic condition of the industries of growing, handling and marketing wheat, and the manufacturing, distributing and selling of flour and bread. A searching inquiry was made by the Commission and the results of its investigations were submitted in a series of five reports. The first and second reports covered the wheat-growing industry, the third that of baking, the fourth the flour-milling industry, while the fifth, completed in February, 1936, dealt with the history of the Commission's investigations and traversed the principal recommendations submitted.

2. **Wheat Costs of Production Committee.**—A Wheat Costs of Production Committee was appointed by the Commonwealth Government in February, 1947, to inquire into and report upon:—(i) the reasonable costs of production of wheat per bushel in Australia's main wheat-growing districts, and (ii) whether basic items of costs could be established as an index to periodical variations in costs of the production of wheat. The Committee in its report to the Commonwealth Government in March, 1948, found that the cost of growing wheat in the Commonwealth was 6s. per bushel at sidings and advised that basic items of cost could be established as an index to periodical variations in wheat production costs.

3. **Licensing of Areas Sown to Wheat, and Acreages Sown.**—Details of the operations of the Wheat Stabilization Board in licensing wheat growing during the seasons 1941–42 to 1948–49 will be found in Official Year Book No. 38, pp. 940, 941. The Board ceased to function on 31st December, 1948.

4. **Legislation relating to Wheat Industry.**—(i) *Stabilized Marketing.* A detailed survey of legislation relating to stabilization of the wheat industry, including controls exercised during the 1914–18 and 1939–45 Wars and legislation establishing the Wheat Stabilization Plan in 1948, was given in the Appendix to Official Year Book No. 37 (pp. 1295–99).

(ii) *The Australian Wheat Board.* The Australian Wheat Board was constituted in September, 1939 under National Security (Wheat Acquisition) Regulations to purchase, sell, or dispose of, wheat or wheat products, manage and control all matters connected with the handling, storage, protection, shipment, etc. of wheat acquired, and such other matters as were necessary to give effect to the regulations.

The Board was reconstituted, with similar powers, under the Commonwealth Wheat Stabilization Act 1948, to administer the stabilization plan. The new Board commenced to function on the 18th December, 1948.

(iii) *Wheat Stabilization Plan.* (a) 1947–48 to 1952–53. Details of the Wheat Stabilization Plan which operated during the seasons 1947–48 to 1952–53 inclusive were published in Official Year Book No. 40, pp. 841 and 842, and previous issues. All contributions paid into the Fund established as a part of the plan have now been refunded.

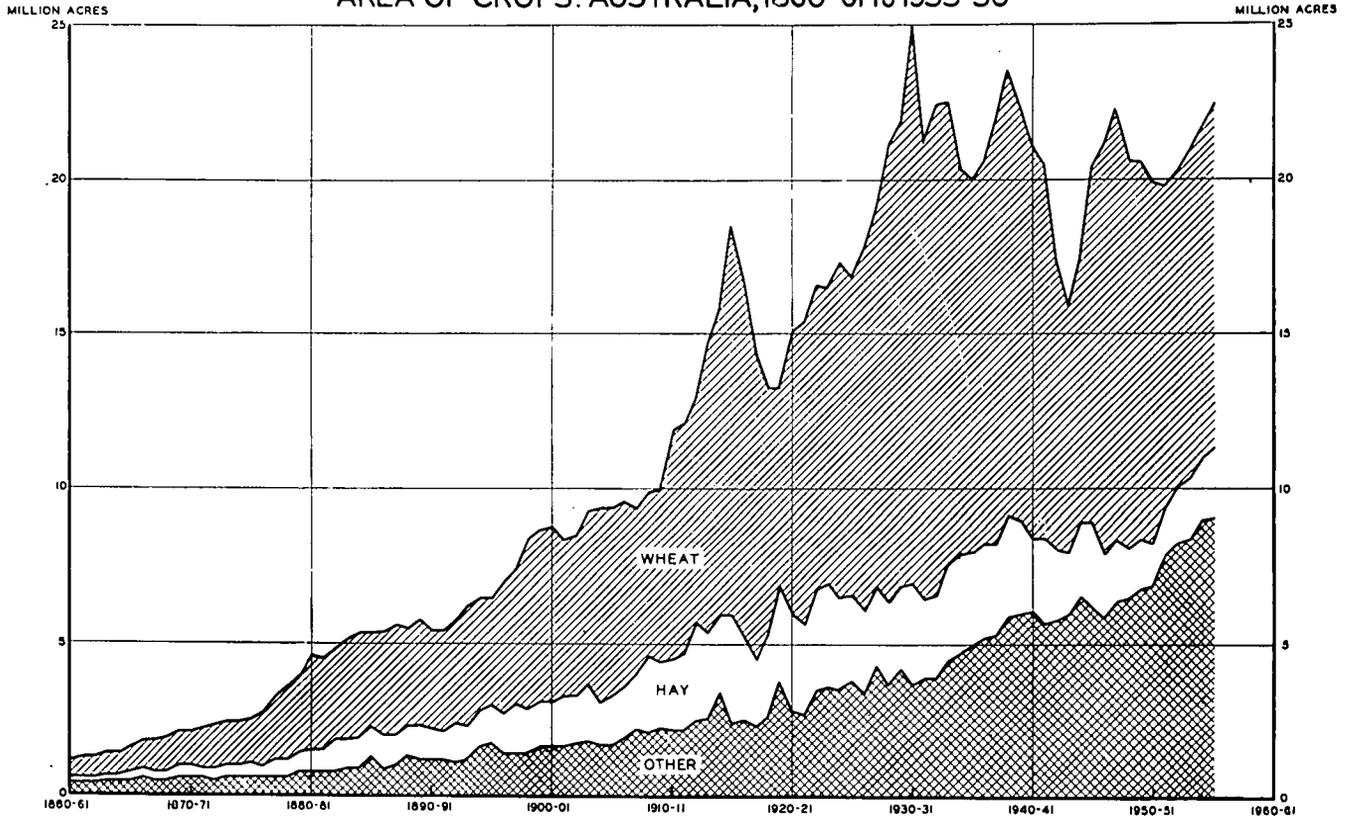
(b) 1953–54 to 1957–58. Agreement was reached in July, 1954, at a conference of Premiers and Ministers for Agriculture on the terms of a new wheat industry stabilization plan. The plan was submitted to polls of wheat growers in the mainland producing States, 94 per cent. of growers voting in favour of the plan.

The necessary legislation was subsequently passed by Commonwealth and State Governments and the plan operated from the 1953–54 season.

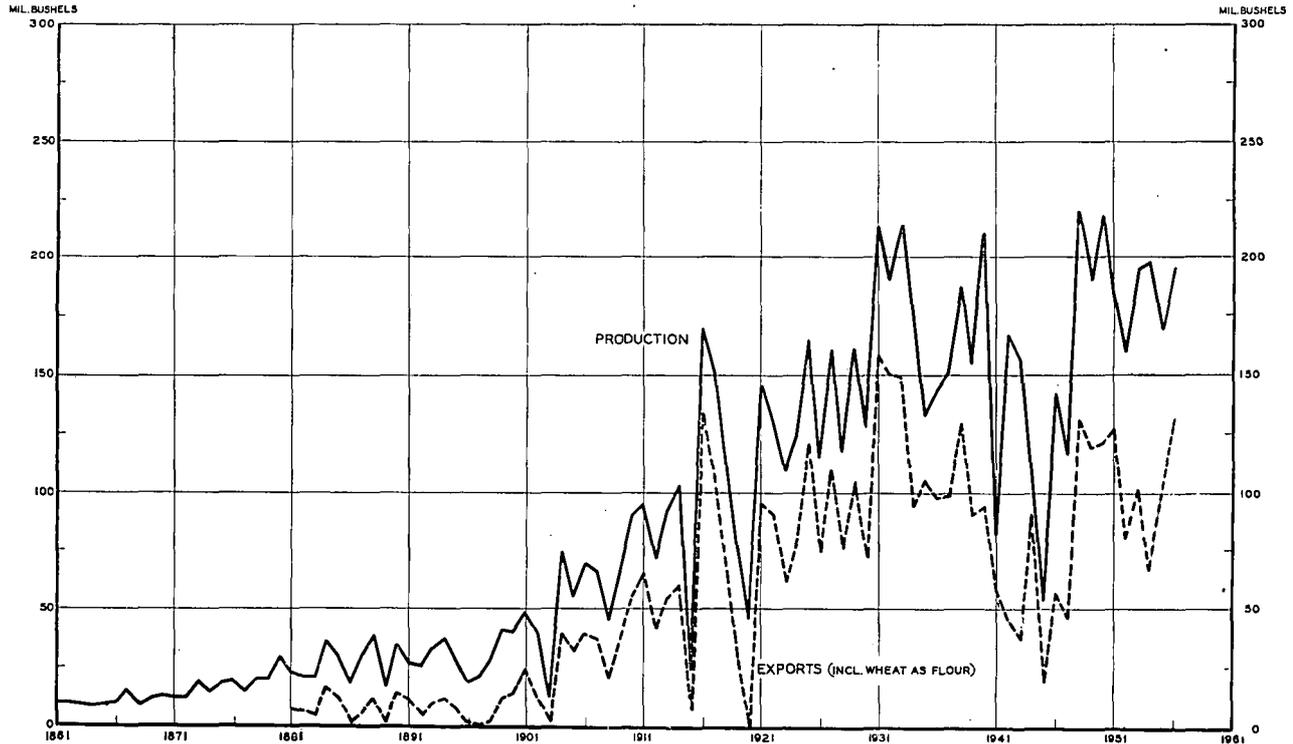
The principal features of the plan are as follows:—

- (i) The period of the Wheat Stabilization Plan to be five years, 1953–54 to 1957–58 inclusive.
- (ii) The Australian Wheat Board will be the sole authority for marketing wheat within Australia and wheat and flour for export from Australia.
- (iii) The Commonwealth Government will guarantee a return to growers of the ascertained cost of production in respect of up to 100 million bushels of wheat exported from Australia from each of the crops covered by the plan.
- (iv) The home consumption price will not be less than the guaranteed price. Subject to this understanding, the home consumption price will be fixed at 14s. per bushel, bulk f.o.r. ports, but will vary downwards to conform with the International Wheat Agreement price current at the commencement of each season. If no international agreement is operating, the home consumption price will vary downwards with the current export price fixed by the Wheat Board.
- (v) A premium of 3d. per bushel on wheat grown in Western Australia and exported from that State will be paid in recognition of the natural freight advantage applying to that State.
- (vi) The home consumption price will be loaded by an amount necessary to cover the cost of freight on wheat to Tasmania.
- (vii) A Stabilization Fund will be established by means of an export tax of 1s. 6d. per bushel when wheat export prices exceed the costs of production by this amount or more, and by that portion of 1s. 6d. by which the export prices exceed the costs of production when the excess is less than 1s. 6d. per bushel.
- (viii) The maximum amount of the Stabilization Fund will be £20 million. As the Fund accumulates beyond this figure, repayments will be made to the oldest contributing pool.

AREA OF CROPS: AUSTRALIA, 1860-61 to 1955-56



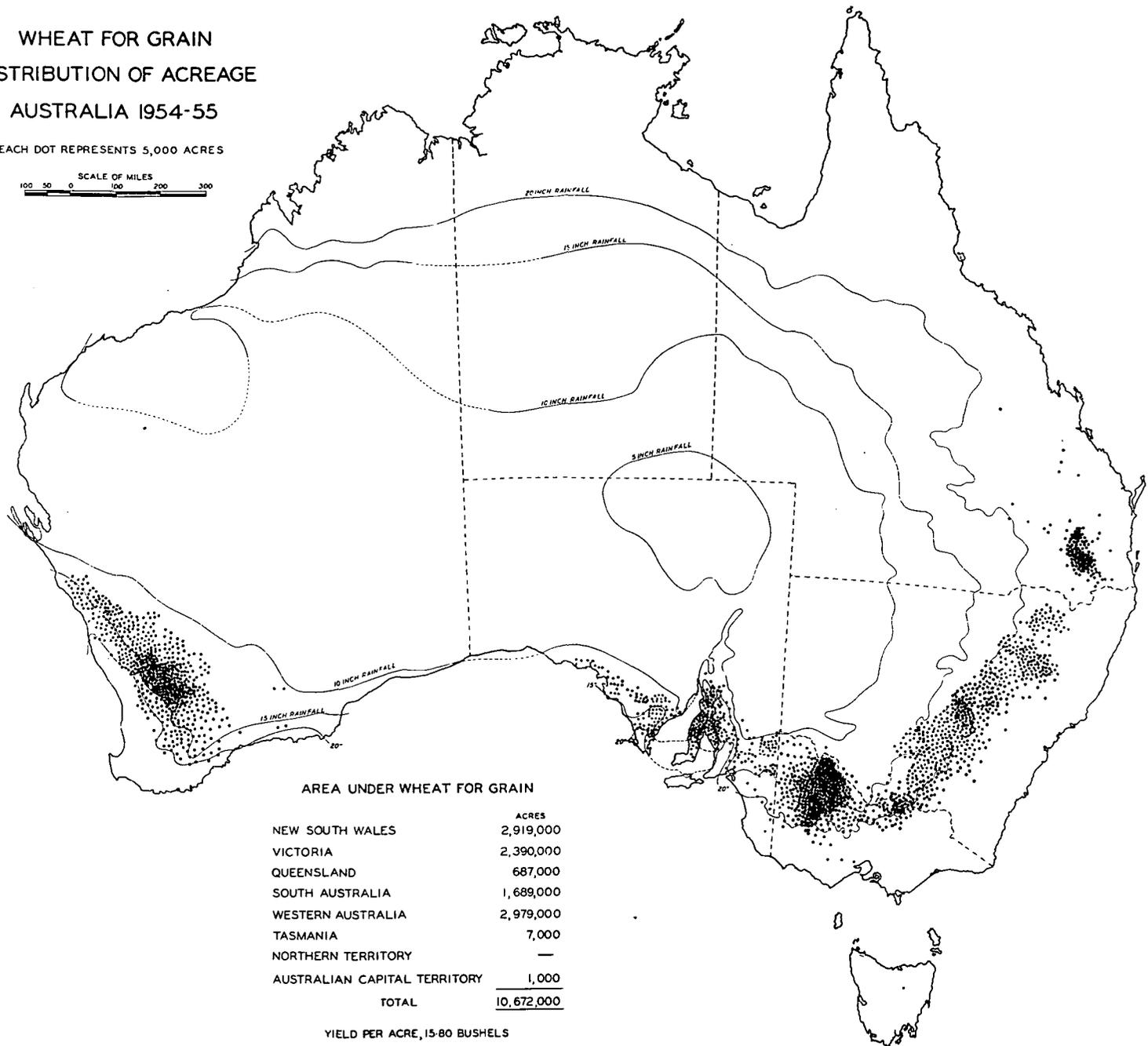
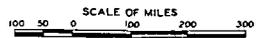
WHEAT PRODUCTION AND EXPORTS: AUSTRALIA, 1860-61 to 1955-56



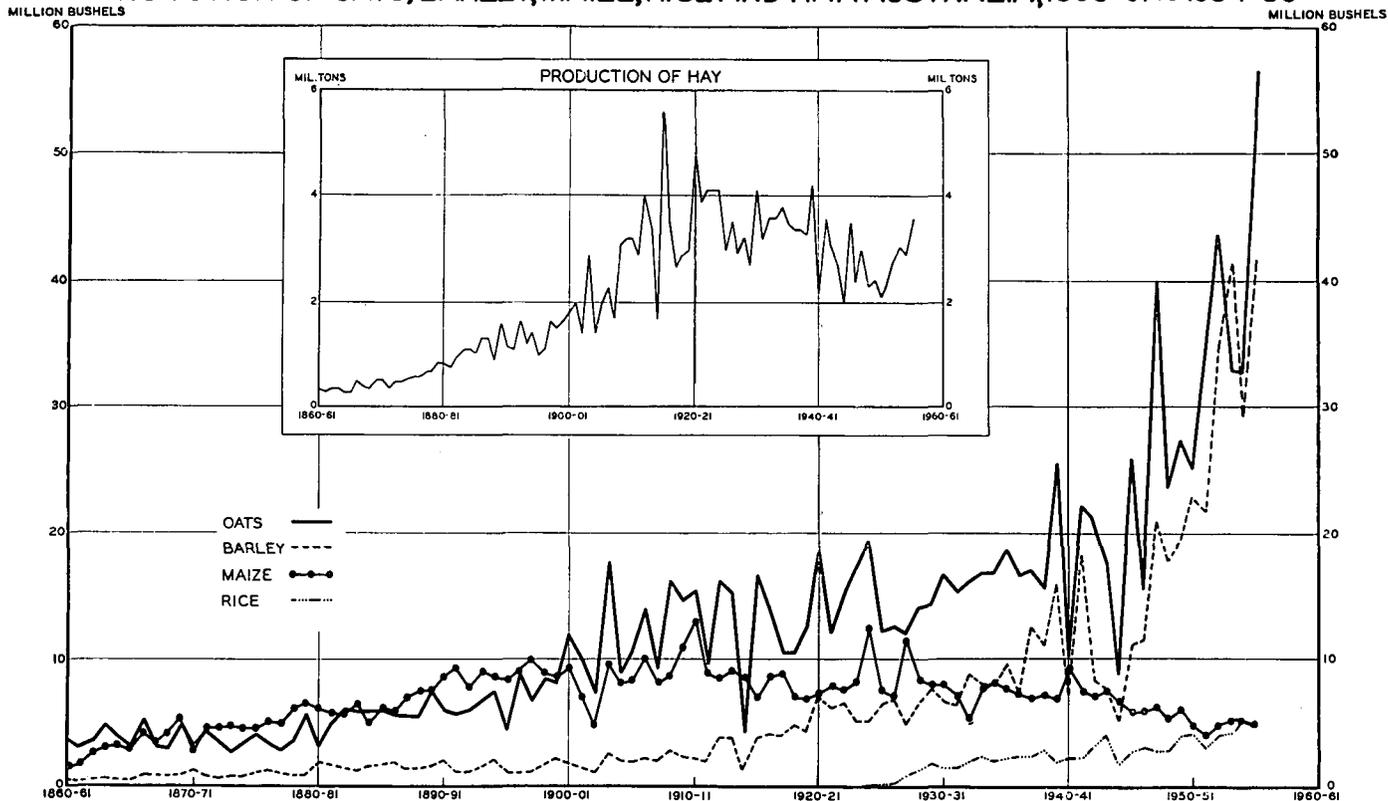
NOTE.—The export figures for the years 1915-16 to 1920-21 do not represent the surplus available for export in each of these years because of the dislocation of shipping due to the 1914-1918 War. For these years the quantity consumed in Australia has been averaged and the balance taken as exports.

WHEAT FOR GRAIN
DISTRIBUTION OF ACREAGE
AUSTRALIA 1954-55

EACH DOT REPRESENTS 5,000 ACRES



PRODUCTION OF OATS, BARLEY, MAIZE, RICE AND HAY : AUSTRALIA, 1860-61 to 1954-56



(ix) When average export realizations fall below costs of production, export returns will be raised, in respect of up to 100 million bushels, first by drawing upon the Stabilization Fund and when that Fund is exhausted the Commonwealth Government will make the necessary payments.

5. Marketing of Wheat.—(i) *Wheat Acquired and Disposed of.* (a) *Wheat Acquired.* Particulars of wheat acquired by the Australian Wheat Board from the 1950–51 to 1955–56 harvests are shown in the following table:—

AUSTRALIAN WHEAT BOARD : WHEAT ACQUIRED, 1950-51 TO 1955-56.
(*000 Bushels.)

Pool.	Harvest.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
15	1951–52	33,853	43,766	6,169	25,773	36,412	48	146,021
16	1952–53	51,608	47,460	16,776	32,171	31,703	87	179,805
17	1953–54	57,844	52,219	9,102	27,711	36,161	161	183,198
18 and 18A	1954–55	32,385	46,431	14,605	28,636	30,628	65	152,750
19	1955–56	51,789	39,079	14,098	26,107	49,649	39	180,761

(b) *Wheat Disposal.* Details relating to the disposal of wheat during the years ended 30th November, 1951 to 1956 are shown in the following table:—

AUSTRALIAN WHEAT BOARD : DISPOSAL OF WHEAT, 1951 TO 1956.(a)
(*000 Bushels.)

Particulars.	1951.	1952.	1953.	1954.	1955.	1956.
Sold for export as wheat ..	85,227	46,192	59,517	40,547	63,171	95,399
Sold for export as flour ..	42,454	36,693	41,255	26,871	(b) 34,024	(b) 34,950
Sold for local consumption as flour	37,577	39,049	39,108	35,860	38,012	39,832
Sold for other purposes ..	29,556	26,233	20,605	20,261	18,560	17,090

(a) Years ended 30th November.

(b) Includes wheat equivalent of manufactured wheat products exported.

(ii) *Finance.* The Wheat Acquisition Regulations empowered the Minister to arrange with the Commonwealth Bank for advances to the Board, the advances being guaranteed by the Commonwealth Government. The Wheat Industry Stabilization Act 1948 included similar provisions for advances to the reconstituted Board established under that Act.

AUSTRALIAN WHEAT BOARD : FINANCIAL OPERATIONS, POOLS Nos. 15 to 19.
(£.)

Particulars.	No. 15 Pool.(a)	No. 16 Pool.(a)	No. 17 Pool.(a)	Nos. 18 and 18A Pools.(b)	No. 19 Pool.(b)
	(1951–52 Harvest.)	(1952–53 Harvest.)	(1953–54 Harvest.)	(1954–55 Harvest.)	(1955–56 Harvest.)
Paid to growers	100,000,768	127,177,779	99,892,850	81,047,474	81,673,674
Rail freight	7,620,657	11,154,989	12,734,561	10,028,470	12,383,167
Expenses	5,415,288	5,944,989	7,513,924	7,676,828	8,432,824
Total Payments ..	113,036,713	144,277,757	120,141,335	98,752,772	102,489,665
Value of sales delivered ..	c 113,036,713	144,277,757	d 129,334,473	99,777,691	103,020,419

(a) Complete. (b) Incomplete. (c) Includes £9,166,550 paid into Wheat Prices Stabilization Fund under Wheat Export Charges Act 1948, plus interest £282,291. (d) Includes £9,165,517 paid to Wheat Prices Stabilization Fund under Wheat Export Charge Act 1954.

NOTE.—Details of earlier pools will be found in previous issues of the Year Book.

(iii) *Advances to Growers.* Details of advances made to wheat growers in respect of the various pools are published in *Statistical Bulletin: The Wheat Industry, Australia*, last issued in April, 1957.

6. **International Wheat Agreements.**—Details of the first and second International Wheat Agreements operative from 1st August, 1949 to 31st July, 1953 and from 1st August, 1953 to 31st July, 1956, respectively, were published in Official Year Book No. 42 (*see pp. 840-1*) and previous issues.

A new International Wheat Agreement covering a period of three years from 1st August, 1956 to 31st July, 1959 came into force on 1st August, 1956. The 1956 Agreement is identical in form with the 1949 and 1953 Agreements, although amendments have been made to many of the more important provisions.

The annual quota of 395 million bushels determined by the 1953 International Wheat Agreement was reduced in the new Agreement by almost a quarter to 303 million bushels.

As previously, 44 importing countries submitted figures for inclusion but many quotas were substantially less than those in the previous Agreement. The number of exporting countries was increased to six. Argentina and Sweden were the two additional exporting countries included and France was given a substantial quota instead of the nominal one it had in the 1953 Agreement.

As a result of the reduction in quantities submitted by importing countries and the participation of France, Argentina and Sweden, there has been a substantial reduction in the export quotas available for Australia, Canada and the United States. Australia's original quota was reduced from 45 million bushels under the 1953 Agreement to 30 million bushels.

The new Agreement was to be ratified by both exporting and importing countries on 1st December, 1956. On that date, 37 importing countries had ratified and Iceland had joined the Agreement as an importer although not included in the original list. Of the remaining seven countries which submitted import quotas, four countries (Brazil, Lebanon, the Netherlands and Panama) have notified that they intend ratifying and three countries (Ceylon, Colombia and Jordan) will not ratify the Agreement. All six exporting countries have acceded.

In accordance with the terms of the Agreement, the original quotas allotted to exporting countries have been reduced in conformity with the reduction in importers' quotas. The adjustment has been made on the basis of ratifications as at 1st December, 1956. This pro rata adjustment has given Australia an export quota of 25.6 million bushels but this will probably be increased to 29.3 million bushels when countries which have indicated their intention of doing so have formally ratified the Agreement.

Particulars of guaranteed sales and purchases and transactions actually recorded during 1955-56 are shown in the following table.

INTERNATIONAL WHEAT AGREEMENT: GUARANTEED SALES AND PURCHASES AND TRANSACTIONS RECORDED FOR 1955-56.(a)
(Million Bushels.)

Exporting Countries.			Importing Countries.		
Country.	Guaranteed Sales.(b)	Sales Recorded	Country.	Guaranteed Purchases.(c)	Purchases Recorded.
United States of America ..	196.5	134.1	Germany	55.1	46.8
Canada	153.1	75.6	Japan	36.7	36.3
Australia	45.0	44.9	India	36.7	19.3
France	0.4	0.4	Netherlands	24.8	15.9
			Belgium	23.9	12.6
			Remaining Importing Countries	217.8	124.1
Total	395.0	255.0	Total	395.0	255.0

(a) Wheat and wheat flour as wheat. (b) Quantities which exporting countries must sell if required by importing countries to do so at the maximum price. (c) Quantities which importing countries must buy if required to do so at the relevant minimum price.

7. **Wheat Farms.**—(i) *Number.* Particulars of the number of farms growing 20 acres and upwards of wheat for grain during each of the years 1951-52 to 1955-56, compared with the average for the five years ended 1938-39, are shown in the following table. It should be noted that a farm worked on the share system or as a partnership is included as one holding only.

NUMBER OF FARMS GROWING 20 ACRES AND UPWARDS OF WHEAT FOR GRAIN.

State.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
New South Wales ..	15,657	13,147	13,167	14,865	13,784	14,035
Victoria ..	12,393	10,076	10,049	10,900	10,547	9,683
Queensland ..	2,403	3,005	4,970	3,918	4,570	4,199
South Australia ..	12,255	8,345	8,432	8,473	8,892	(a)
Western Australia ..	8,859	7,766	7,751	7,786	7,979	7,962
Tasmania ..	269	51	95	149	114	85
Australia(b) ..	51,836	42,390	44,464	46,091	45,886	(a)

(a) Not yet available.

(b) Excludes Australian Capital Territory.

(ii) *Special Tabulations relating to Wheat Holdings.* With the co-operation of State Statisticians, a series of special tabulations relating to rural holdings was undertaken for all States for the year 1949-50. The tabulations, which covered, *inter alia*, a series of size classifications of wheat farms, have been published in detail in *Primary Industries 1949-50*, Bulletin No. 44. A similar tabulation was made for the year 1947-48, a summary of the results being published in *Production—Part II.—Primary Industries*, Bulletin No. 42, and Official Year Book No. 38, p. 947.

8. *Area, Production and Yield per Acre.*—(i) *Area.* Wheat is the principal crop grown in Australia, and its progress since 1860-61 has been almost continuous. Prominent features in its early development were the increase in population following the discovery of gold and the redistribution of labour after the surface gold had been won. The economic depression of 1893 interrupted its progress, but its subsequent recovery was assisted by the invention of mechanical appliances, the use of superphosphates as an aid to production, and the introduction of new and more suitable varieties for Australian conditions. The establishment of closer settlement schemes and the settling of returned soldiers and others on the land were additional factors in its expansion.

The area, production and yield per acre of wheat for grain in each State are shown below for the years 1951-52 to 1955-56 in comparison with the averages for the decennial periods ended 1938-39 and 1954-55:—

WHEAT FOR GRAIN : AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA ('000 ACRES).								
Average, 1929-30 to 1938-39 ..	4,302	3,063	277	3,526	3,158	17	2	14,345
1951-52 ..	2,753	2,464	455	1,613	3,094	4	1	10,384
1952-53 ..	2,702	2,232	724	1,544	2,999	7	1	10,209
1953-54 ..	3,357	2,389	580	1,528	2,885	10	2	10,751
1954-55 ..	2,919	2,390	688	1,689	2,979	7	1	10,673
Average, 1945-46 to 1954-55 ..	3,640	2,801	532	1,924	2,793	7	2	11,699
1955-56 ..	2,937	2,141	582	1,609	2,890	6	1	10,166
PRODUCTION ('000 BUSHEL). (a)								
Average, 1929-30 to 1938-39 ..	55,935	38,416	4,118	34,700	35,812	374	43	169,398
1951-52 ..	39,689	45,995	6,632	27,301	40,000	94	14	159,725
1952-53 ..	56,670	50,335	18,662	33,919	35,458	156	8	195,208
1953-54 ..	63,681	53,698	10,180	30,409	39,700	263	29	197,960
1954-55 ..	37,718	48,484	16,478	31,463	34,300	159	15	168,617
Average, 1945-46 to 1954-55 ..	56,110	48,181	10,641	28,998	35,334	138	45	179,447
1955-56 ..	57,149	41,083	14,922	28,891	53,250	129	19	195,443

WHEAT FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE—*continued.*

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
YIELD PER ACRE (BUSHELS).(a)								
Average, 1929-30								
to 1938-39 ..	13.0	12.5	14.9	9.8	11.3	21.7	20.6	11.8
1951-52 ..	14.4	18.7	14.6	16.9	12.9	26.1	14.0	15.4
1952-53 ..	21.0	22.6	25.8	22.0	11.8	23.4	12.7	19.1
1953-54 ..	19.0	22.5	17.6	19.9	13.8	27.2	18.5	18.4
1954-55 ..	12.9	20.3	24.0	18.6	11.5	21.7	19.4	15.8
Average, 1945-46								
to 1954-55 ..	15.4	17.2	20.0	15.1	12.7	21.1	18.5	15.3
1955-56 ..	19.5	19.2	25.7	18.0	18.4	20.7	25.5	19.2

(a) 60 lb. per bushel.

A graph showing the expansion of the area sown to wheat for grain in Australia since 1860-61 appears on p. 831 while a map showing the distribution of areas growing wheat for grain throughout Australia in 1954-55 appears on p. 833. Similar maps showing the distribution of wheat areas in 1924-25, 1938-39 and 1947-48 appeared respectively in Official Year Books No. 22, p. 695, No. 34, p. 451 and No. 39, pp. 977-8.

(ii) *Production.* Apart from the variations in the area sown, the size of the wheat harvest in Australia is largely determined by the nature of the season and inconsistencies in this respect are reflected in the yearly production.

The main wheat-producing States of Australia are New South Wales, Victoria, South Australia and Western Australia. Queensland production normally approaches local demands, but Tasmania imports wheat from the mainland to satisfy its needs, though it ships flour made from local wheat which is particularly suitable for biscuits. Normally the production of wheat greatly exceeds Australian requirements, and from half to two-thirds of the crop is exported.

Australia's wheat production in 1955-56 was 195.4 million bushels, representing an average yield of 19.2 bushels per acre. This was 16.0 million bushels more than the average for the ten years ended 1954-55 and 26.0 million bushels more than the average for the ten years ended 1938-39.

(iii) *Yield per Acre.* Short-term variations in yield per acre are due chiefly to the vagaries of the seasons. The best yields per acre for single seasons since 1901 were obtained in 1920-21, 16.1 bushels; in 1942-43, 16.8 bushels; in 1949-50, 17.8 bushels; in 1952-53, 19.1 bushels; in 1953-54, 18.4 bushels and in 1955-56, 19.2 bushels (the record).

(iv) *Decennial Averages, 1861-70 to 1947-56.* The following table shows the average area, production and yield per acre for decennial periods since 1861.

WHEAT FOR GRAIN: AVERAGE AREA AND PRODUCTION, AUSTRALIA.

Period.		Area.	Production.	Yield per Acre.
		'000 Acres.	'000 Bushels.	Bushels.
1861-70	.. ..	831	10,622	12.8
1871-80	.. ..	1,646	17,711	10.8
1881-90	.. ..	3,258	26,992	8.3
1891-1900	.. ..	4,087	29,934	7.3
1901-10	.. ..	5,711	56,058	9.8
1911-20	.. ..	8,928	95,480	10.7
1921-30	.. ..	11,291	135,400	12.0
1931-40	.. ..	14,176	177,758	12.5
1941-50	.. ..	11,358	145,599	12.8
1947-56	.. ..	11,573	184,750	16.0

It should be noted, that with improved farming methods, including the proper tillage of the soil, rotation of crops, the growing of suitable varieties and the application of fertilizers, average yields per acre in the five decades since 1901 have shown a continued improvement.

9. *Varieties of Wheat Sown.*—(i) *General.* The breeding of wheat suitable to local conditions has long been established in Australia. Farrer (1845-1905) did invaluable work in pioneering this field and the results of his labour and the continued efforts of those who have since followed him have proved of immense benefit to the wheat industry of Australia. Their efforts have resulted in better average yields, a greater uniformity of sample with which have accrued certain marketing advantages, as well as an improvement

in the quality of wheat grown. More than 1,000 different varieties of Australian wheats have been catalogued by the Commonwealth Scientific and Industrial Research Organization, but the number of principal varieties grown during each season is restricted to about 40.

(ii) *States, 1955.* The principal varieties of wheat sown and the percentage of each to the total area sown in the five main producing States during 1955 were as follows:—New South Wales, Bencubbin (33.3), Gabo (20.3); Glenwarie (6.3); Victoria, Insignia (49.3), Pinnacle (24.7), Quadrat (15.4); Queensland, Spica (15.4), Charter (15.0), Festival (13.2); South Australia, Gabo (22.4), Insignia 49 (12.8); Western Australia, Bungulla (21.8), Bencubbin (18.8), Gabo (16.5). A detailed table of wheat varieties sown in these five States appears in the annual bulletin *Primary Industries—Part I.—Rural Industries.*

10. **F.A.Q. Standard of Wheat.**—The Chambers of Commerce in each of the four main wheat States each year determine the "f.a.q." standard for the State. In the case of New South Wales as from 1956–57, two f.a.q. standards will be determined—one for the Northern Zone and one for the Southern Zone. "F.a.q." means "fair average quality", and the standard is used as the basis for sales of the season's crop. It represents the average quality for the season, and this average varies from year to year, and from State to State. "F.a.q." is an Australian term, and the method differs from that of other countries which sell according to sample, or (as in Canada) according to grades which are fixed, and do not vary from year to year.

Samples of wheat are obtained by the Chambers of Commerce from the different wheat districts, and are mixed to give a representative sample of the whole crop. From this representative sample the f.a.q. weight is determined by the use of the Schopper 1-litre scale chondrometer.

The f.a.q. weight of a bushel of wheat in each of the four main wheat-producing States for the 1955–56 season's crop was as follows (1954–55 details in parentheses)—New South Wales, 62 lb. (61½ lb.); Victoria, 63¾ lb. (62½ lb.); South Australia, 64 lb. (64½ lb.); and Western Australia, 64 lb. (63½ lb.).

11. **Price of Wheat.**—(i) *Home Consumption.* The price charged by the Australian Wheat Board for wheat sold to millers for gristing into flour for consumption in Australia and for wheat sold as stock feed is shown in the table below for the years 1953 to 1957.

AUSTRALIAN WHEAT BOARD'S PRICE FOR WHEAT FOR HOME CONSUMPTION : AUSTRALIA.

(s. d. per Bushel, Bulk Basis.)

Particulars.	1953.	1954.	1955.	1956.	1957.
For Flour	11 11	(a) 14 1½	(a) 14 1½	(a) 13 5½	(a) 13 9½
For Stock Feed	(b) 13 11	(a) 14 1½	(a) 14 1½	(a) 13 5½	(a) 13 9½

(a) Of this, 1½d. is to be used to meet freight charges incurred on wheat shipped to Tasmania.
 (b) Excludes subsidy of 2s. 2d. in 1953 paid by the Commonwealth Government.

(ii) *Export Wheat Prices—Australian Wheat Board's Basic Selling Price.*—The monthly average of the Wheat Board's basic export selling prices for f.a.q. bulk wheat f.o.b. basis was 13s. 4d. for the season ended 31st July, 1956, both for wheat sold under the International Wheat Agreement and for "free" wheat sold on the open market. Actual selling prices have been lower than the basic prices in some cases, particularly where other exporting countries enjoy a geographical freight advantage.

The maximum and minimum prices fixed under the 1956–59 International Wheat Agreement are expressed in terms of "Canadian currency per bushel, at the parity of the Canadian dollar determined for the purposes of the International Monetary Fund for No. 1 Manitoba Northern wheat in bulk in store Fort William—Port Arthur." Expressed in terms of Australian currency the maximum price for f.a.q. Australian wheat sold under the Agreement is approximately 18s. per bushel. The direct currency conversion of the minimum price is 12s. but this price will vary according to movements in transportation costs.

Details of export wheat prices in previous years, including those received for wheat sold under the terms of the 1949–1953 International Wheat Agreement, are given in *Official Year Book No. 40*, pp. 849–50, and *Statistical Bulletin: The Wheat Industry, Australia*, No. 92, of April, 1957, and in previous issues of these publications.

12. **Value of the Wheat Crop.**—The estimated gross value of the wheat crop in each State and in Australia during the season 1954-55 and the value per acre are shown below.

WHEAT FOR GRAIN : VALUE OF CROP(a), 1954-55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
Aggregate value £'000	23,582	30,516	10,697	20,796	21,827	100	10	107,528
Value per acre ..	£8 1 7	£12 15 4	£15 11 3	£12 6 3	£7 6 6	£13 13 8	£12 2 1	£10 1 6

(a) Gross value of total crop, including wheat used for seed and for stock feed on farms.

13. **Production and Disposal of Wheat in Australia.**—In the following table, details are given of the production of wheat and its disposal during each of the years ended 30th November, 1952 to 1956 in comparison with the average for the three years ended November, 1937 to 1939. The particulars respecting local consumption refer to sales actually executed by the Australian Wheat Board, whilst those respecting exports represent actual shipments. (For particulars of production and exports from 1860-61 see graph, p. 832.)

WHEAT : PRODUCTION AND DISPOSAL, AUSTRALIA.
(Million Bushels.)

Particulars.	Average, Three Years ended 30th Nov. 1939.	Year ended 30th November—				
		1952.	1953.	1954.	1955.	1956.
Opening stocks (including flour as wheat)	10.2	19.4	16.9	37.7	94.9	95.0
Production	164.7	159.7	195.2	198.0	168.6	195.4
<i>Total Available Supplies</i>	<i>174.9</i>	<i>179.1</i>	<i>212.1</i>	<i>235.7</i>	<i>263.5</i>	<i>290.4</i>
Exports—						
Wheat	75.0	45.6	60.7	38.5	64.8	94.0
Flour as wheat(a)	30.6	36.1	41.4	27.9	35.0	36.9
Breakfast foods and other products(b)	(c)	1.2	0.8	0.8	1.0	1.4
Local Consumption—						
Flour as wheat	30.9	39.0	39.1	34.4	38.0	39.8
Stock feed	9.3	23.9	18.4	17.6	16.5	15.3
Seed	14.6	10.3	10.8	10.8	10.9	10.1
Breakfast foods and other products(b)	(c)	2.6	2.2	1.6	2.0	1.7
Balance retained on farm (excluding seed)	(d)	3.4	4.6	4.0	5.0	4.5
Closing stocks (including flour as wheat)	14.5	16.9	37.7	94.9	95.0	84.2
<i>Total Disposals</i>	<i>174.9</i>	<i>179.0</i>	<i>215.7</i>	<i>230.5</i>	<i>268.2</i>	<i>287.9</i>
Excess (+) or Deficiency (–) of Disposals in respect of Available Supplies e	..	–0.1	+3.6	–5.2	+4.7	–2.5

(a) Includes wheatmeal from July 1951, and sharps from July, 1954. (b) In terms of wheat.
(c) Included with flour (local consumption). (d) Included with stock feed. (e) Includes allowance for unrecorded movements in stocks, gain or loss in out-turn, etc.

14. **Exports of Wheat and Flour.**—(NOTE: Statistics in this section relate to years ended 30th June). (i) *Quantities.* The following table shows particulars of the exports of wheat and flour and total of both in terms of wheat for each of the years 1951-52 to 1955-56 compared with the average for the five years ended 1938-39. For the sake of convenience, flour has been expressed at its equivalent in wheat, 1 ton of flour being taken as equal to 46.3 bushels of grain. Wheat and flour have been imported to tide over lean seasons on only two occasions since 1900; in 1902-3 the wheat harvest was as low as 12,378,000 bushels, and wheat and flour representing 12,468,000 bushels of wheat were

imported, whilst an equivalent of 7,279,000 bushels was imported in 1914-15 to supplement the yield of 25 million bushels produced in that season. During the five years ended 1955-56, exports in terms of wheat averaged 93,233,000 bushels, compared with the average of 106,432,000 bushels for the five years ended 1938-39.

WHEAT AND FLOUR : EXPORTS FROM AUSTRALIA.

Year.	Quantity.				Value. (£'000.)		
	Wheat.	Flour.		Total as Wheat.	Wheat.	Flour.	Total.
		As Flour.	As Wheat. (a)				
	'000 bushels.	Tons. (2,000 lb.)	'000 bushels.	'000 bushels.			
Average, 1934-35 to 1938-39	76,473	647,073	29,959	106,432	14,813	(b)5,058	19,871
1951-52	62,921	791,470	36,645	99,566	55,287	33,107	88,394
1952-53	59,508	871,096	40,331	99,839	51,970	37,471	89,441
1953-54	36,058	761,917	35,276	71,334	30,957	29,726	60,683
1954-55	63,133	656,605	30,401	93,534	45,222	20,357	65,579
1955-56	71,041	667,773	30,918	101,959	46,456	19,743	66,199

(a) One ton (2,000 lb.) of flour is taken to be equivalent to 46.3 bushels of wheat. (b) Excludes wheatmeal for baking.

(ii) *Destination.* (a) *Wheat.* The following table shows the exports of wheat to various countries for each of the five years ended 1955-56 and the average for the five years ended 1938-39.

WHEAT: EXPORTS FROM AUSTRALIA. (^{'000 Bushels.})

Country to which Exported.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
United Kingdom	45,195	17,932	21,956	11,520	19,134	20,442
India	1,662	7,372	10,767	7,038	17,416	5,562
New Zealand	1,537	9,649	5,808	7,753	7,979	9,067
Other British Countries	7,863	7,322	10,760	5,405	6,738	6,235
Egypt	503	3,980	..	..	3	..
Germany, Federal Republic of	(a) 235	4,734	2,847	1,888	5,084	8,189
Italy	3,152	6,473	2,068	357	..	..
Other Foreign Countries	16,326	5,459	5,302	2,097	6,779	21,546
Total	76,473	62,921	59,508	36,058	63,133	71,041

(a) Pre-war Germany.

(b) *Flour.* The following table shows the exports of flour to various countries for each of the five years ended 1955-56, and the average for the five years ended 1938-39.

FLOUR : EXPORTS FROM AUSTRALIA. (Tons of 2,000 lb.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
United Kingdom	142,912	96,432	139,941	65,659	80,832	67,080
Ceylon	16,915	187,134	261,845	222,479	112,466	115,737
India	2,732	83,142	79,921	19,880	47	89
Malaya, Federation of	63,309	60,030	65,074	70,829	87,281	81,484
Singapore	(b)	52,238	66,691	64,382	77,738	54,312
Other British Countries	109,609	88,195	92,122	97,257	115,731	98,179
Egypt	24,284	65,143	23,078	19,588	9,830	2,689
Indonesia, Republic of .. .. .	..	62,322	90,774	133,406	95,509	177,724
Other Foreign Countries	287,312	96,834	51,650	68,437	77,171	69,580
Total	647,073	791,470	871,096	761,917	656,605	666,874

(a) Excludes wheatmeal for baking.

(b) Included with Federation of Malaya.

15. **Stocks of Wheat and Flour.**—Stocks of wheat and flour in terms of wheat held by each State at 30th November in each year 1939 and 1952 to 1956 are shown in the following table. These data are based on stocks held at mills, sidings, ports and depots as recorded by the Australian Wheat Board.

**WHEAT (INCLUDING FLOUR IN TERMS OF WHEAT): STOCKS AT
30th NOVEMBER.(a)
(*000 Bushels.)**

30th November—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1939	6,674	4,702	549	6,134	2,513	241	20,813
1952	5,881	4,432	5	4,254	2,108	187	16,867
1953	9,888	11,550	2,237	7,576	6,307	188	37,746
1954	26,458	26,937	2,487	15,413	23,499	125	94,919
1955	17,483	28,434	4,049	18,470	26,278	256	94,970
1956	21,365	22,821	1,973	15,223	22,534	265	84,181

(a) One ton of flour is treated as equivalent to 46.3 bushels of wheat.

16. **Bulk Handling and Storage of Wheat in Australia.**—(i) *Description and Development of the Bulk Handling System.* A detailed description of the bulk handling system including its advantages and disadvantages compared with other methods of handling appeared on p.p. 954–8 of Official Year Book No. 39.

New South Wales, Victoria and Western Australia have operated bulk handling systems for a number of years, but until recently no efforts have been made to introduce such a system in the other States.

Late in 1953, it became clear that Australia could not clear its stocks of wheat as quickly as in past years and in April, 1954, the Commonwealth Government arranged to finance the construction of additional storage space in New South Wales, Victoria and South Australia (Western Australia and Queensland were later included in the scheme). The Australian Wheat Board was authorized to control the expenditure of the money provided, amounting to £3½ million.

(ii) *Bulk Handling and Storage in the States.* Particulars of the operation of the bulk handling and storage system and projected extensions in the States concerned are set out below:—

(a) *New South Wales.* At the end of 1955, there were 180 elevators operated by the Grain Elevators Board (formerly the Government Grain Elevators) and situated at the more important wheat receiving stations throughout the State, as well as terminal elevators at Sydney and Newcastle. The storage capacity of the country elevators is 25,422,000 bushels. In 1955–56, 82 per cent. of the total marketable crop was handled compared with 85 per cent. in 1954–55 and 61 per cent. in 1953–54.

Additional storage capacity has been constructed at several country centres and sub-terminals at Junee, Temora and Werris Creek were enlarged to hold 4.5 million bushels each as part of the plan to meet the general shortage in storage capacity.

Temporary bulkheads were also erected to meet shortages and in 1955–56, 80 of these were used.

The State's portion of the Commonwealth loan of £3½ million, mentioned above, was used to construct additional bulk storages totalling 11,900,000 bushels; in many instances these new storages—of which 11 were in use for 1955–56—will replace temporary bulkheads which will then be dismantled.

(b) *Victoria.* The Victorian Grain Elevators Board operates 148 elevators with storage capacity totalling 17,034,000 bushels and a terminal elevator at Geelong with a capacity of 4,100,000 bushels. Storages for 18 million bushels, adjacent to the permanent terminal, have been constructed at Geelong.

Temporary measures for extending bulk handling have been adopted and sub-terminals were constructed or acquired at Dunolly, Murtoa and Warracknabeal with a capacity of

22 million bushels. Temporary bulkheads have also been used but most of these will be replaced by the construction of a total of 99 steel annex bins (many of which were completed in 1955) with total capacity of 6,435,000 bushels and 47 steel elevators, each of 100,000 bushels, to be constructed in 1956 and 1957.

In 1955-56, 98 per cent. of the total marketable crop was received as bulk wheat compared with 97 per cent. in 1954-55 and 96 per cent. in 1953-54.

(c) *Queensland.* In 1952-53, a temporary silo was provided at Pinkenba and a number of concrete silos and temporary bulkheads have subsequently been erected at country centres. Plans to extend this programme include the provision of a permanent bulk terminal at Pinkenba.

(d) *South Australia.* In 1951-52, a bulk terminal was erected by the Wheat Board at Ardrossan with storage capacity for 1,000,000 bushels. Approximately 6,645,000 bushels were shipped through that facility during the 1954-55 season.

In 1955, the South Australian Co-operative Bulk Handling Ltd. was formed, as a grower-controlled organization, to receive, store and handle bulk wheat on behalf of the Wheat Board. The Company purchased the Ardrossan terminal from the Board and commenced its programme of country bulk storage constructions, completing one storage, at Paskeville, in time to receive wheat of 1955-56 harvest. The company's plans provide not only for the expansion of bulk receival facilities in country areas but also the construction of further shipping terminals at Wallaroo, Port Lincoln and other ports.

(e) *Western Australia.* The system of storage in Western Australia differs from that in the Eastern States in that horizontal storages made of timber and galvanised iron are used. These are relatively cheap and can be moved from place to place as required. These storages are operated by Co-operative Bulk Handling Ltd. which is controlled and managed by wheat growers.

In 1955-56, there were 281 sidings equipped with bulk handling facilities and 49,627,000 bushels, comprising the whole of the marketable crop, were received.

Extension of storage facilities in 1954-55, financed from the Commonwealth loan of £3½ million, involved the erection of a storage for 5 million bushels at Midland Junction.

(f) *Tasmania.* Bulk handling of wheat has not been found necessary in this State but it is planned to erect installations at Hobart and Launceston to store wheat imported from the mainland.

17. **World Area and Production of Wheat.**—The details in the following table of the world area and production of wheat by principal countries and by continents have been compiled from official sources so far as they are available, but more particularly from the records published by the Food and Agriculture Organization of the United Nations, and the United States Office of Foreign Agricultural Service. The harvests shown for countries in the Northern Hemisphere are those garnered during the period March to October whilst those for the Southern Hemisphere cover the period November to February following.

WHEAT : AREA, PRODUCTION AND YIELD PER ACRE IN VARIOUS COUNTRIES.

Continent and Country.	Area.(a)			Production.			Yield per Acre.		
	Average 1935-39.	1954.	1955.(b)	Average 1935-39.	1954.	1955.(b)	Average 1935-39.	1954.	1955.(b)
	'000 acres.	'000 acres.	'000 acres.	'000 bushels.	'000 bushels.	'000 bushels.	bus.	bus.	bus.
North America—									
Canada	25,595	24,267	21,506	312,399	308,909	494,140	12.2	12.7	23.0
United States	57,293	54,356	47,255	758,629	983,900	936,761	13.2	18.1	19.8
<i>Total(c)</i>	84,170	80,610	70,660	1,086,000	1,325,000	1,464,000	12.9	16.4	20.7

See next page for footnotes.

WHEAT: AREA, PRODUCTION AND YIELD PER ACRE IN VARIOUS COUNTRIES—continued.

Continent and Country.	Area.(a)			Production.			Yield per Acre.		
	Average 1935-39.	1954.	1955.(b)	Average 1935-39.	1954.	1955.(b)	Average 1935-39.	1954.	1955.(b)
	'000 acres.	'000 acres.	'000 acres.	'000 bushels.	'000 bushels.	'000 bushels.	bus.	bus.	bus.
Europe—									
France ..	12,560	11,100	11,900	286,505	388,220	380,890	22.8	35.0	33.7
Italy ..	12,577	12,100	12,300	278,366	267,600	349,260	22.1	22.1	28.4
Spain ..	(d)11,253	10,670	10,536	(d)157,986	180,000	150,000	d 14.0	16.9	14.2
<i>Total(c)</i>	74,850	72,570	72,630	1,600,000	1,705,000	1,810,000	21.4	23.4	24.9
U.S.S.R. ..	104,000	(e)	(e)	1,240,000	(e)	(e)	11.9	(e)	(e)
Africa— <i>Total(c)</i>	13,850	18,580	16,990	143,000	221,000	193,000	10.3	11.9	11.4
Asia—									
China ..	(f)49,000	(e)	(e)	(f)750,000	(e)	(e)	(f)15.3	(e)	(e)
India ..	(f)25,460	26,394	27,517	262,100	294,560	327,710	10.3	11.2	11.9
Pakistan ..	(f) 9,305	10,650	10,660	117,000	137,500	118,420	12.6	12.9	11.1
Turkey ..	8,973	15,830	17,790	135,690	180,040	260,880	15.1	11.4	14.7
<i>Total(c)</i>	114,190	136,420	138,310	1,558,000	1,860,000	1,885,000	13.6	13.6	13.6
South America—									
Argentina ..	15,834	13,500	9,735	221,769	282,560	192,900	14.0	20.9	19.8
<i>Total(c)</i>	20,490	19,780	16,510	281,000	387,000	303,000	13.7	19.6	18.4
Oceania—									
Australia ..	13,128	10,673	10,166	169,744	168,617	195,443	12.9	15.8	19.2
<i>Total(c)</i>	13,349	10,774	10,239	176,873	172,720	198,500	13.2	16.0	19.4
World <i>Total(c)</i> ..	424,900	460,730	475,260	6,085,000	7,010,000	7,405,000	14.3	15.2	15.6

(a) Figures refer to harvested areas as far as possible. (b) Preliminary. (c) Totals (estimates) include allowances for any missing data for countries shown and for other producing countries not shown. (d) 1935 only. (e) Not available. See footnote (c). (f) Average of less than five years.

18. Exports—Principal Countries.—The following table shows the quantities of wheat exported from the chief exporting countries for the period 1934-38 and the years 1954 and 1955 according to statistics recently published by the Food and Agriculture Organization of the United Nations, and the United States Office of Foreign Agricultural Service.

While Australia's production of wheat averages about 3 per cent. of the world's total, its exports account for a much higher proportion of the total quantities shipped. During the five years 1934-38, Australia's share of world wheat exports was 16 per cent., but in 1955 the proportion fell to 10 per cent. The actual quantity shipped in 1955 was 10 per cent. lower than the average for 1934-38.

WHEAT(a) : EXPORTS, PRINCIPAL COUNTRIES.

Exporting Country.	Average, 1934-38.		1954.		1955.	
	Quantity.	Proportion of World Total.	Quantity.	Proportion of World Total.	Quantity.	Proportion of World Total.
	'000 bushels.	%	'000 bushels.	%	'000 bushels.	%
Canada	175,294	27.6	253,589	29.2	228,652	24.8
Argentina	122,740	19.3	111,816	12.9	131,687	14.3
Australia	102,406	16.1	72,509	8.4	92,335	10.0
United States of America	46,274	7.3	231,474	26.7	270,943	29.4
U.S.S.R. (Russia)	26,631	4.2	(b)27,928	3.2	(b)22,046	2.4
France	18,316	2.9	62,456	7.2	107,546	11.6
All other	143,993	22.6	107,363	12.4	69,040	7.5
<i>Total</i>	<i>635,654</i>	<i>100.0</i>	<i>867,135</i>	<i>100.0</i>	<i>922,249</i>	<i>100.0</i>
World Production (mil. bus.) ..	(c) 6,085		7,010		7,405	
Proportion of Australia's Production to World Production	%		%		%	
	2.8		2.4		2.6	

(a) Includes flour expressed in terms of wheat.

(b) Unofficial.

(c) Average 1935-39.

19. Imports—Principal Countries.—The principal importers of wheat, together with quantities imported, for the periods indicated, are shown in the following table:—

WHEAT(a) : IMPORTS, PRINCIPAL COUNTRIES.

Importing Country.	Average, 1934-38.		1954.		1955.	
	Quantity.	Proportion of World Total.	Quantity.	Proportion of World Total.	Quantity.	Proportion of World Total.
	'000 bushels.	%	'000 bushels.	%	'000 bushels.	%
United Kingdom	208,737	33.8	147,986	17.5	186,067	20.2
Brazil	36,387	5.9	60,486	7.2	68,121	7.4
Italy	26,043	4.2	9,763	1.2	27,998	3.0
Germany, Federal Republic of ..	(b)25,606	(b) 4.1	123,423	14.6	89,469	9.7
Netherlands	22,593	3.7	29,593	3.5	30,901	3.4
Japan	11,552	1.9	81,805	9.7	85,721	9.3
India and Pakistan	1,826	0.3	12,720	1.5	16,314	1.8
Egypt	588	0.1	2,881	0.3	514	0.1
All other	283,950	46.0	376,432	44.5	415,307	45.1
<i>Total</i>	<i>617,282</i>	<i>100.0</i>	<i>845,089</i>	<i>100.0</i>	<i>920,412</i>	<i>100.0</i>

(a) Includes flour expressed in terms of wheat.

(b) Pre-war Germany.

§ 5. Oats.

1. **Area, Production and Yield per Acre.**—Oats are usually next in importance to wheat amongst the grain crops cultivated in Australia, but while wheat grown for grain in 1955–56 accounted for 45.3 per cent., oats grown for grain represented only 14.9 per cent. of the area of all crops. The area, production and yield per acre of oats for the years 1951–52 to 1955–56 and the averages for the ten-year periods ended 1938–39 and 1954–55 are shown in the following table:—

OATS FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
AREA ('000 ACRES).								
Average, 1929–30 to 1938–39 ..	229	478	5	282	369	30	..	1,393
1951–52 ..	596	676	21	387	657	27	1	2,365
1952–53 ..	730	756	57	369	832	20	..	2,764
1953–54 ..	507	584	13	280	733	20	..	2,137
1954–55 ..	657	644	36	340	874	23	..	2,574
Average, 1945–46 to 1954–55 ..	536	583	27	313	611	20	..	2,090
1955–56 ..	902	871	36	425	1,091	29	..	3,354
PRODUCTION ('000 BUSHEL). ^(a)								
Average, 1929–30 to 1938–39 ..	3,578	5,750	68	2,233	3,973	831	4	16,437
1951–52 ..	9,395	11,151	263	5,405	7,689	594	9	34,506
1952–53 ..	12,326	12,599	1,303	6,666	10,440	286	3	43,623
1953–54 ..	8,533	9,852	199	4,321	9,590	461	5	32,961
1954–55 ..	7,667	10,021	597	4,508	9,585	452	4	32,834
Average, 1945–46 to 1954–55 ..	8,043	9,805	472	4,189	7,263	430	6	30,208
1955–56 ..	16,537	14,858	743	7,280	16,516	548	5	56,487
YIELD PER ACRE (BUSHEL). ^(a)								
Average, 1929–30 to 1938–39 ..	15.7	12.0	12.8	7.9	10.8	28.2	22.4	11.8
1951–52 ..	15.8	16.5	12.6	14.0	11.7	22.4	15.4	14.6
1952–53 ..	16.9	16.7	23.1	18.0	12.5	14.3	17.2	15.8
1953–54 ..	16.8	16.9	14.8	15.4	13.1	22.9	18.6	15.4
1954–55 ..	11.7	15.5	16.4	13.3	11.0	20.0	20.4	12.8
Average, 1945–46 to 1954–55 ..	15.0	16.8	17.7	13.4	11.9	21.4	14.1	14.5
1955–56 ..	18.3	17.1	20.8	17.1	15.1	19.1	17.1	16.8

(a) 40 lb. per bushel.

A graph showing the production of oats appears on pp. 834.

The principal oat-growing States are New South Wales, Victoria and Western Australia, which produce on the average more than 80 per cent. of the total quantity grown in Australia. South Australia also produces considerable quantities, but in Queensland and Tasmania the output is small. The production of oats for grain in Australia in 1955–56 amounted to 56,487,000 bushels which was a record. This compares with 32,834,000 bushels in 1954–55. The previous record was 43,623,000 bushels in 1952–53.

During the five seasons ending 1955–56, an average of 8.4 million bushels were exported; 1.9 million bushels were used in factories for oatmeal; and 7.5 million bushels were used for seed purposes; leaving a balance of 22.3 million bushels for stock feed (principally unprocessed) and carry-over.

The largest yield per acre recorded for Australia in the ten years ended 1955–56 was that of the season 1947–48, amounting to 19.3 bushels per acre, this being the highest yield since 1920–21. The smallest yield per acre for the same period was that recorded in the abnormally dry season 1944–45, namely 4.4 bushels which is the lowest ever recorded for Australia.

2. **Price of Oats.**—The average wholesale price in the Melbourne market for oats of good milling quality in 1955–56 was 6s. 9½d. per bushel. This represents a decrease of 20.6 per cent. on the price in 1954–55 (9s. 3d.) and an increase of 96.4 per cent. on the price in 1938–39 (3s. 5½d.).

3. **Value of Oat Crop.**—The estimated gross value of the oat crop in each State for the 1954-55 season and the value per acre were as follows:—

OATS : VALUE OF CROP, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
Aggregate value £'000	3,993	4,415	351	1,944	3,093	268	2	14,066
Value per acre	£6 1 6	£6 17 0	£9 12 7	£5 14 6	£3 10 10	£11 16 7	£10 12 4	£5 9 3

4. **Imports and Exports.**—The production of oats in Australia is sufficient to admit of a regular export trade. The quantities and values of oats exported from Australia during the years 1951-52 to 1955-56 compared with the average for the years 1934-35 to 1938-39 are shown hereunder:—

OATS : EXPORTS, AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Quantity .. '000 bus.	286	12,971	11,846	3,275	2,872	9,608
Value.. .. £'000	36	8,001	4,851	1,219	1,376	3,578

The quantity of oats imported into Australia is usually not very large, although in 1945-46 imports exceeded exports by 802,000 bushels. Canada was the chief supplier. The previous year in which imports exceeded exports was 1927-28 (by 461,000 bushels), when New Zealand was the main supplier. In 1955-56, the principal countries of destination of the exports were the United Kingdom, the Federal Republic of Germany, New Zealand, Italy and the Netherlands.

5. **Oatmeal, etc.**—The production of oatmeal amounted in 1955-56 to 20,013 tons equivalent to about 2,241,000 bushels of oats, or about 4.0 per cent. of the total production.

6. **World Production.**—The world's production of oats for the year 1955, according to preliminary details released by the United States Department of Agriculture, amounted to 4,435 million bushels, harvested from 127.0 million acres, representing an average yield of 34.9 bushels per acre. This compared with the production in the previous year of 4,275 million bushels from an area of 132.5 million acres giving an average yield of 32.3 bushels per acre. The world's average production, for the years 1934 to 1938 amounted to 3,588 million bushels from 143 million acres giving an average yield of 25.09 bushels per acre. In comparison with the average return per acre for world production in 1955 that of Australia for the same period (16.8 bushels) appears very small. Yields in excess of 40 bushels per acre are not uncommon and some European countries record averages in excess of 50 bushels per acre.

§ 6. Maize.

1. **States Growing Maize.**—Maize is grown for grain chiefly in Queensland and New South Wales, the area so cropped in these States during the 1955-56 season being 163,824 acres, or 98 per cent. of the total for Australia. In all States except South Australia, the crop is grown to some extent for green fodder, particularly in connexion with the dairying industry.

2. **Area, Production and Yield per Acre.**—Although maize for grain is grown extensively in other countries, the area sown to maize for grain in Australia has averaged only 195,539 acres during the ten years ended 1954-55. Compared with the previous year, the area in 1955-56 decreased by 2,246 acres and was considerably less than the comparatively large areas of 414,914 and 400,544 acres sown in 1910-11 and 1927-28 respectively.

There has been a considerable increase in recent years in the growing of maize from hybrid strains of seed. Varieties have been developed which are capable of producing yields per acre considerably in excess of the older open pollinated types. The expansion in areas sown to hybrid maize necessitates a parallel development in the specialized industry of growing hybrid strains of seed.

The area, production and yield per acre of maize for grain in each State for the years 1951-52 to 1955-56 and the averages for the ten-year periods ended 1938-39 and 1954-55 are given in the following table. Separate details for hybrid and other varieties are shown for New South Wales, Victoria and Queensland for 1955-56.

MAIZE FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA (ACRES).								
Average, 1929-30								
to 1938-39 ..	114,881	18,413	161,380	12	15	..	7	294,708
1951-52 ..	54,216	4,115	111,181	..	8	18	2	169,540
1952-53 ..	60,647	5,175	108,230	..	13	9	..	174,074
1953-54 ..	58,556	5,613	114,735	..	21	64	..	178,989
1954-55 ..	50,617	4,379	114,673	2	8	8	..	169,687
Average, 1945-46								
to 1954-55 ..	71,683	5,785	118,006	1	49	14	1	195,539
1955-56—								
Hybrid ..	35,511	2,730	47,353	} 6	6	65	2	a 167,441
Other ..	20,167	805	60,793					
PRODUCTION ('000 BUSHELS).(b)								
Average, 1929-30								
to 1938-39 ..	3,072	631	3,525	..	..	..	..	7,228
1951-52 ..	1,410	168	2,439	..	..	1	..	4,018
1952-53 ..	2,113	204	2,650	..	..	..	..	4,967
1953-54 ..	1,737	298	3,042	..	..	2	..	5,079
1954-55 ..	1,767	229	3,080	..	..	..	..	5,076
Average, 1945-46								
to 1954-55 ..	2,085	253	2,937	..	1	..	..	5,276
1955-56—								
Hybrid ..	1,310	149	1,357	} ..	..	1	..	4,755
Other ..	558	27	1,353					
YIELD PER ACRE (BUSHELS).(b)								
Average, 1929-30								
to 1938-39 ..	26.7	34.3	21.8	29.8	10.0	..	8.5	24.5
1951-52 ..	26.0	40.8	21.9	..	13.9	34.8	3.0	23.7
1952-53 ..	34.8	39.3	24.5	..	22.6	12.0	..	28.5
1953-54 ..	29.7	53.1	26.5	..	12.9	29.6	..	28.4
1954-55 ..	34.9	52.3	26.9	..	9.8	21.6	..	29.9
Average, 1945-46								
to 1954-55 ..	29.1	43.7	24.9	5.0	10.3	23.8	7.0	27.0
1955-56—								
Hybrid ..	36.9	54.7	28.7	} 12.5	15.0	19.4	80.0	28.4
Other ..	27.7	32.9	22.3					

(a) Includes 3 acres in the Northern Territory.

(b) 56 lb. per bushel.

The average yield for Australia for the ten-year period ended 1954-55 was 27.0 bushels per acre. Among principal producing countries during 1955 the United States of America averaged 40.6 bushels per acre and Italy 38.0 bushels.

3. Price of Maize.—The average wholesale price of maize in the Melbourne market in 1955-56 was 16s. 5d. per bushel compared with 16s. 6d. in 1954-55. In 1938-39, the comparable price for maize of similar quality was 5s. 2½d.

4. Value of Crop.—The estimated gross value of the crop in each State for the 1954-55 season and the value per acre were as follows:—

MAIZE FOR GRAIN: VALUE OF CROP, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Aggregate value .. £'000	1,495	177	1,943	..	..	..	3,615
Value per acre	£29 10 8	£40 8 7	£16 18 9	..	..	..	£21 6 1

5. Exports of Maize and Maize Products.—Details of exports of maize for the five years ended 1955-56 compared with the average of the five years ended 1938-39 are shown below.

MAIZE: EXPORTS, AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Quantity .. '000 bus.	57	188	782	504	458	185
Value £'000	9	149	703	353	301	119

In recent years only small quantities of maize have been imported.

Exports of cornflour, which prior to the 1939-45 War were very small, increased considerably during the war years, the principal country of destination being New Zealand. In 1955-56, 1,050,100 lb., valued at £32,745, were exported, compared with an annual average of only 37,000 lb. during the five years ended 1938-39. It should be noted that these figures include some quantities of "cornflour" made from wheat. Imports of cornflour into Australia are negligible.

6. World Production.—According to preliminary details released by the Food and Agriculture Organization of the United Nations, world production of maize, excluding that of the U.S.S.R., in the year 1955, amounted to 6,275 million bushels, harvested from 250 million acres, giving an average yield per acre of 25.1 bushels. This compared with production in the previous year of 5,635 million bushels from 225 million acres, yielding an average per acre of 25.0 bushels. Production (including that of the U.S.S.R.) over the years 1934 to 1938 averaged 4,525 million bushels from 218 million acres, giving an average yield per acre of 21.0 bushels.

The United States of America is the most important maize-producing country in the world and during the three years ended 1956 the area sown to maize in that country averaged 79 million acres or 32 per cent. of the world total. During the same period production averaged 3,246 million bushels or about 52 per cent. of the world total. These figures are not strictly comparable with those for other countries included in the above-mentioned world totals as the area, and an estimate of grain equivalent, of maize used as green fodder are included. In recent years, maize grain actually harvested in the United States has amounted to about 90 per cent. of the total crop.

A graph showing the production of maize in Australia appears on p. 834.

§ 7. Barley.

1. Area, Production and Yield per Acre.—The area sown to barley for grain expanded considerably during the ten years preceding the 1939-45 War—from 383,000 acres in 1930-31 to 836,000 acres in 1939-40. This increase was followed by a decline to 443,000 acres in 1943-44, but the area sown has increased in succeeding years, and in 1955-56 reached the record level of 1,894,000 acres. Victoria was originally the principal barley-growing State, but since 1913-14 its place has been taken by South Australia which accounted for 55 per cent. of the Australian acreage in 1955-56. There has been a substantial increase in the acreage sown in most States in recent years particularly in Western Australia and Queensland. Small areas of barley are sown for hay, and more considerable quantities are sown for green forage but these are not included in this section. The production of barley for grain in Australia in 1955-56, at 41,655,000 bushels was the highest ever recorded. The area, production and yield per acre of barley for grain in the several States for the years 1951-52 to 1955-56 and the averages for the ten-year periods ended 1938-39 and 1954-55 are shown in the following table:—

BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA ('000 ACRES).								
Average, 1929-30 to 1938-39 ..	11	107	8	331	31	7	..	495
1951-52 ..	11	186	28	832	57	4	..	1,118
1952-53 ..	18	235	72	937	107	8	..	1,377
1953-54 ..	32	375	56	1,122	209	9	..	1,803
1954-55 ..	37	280	87	1,020	260	7	..	1,691
Average, 1945-46 to 1954-55 ..	22	216	37	757	102	7	..	1,141
1955-56—								
Malting (2-Row)	37	291	125	981	70	6	..	1,510
Other (6-Row)	17	18	21	61	267	..	..	384
Total ..	54	309	146	1,042	337	6	..	1,894

BARLEY FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE—*continued.*

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
PRODUCTION ('000 BUSHELS).(a)								
Average, 1929-30 to 1938-39 ..	173	1,976	132	5,714	371	186	1	8,553
1951-52 ..	167	3,620	450	16,826	695	150	1	21,909
1952-53 ..	341	4,734	2,109	25,902	1,742	217	..	35,045
1953-54 ..	680	7,932	1,139	28,492	2,733	296	..	41,272
1954-55 ..	500	4,946	2,573	18,376	2,805	200	..	29,400
Average, 1945-46 to 1954-55 ..	353	4,181	898	16,250	1,278	179	..	23,139
1955-56—								
Malting (2-Row)	764	6,488	3,648	23,398	994	178	..	35,470
Other (6-Row)	356	389	568	1,200	3,659	13	..	6,185
Total ..	1,120	6,877	4,216	24,598	4,653	191	..	41,655
YIELD PER ACRE (BUSHELS).(a)								
Average, 1929-30 to 1938-39 ..	16.6	18.4	16.7	17.3	11.9	25.2	18.9	17.3
1951-52 ..	15.0	19.4	16.0	20.2	12.3	35.3	26.1	19.6
1952-53 ..	19.4	20.2	29.3	27.6	16.3	27.0	..	25.5
1953-54 ..	21.4	21.2	20.3	25.4	13.1	31.4	..	22.9
1954-55 ..	13.6	17.6	29.5	18.0	10.8	27.5	..	17.4
Average, 1945-46 to 1954-55 ..	16.3	19.3	24.3	21.5	12.5	27.5	..	20.3
1955-56—								
Malting (2-Row)	20.6	22.3	29.2	23.9	14.1	29.9	..	23.5
Other (6-Row)	20.8	21.1	27.4	19.7	13.7	34.4	..	16.1
Total ..	20.7	22.2	29.0	23.6	13.8	30.2	..	22.0

(a) 50 lb. per bushel.

For Australia as a whole, about 80 per cent. of the area of barley for grain in 1955-56 was sown with malting or 2-row barley while the remainder consisted of 6-row, or feed, varieties. The proportion, however, varied considerably in the several States. The consumption of barley during the season 1955-56 was as follows:—malt works, 7,829,000 bushels; flour and other grain mills, 592,000 bushels; distilleries, 42,000 bushels; exports, 28,246,000 bushels; leaving a balance of 4,946,000 bushels for feed, seed and other purposes.

The following table sets out the acreage and production of malting and other barley in Australia during the seasons 1951-52 to 1955-56 and the averages for the ten-year periods ended 1938-39 and 1954-55.

BARLEY, MALTING AND OTHER: AREA AND PRODUCTION, AUSTRALIA.

Season.	Area. (‘000 Acres.)			Production. (‘000 Bushels.)			Yield per Acre. (Bushels.)		
	Malting (2-row).	Other (6-row).	Total.	Malting (2-row).	Other (6-row).	Total.	Malting (2-row).	Other (6-row).	Total.
Average, 1929-30 to 1938-39 ..	428	67	495	7,480	1,073	8,553	17.5	16.0	17.3
1951-52 ..	965	153	1,118	19,477	2,432	21,909	20.2	15.9	19.6
1952-53 ..	1,123	254	1,377	29,633	5,412	35,045	26.4	21.3	25.5
1953-54 ..	1,482	321	1,803	35,923	5,349	41,272	24.2	16.7	22.9
1954-55 ..	1,391	300	1,691	25,622	3,778	29,400	18.4	12.6	17.4
Average 1945-46 to 1954-55 ..	976	165	1,141	20,404	2,735	23,139	20.5	16.6	20.3
1955-56 ..	1,510	384	1,894	35,470	6,185	41,655	23.5	16.1	22.0

A graph showing the production of barley appears on p. 834.

During the last ten-year period shown, the average area of barley of the malting, or 2-row, class was nearly six times the corresponding figure for barley of the 6-row, or feed, class. The yield per acre for malting barley was 23 per cent. higher than that for 6-row barley.

2. **Australian Barley Board.**—Following the outbreak of war in 1939, the Australian Barley Board, representative of the whole industry, was formed, and the Commonwealth

Government acceded to its request to acquire the entire 1939-40 barley crop, which was placed under the control of the Board. A pool was established from which proceeds were distributed with appropriate margins for different grades of barley.

The Board was responsible for the marketing and storage of barley, and, like the Australian Wheat Board, appointed licensed receivers to receive grain on its behalf and to act as agents for all local and overseas sales.

Following the decision of the Commonwealth Government not to acquire barley in the smaller producing States after 1941-42, the Governments of Western Australia and Queensland established State Barley Boards to control marketing in these States.

The Commonwealth Government did not acquire barley after the 1947-48 crop, and the Victorian and South Australian Governments formed a joint board under the same name as the former Commonwealth board to market the 1948-49 and subsequent crops of the two States. Details of the acquisitions from 1950-51 to 1955-56 are shown in the table below.

AUSTRALIAN BARLEY BOARD ; BARLEY ACQUIRED, SOLD, ETC.

Pool.	Quantity	Quantity.	Total	Total Net
	Acquired.	Sold.(a)	Advances made per Bushel on 2-row No. 1 Grade less freight.	Payments to Growers.
	'000 bushels.	'000 bushels.	<i>s. d.</i>	£
No. 12 (1950-51 Crop)	19,976	20,152	(b) 11 2.488	10,721,180
„ 13 (1951-52 „)	19,340	19,488	15 8.28	14,563,936
„ 14 (1952-53 „)	29,087	29,103	16 2.01	21,359,168
„ 15 (1953-54 „)	34,430	34,586	10 4.101	15,417,374
„ 16 (1954-55 „)	20,679	20,709	12 10.92	11,953,430
„ 17 (1955-56 „)	29,357	29,438	(c) 9 6	11,835,364

(a) Includes surplus in out-turn. (b) Paid to growers in the northern part of South Australia. Growers in the south-east of South Australia and Victoria received an additional 2d per bushel. (c) As at 30th April 1957. At that date it was estimated that the amount still to be paid to growers was 9.441d. per bushel.

3. Prices.—The average wholesale price for 2-row English malting barley in the Melbourne market during 1955-56 was 14s. 7½d. compared with 14s. 6½d. in 1954-55 and 3s. 5½d. in 1938-39.

4. Value of Barley Crop.—The estimated gross value of the barley crop in each State for the 1954-55 season and the value per acre are shown in the following table:—

BARLEY FOR GRAIN: VALUE OF CROP, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Aggregate value .. £'000	333	3,155	1,427	11,622	1,554	166	18,257
Value per acre	£9 0 9	£11 4 10	£16 7 0	£11 7 11	£5 19 8	£22 18 7	£10 15 11

5. Exports.—Australian exports of barley during the five years ended 1955-56 averaged 19,532,000 bushels, South Australia being the principal exporting State and the United Kingdom, the Netherlands and Japan the principal countries to which barley was shipped. Particulars of Australian exports for the years 1951-52 to 1955-56 together with the average for the five years ended 1938-39 are shown in the following table:—

BARLEY: EXPORTS, AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Quantity .. '000 bus.	3,279	12,062	22,239	26,949	18,867	17,539
Value .. £'000	483	11,154	19,245	14,870	10,357	10,471

Imports of barley in recent years have been negligible.

In addition to exports of barley grain, there is also an export of Australian pearl and Scotch barley, the total for 1955-56 amounting to 356,142 lb., valued at £11,961, consigned mainly to Malaya.

6. Malt.—(i) *Production.* Details of the quantity of grain used and the production of barley malt are given in the following table:—

BARLEY MALT: GRAIN USED AND MALT PRODUCED, AUSTRALIA.

Particulars.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Grain used . . '000 bus.	3,730	6,063	6,505	7,118	7,629	7,803
Malt produced '000 bus.(a)	3,621	6,073	6,620	7,078	7,517	7,782

(a) 40 lb. per bushel.

(ii) *Imports and Exports.* The production of malt in Australia was sufficient to meet local requirements and to provide a margin for export until 1947-48 but from 1948-49 to 1951-52 imports exceeded exports by an increasing quantity, the net imports reaching 266,000 bushels in 1951-52. In 1952-53, there was a small net export and net exports have increased steadily since. In 1954-55 and 1955-56, no malt was imported and exports amounting to 368,247 bushels valued at £372,177 in 1954-55 and 451,687 bushels valued at £502,046 in 1955-56 were recorded.

7. *World Production.*—In comparison with the barley production of other countries, that of Australia is extremely small. The main producers in 1955 were the United States of America and Canada. China is also normally a major producer, but details for 1955 are not available. Australian production in that year was only a little more than one per cent. of the world total.

According to preliminary results compiled by the Food and Agriculture Organization of the United Nations, world production of barley in the year 1955, excluding that of the U.S.S.R., amounted to 2,562 million bushels harvested from 112.2 million acres, equivalent to a yield per acre of 22.8 bushels. This compared with the production of 2,465 million bushels in the previous year from 110 million acres, giving a yield per acre of 22.4 bushels. Production, including that of the U.S.S.R., over the years 1934-38 averaged 2,273 million bushels from 114.6 million acres, representing an average yield of 19.8 bushels per acre.

§ 8. Rice.

The rice-growing areas of the world are confined almost entirely to Asia although rice is grown in limited quantities in other countries. In Australia, rice was first cultivated at the Yanco Experimental Farm in New South Wales, but it was not grown commercially until 1924-25 when 16,240 bushels were produced from 153 acres. Favoured by high average yields and protected by tariff, rice culture made rapid progress in the Murrumbidgee Irrigation Area until local requirements were met and a small surplus became available for export. The acreage to be sown in this area is controlled as the quantity of water available is limited.

In 1956, the Commonwealth Government entered into an agreement for the development of large scale rice-growing in the Northern Territory. The agreement, which was made with a company financed by American and Australian interests, granted a 30 year lease over 750,000 acres of sub-coastal plains east of Darwin and provided for the development of 500,000 acres of land for rice-growing within 15 years.

The area sown in 1955-56 was a record at 41,182 acres, the previous highest area being 40,690 acres in 1943-44. Production was 4,725,000 bushels in 1955-56 which was 355,000 bushels less than the record production of 5,080,000 bushels in 1954-55.

A graph showing the production of rice appears on p. 834.

The bulk of Australia's exports of rice, which had gone to the United Kingdom in years prior to 1938-39, is shipped now to islands in the South-East Asia area.

Details relating to area, production and trade for the years 1951-52 to 1955-56, compared with the averages for the years 1934-35 to 1938-39, are shown in the following table:—

RICE : AREA, PRODUCTION AND TRADE, AUSTRALIA.(a)

Season.	No. of Holdings Growing Rice. (b)	Area.	Production (Paddy Rice).		Average Yield (Paddy) per Acre.	Imports.		Exports.	
			Quantity.	Gross Value. (c)		Un-cleaned.	Cleaned.	Un-cleaned.	Cleaned.
			'000 Bushels. (d)	£'000.		Bushels. (d)	Centals.	Centals.	Centals.
Average, 1934-35 to 1938-39 ..	(e) 313	22,823	2,274	450	99.7	2,124	38,272	9,357	271,851
1951-52 ..	452	35,664	3,048	2,108	85.5	3	18	4,140	559,395
1952-53 ..	496	34,519	3,964	3,338	114.8	136	2,223	2,126	532,828
1953-54 ..	539	38,909	4,069	3,197	104.6	(f)	(f)	18,758	775,489
1954-55 ..	573	38,690	5,080	3,430	131.3	(f)	(f)	62,571	618,313
1955-56 ..	620	41,182	4,725	3,405	114.7	(f)	(f)	200,813	760,400

(a) Rice-growing in Australia has been practically confined to New South Wales with very small acreages only being sown in Queensland, Western Australia and the Northern Territory in recent seasons. (b) Twenty acres or more in area. (c) Excludes the value of straw. (d) Forty-two lb. per bushel. (e) 1938-39 figure, previous years not collected. (f) Not available.

§ 9. Sorghum for Grain.

The growing of sorghum for grain on an extensive scale is a recent development in Australia. No details of the area and production of this cereal are available prior to 1939-40, but the output was of little importance. The climatic conditions of Queensland and northern New South Wales are particularly suited for the growing of sorghum and so far, development has been restricted mainly to these areas, and more particularly to Queensland which accounts for the greater portion of the area sown. The grain produced is fed to livestock and has become an important source of supply for supplementing other coarse grains for the feeding of livestock. Other sorghums are grown in Australia mainly as green fodder, hay and silage (sweet sorghums and Sudan grass) and for the production of brush for broom manufacture (broom millet). Particulars of the area and production of sorghum grown for grain are given in the following table.

GRAIN SORGHUM : AREA, PRODUCTION AND YIELD PER ACRE, AUSTRALIA.

Season.	Area.			Production.(a)			Yield per Acre.(a)		
	N.S.W.	Q'land.	Total. (b)	N.S.W.	Q'land.	Total. (b)	N.S.W.	Q'land.	Total. (b)
	Acres. (c)	Acres.	Acres. (d)	Bushels. (c)	Bushels.	Bushels. (d)	Bushels. (c)	Bushels.	Bushels. (d)
1939-40 ..	7,101	4,397	11,498	41,487	57,936	99,423	5.8	13.2	13.2
1951-52 ..	7,101	169,558	176,660	41,487	2,651,799	2,693,289	5.8	15.6	15.3
1952-53 ..	4,982	190,619	195,601	88,905	3,239,133	3,328,038	17.9	17.0	17.0
1953-54 ..	7,053	181,819	188,872	129,063	4,039,779	4,168,842	18.3	22.2	22.1
1954-55 ..	13,069	202,532	215,688	272,604	5,082,762	5,356,335	20.9	25.1	24.8
1955-56 ..	23,697	155,527	179,298	662,973	3,960,195	4,624,273	28.0	25.5	25.8

(a) 60 lb. per bushel. (b) Includes small areas sown and quantities produced in other States. (c) Not available. (d) Queensland only.

§ 10. Potatoes.

1. Area, Production and Yield per Acre.—Victoria possesses particular advantages for the growing of potatoes, as the rainfall is generally satisfactory and the climate is unfavourable to the spread of Irish blight; consequently, the crop is widely grown. The principal areas of that State are the central highlands, and the south-western and Gippsland districts. Tasmania comes next in order of acreage sown, although the production exceeded that of Victoria in some of the war years. New South Wales occupies third place in acreage and production. The area of these three States accounted for 76 per cent. of the total for Australia in 1955–56.

The area sown, production and yield per acre of potatoes in each State during the years 1951–52 to 1955–56 and the averages for the ten-year periods ended 1938–39 and 1954–55 are shown hereunder:—

POTATOES : AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
AREA (ACRES).									
Average, 1929–30 to 1938–39 ..	19,199	54,658	11,039	5,042	4,953	34,684	(a)	30	129,605
1951–52 ..	19,034	42,108	11,465	6,971	6,885	31,514	(a)	168	118,145
1952–53 ..	18,119	52,851	11,641	9,231	8,079	35,347	(a)	127	135,395
1953–54 ..	16,513	52,745	9,382	7,023	8,068	34,524	(a)	112	128,367
1954–55 ..	13,897	44,075	9,621	6,037	7,563	26,209	5	71	107,478
Average, 1945–46 to 1954–55 ..	19,349	51,950	11,212	7,058	7,431	36,546	(a)	116	133,662
1955–56 ..	13,270	37,020	10,202	5,373	6,826	20,842	..	74	93,607
PRODUCTION (TONS).									
Average, 1929–30 to 1938–39 ..	44,122	150,238	18,100	20,202	23,410	94,500	(a)	63	350,635
1951–52 ..	52,020	178,399	33,001	43,898	49,930	150,500	(a)	1,017	508,765
1952–53 ..	51,132	133,148	35,051	43,880	52,759	114,500	(a)	663	431,133
1953–54 ..	58,046	213,714	32,628	45,044	53,708	144,300	(a)	514	547,954
1954–55 ..	47,700	206,577	30,651	38,362	43,565	101,000	4	330	468,189
Average, 1945–46 to 1954–55 ..	57,127	184,463	29,975	37,967	44,715	143,760	(a)	619	498,626
1955–56 ..	44,162	163,239	37,561	36,460	42,079	77,930	..	439	401,870
YIELD PER ACRE (TONS).									
Average, 1929–30 to 1938–39 ..	2.30	2.75	1.64	2.50	4.73	2.72	(a)	2.09	2.71
1951–52 ..	2.73	4.24	2.88	6.30	7.25	4.78	(a)	6.05	4.31
1952–53 ..	2.82	2.52	3.01	4.75	6.53	3.24	(a)	5.22	3.18
1953–54 ..	3.52	4.05	3.48	6.41	6.66	4.18	(a)	4.59	4.27
1954–55 ..	3.43	4.69	3.19	6.35	5.76	3.85	0.80	4.65	4.36
Average, 1945–46 to 1954–55 ..	2.95	3.55	2.67	5.38	6.02	3.93	(a)	5.34	3.73
1955–56 ..	3.33	4.41	3.68	6.79	6.16	3.74	..	5.93	4.29

(a) Not available.

After the outbreak of war in the Pacific in December, 1941, the area sown to potatoes increased rapidly and reached a maximum of 241,803 acres in 1944–45. Areas sown in subsequent seasons were considerably less, however, and showed a general decline to the figure for the 1955–56 season, 93,607 acres.

Compared with the yield per acre obtained in other countries, that returned for Australia is low; the production in New Zealand, for example, averaged 6.74 tons per acre in 1954–55 from an area of about 20,000 acres, as compared with a record yield of 4.36 tons per acre in Australia in 1954–55, and 4.29 tons per acre in 1955–56.

2. **Gross Value of Potato Crop.**—The estimated gross value of the potato crop of each State for the 1954–55 season and the value per acre are shown in the following table.

POTATOES : VALUE OF CROP, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
Aggregate value £'000	914	5,840	766	675	1,175	4,073	6	13,449
Value per acre £ s. d.	65 15	2,132 9 9	79 12 11	111 14	1'155 6 10	155 8 4	89 3	1,125 2 7

3. **Consumption.**—The annual consumption of potatoes in Australia during each of the three years 1953–54 to 1955–56 amounted to 485,400 tons, 417,100 tons and 373,400 tons respectively, or 122.2 lb., 102.8 lb. and 89.8 lb. respectively per head of population. These figures exclude the quantities used for seed, which averaged about 55,000 tons annually over this period. Consumption during the three years ended 1938–39 averaged 318,500 tons (103.8 lb. per head of population) excluding 37,000 tons for seed. New South Wales, Queensland and, in some seasons, South Australia do not produce the quantities necessary for their requirements and must import from Tasmania and Victoria which have a surplus.

4. **Marketing.**—Commonwealth control of potato marketing under war-time legislation ceased at the end of 1948 with the completion of sales of the 1947–48 crop.

Potato Marketing Boards were subsequently established in all States under separate State legislation. The Queensland Board was not extended when its term ended in 1954, and the New South Wales Board was voted out by growers in 1956. As the Victorian Board does not acquire the State crop, potato marketing is conducted now chiefly on an open marketing system.

5. **Exports.**—Prior to the 1939–45 War, small quantities of potatoes were exported, principally to the Pacific Islands and Papua. After the war, the export trade expanded considerably. It reached a peak in 1952–53 but then declined. Details showing exports for the years 1951–52 to 1955–56 and the annual average for the period 1934–35 to 1938–39 are given in the following table:—

POTATOES : EXPORTS, AUSTRALIA.

Particulars.	Average, 1934–35 to 1938–39.	1951–52.	1952–53.	1953–54.	1954–55.	1955–56.
Quantity .. tons	1,884	12,468	37,570	4,010	3,473	3,478
Value .. £'000	17	437	1,237	155	109	225

Imports of potatoes are negligible.

§ 11. Onions.

1. **Area, Production and Yield per Acre.**—Australia's supply of onions comes chiefly from Victoria, which accounted for 47.6 per cent. of the total area and 50.9 per cent. of the quantity produced in 1955–56. Queensland came next with 35.4 per cent. of the area and 23.0 per cent. of the production, leaving a balance of 17.0 per cent. of area and 26.1 per cent. of production distributed among the remaining four States. The Victorian crop consists almost entirely of brown onions of good keeping qualities, and the bulk of the crop is grown in a small section of the Western Division of the State, where soil conditions have been found to be particularly suitable for onion growing on a commercial scale. Details of the area, production and yield per acre are given in the following table for the years 1951–52 to 1955–56 together with averages for the ten-year periods ended 1938–1939 and 1954–55.

ONIONS : AREA, PRODUCTION AND AVERAGE YIELD.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA (ACRES).								
Average, 1929-30 to 1938-39	124	6,159	840	450	109	5	3	7,690
1951-52	401	4,745	2,527	620	334	50	5	8,682
1952-53	363	3,866	2,813	552	414	49	9	8,066
1953-54	270	3,641	2,497	471	375	18	7	7,279
1954-55	285	3,970	2,807	512	390	21	9	7,994
Average, 1945-46 to 1954-55	380	5,137	2,466	521	405	31	6	8,946
1955-56	318	3,337	2,480	524	321	22	8	7,010
PRODUCTION (TONS).								
Average, 1929-30 to 1938-39	354	35,431	2,548	3,414	814	20	11	42,592
1951-52	1,937	31,150	9,691	6,302	3,855	243	38	53,216
1952-53	1,171	23,690	11,542	5,500	5,409	196	55	47,563
1953-54	1,325	22,783	11,957	4,975	4,626	87	14	45,767
1954-55	1,340	26,091	12,243	4,790	4,322	107	71	48,964
Average, 1945-46 to 1954-55	1,513	31,714	10,723	5,129	4,007	137	32	53,255
1955-56	1,759	20,299	9,157	4,911	3,547	140	42	39,855
YIELD PER ACRE (TONS).								
Average, 1929-30 to 1938-39	2.85	5.75	3.03	7.59	7.47	4.00	3.67	5.54
1951-52	4.83	6.56	3.83	10.16	11.54	4.86	7.60	6.13
1952-53	3.23	6.13	4.10	9.96	13.07	4.00	6.11	5.90
1953-54	4.91	6.26	4.79	10.56	12.34	4.83	2.00	6.29
1954-55	4.70	6.57	4.36	9.36	11.08	5.10	7.89	6.13
Average, 1945-46 to 1954-55	3.98	6.17	4.35	9.84	9.89	4.42	5.33	5.95
1955-56	5.53	6.08	3.69	9.37	11.05	6.36	5.25	5.69

2. **Gross Value of Onion Crop.**—The estimated gross value of the onion crop and the value per acre are shown in the following table for the 1954-55 season:—

ONIONS : VALUE OF CROP, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.	
Aggregate value £'000	58	841	352	194	134	4	3	1,586	
Value per acre £ s. d.	203 6	0 211 17	10 125 7	11 378 17	11 344 5	8 188 11	5 341 4	5 198 9	1

3. **Consumption.**—The annual consumption of onions in Australia averaged 44,600 tons or 11.0 lb. per head of population during the three years ended 1955-56, compared with 40,600 tons or 13.2 lb. per head during the three years ended 1938-39. These figures exclude an estimated wastage which averaged 2,300 tons and 2,100 tons respectively.

4. **Imports and Exports.**—Onions are the only root crop, other than potatoes, in which any considerable overseas trade is carried on by Australia. In 1955–56, exports amounted to 981 tons, valued at £54,944, and were shipped mainly to New Caledonia, Singapore, Papua and Hong Kong. The quantity of exports in 1954–55 was 2,706 tons, valued at £104,440. There were no imports in 1954–55 and 1955–56.

Details relating to fresh vegetables other than potatoes and onions are given in § 17.

§ 12. Hay.

1. **General.**—(i) *Area and Production.* As already stated, the chief crop in Australia is wheat grown for grain. Up to and including 1946–47, hay was next in importance in area but, in 1947–48, it gave place to oats (for grain). In the following year, 1948–49, green fodder replaced hay as the third most important crop and hay has since remained in fourth position.

In 1955–56, the hay area represented 10.0 per cent. of the total area cropped. A graph showing the area sown to hay since 1860 appears on p. 831. In most European countries, the hay consists almost entirely of meadow and other grasses, but, in Australia, a very large proportion consists of oats, wheat and lucerne. The area, production and yield per acre of hay of all kinds in the several States during the years 1951–52 to 1955–56 and the averages for the ten-year periods ended 1938–39 and 1954–55 are shown below:—

HAY : AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA ('000 ACRES).								
Average, 1929–30 to 1938–39 ..	757	1,111	68	541	432	83	2	2,994
1951–52 ..	334	640	44	257	174	98	2	1,549
1952–53 ..	388	753	66	214	227	110	3	1,761
1953–54 ..	450	807	71	262	219	123	3	1,935
1954–55 ..	524	739	76	257	289	96	3	1,984
Average, 1945–46 to 1954–55 ..	458	709	63	289	232	99	3	1,853
1955–56 ..	562	879	63	326	269	137	5	2,241
PRODUCTION ('000 TONS).								
Average, 1929–30 to 1938–39 ..	959	1,263	104	577	464	120	3	3,490
1951–52 ..	451	1,047	80	380	211	172	4	2,345
1952–53 ..	579	1,245	136	318	290	192	5	2,765
1953–54 ..	639	1,361	140	369	294	241	5	3,049
1954–55 ..	680	1,208	171	330	305	158	4	2,856
Average, 1945–46 to 1954–55 ..	601	1,116	123	385	271	166	4	2,666
1955–56 ..	846	1,526	137	461	384	261	10	3,625
YIELD PER ACRE (TONS).								
Average, 1929–30 to 1938–39 ..	1.27	1.14	1.54	1.07	1.07	1.44	1.21	1.17
1951–52 ..	1.35	1.63	1.83	1.48	1.22	1.76	1.58	1.51
1952–53 ..	1.49	1.65	2.05	1.48	1.28	1.75	1.54	1.57
1953–54 ..	1.42	1.69	1.99	1.41	1.34	1.96	1.52	1.58
1954–55 ..	1.30	1.63	2.25	1.28	1.05	1.64	1.33	1.44
Average, 1945–46 to 1954–55 ..	1.31	1.57	1.96	1.33	1.17	1.67	1.44	1.44
1955–56 ..	1.51	1.74	2.17	1.41	1.42	1.91	2.08	1.62

Owing to various causes, particularly the variation in the relative prices of grain and hay and the favourableness or otherwise of the season for a grain crop, the area of hay is apt to fluctuate considerably. The area under hay in Australia during the season 1915–16, 3,597,771 acres, was the largest on record, whilst the average for the ten-years ended 1954–55 was 1,852,509 acres.

A graph showing the production of hay appears on p. 834.

(ii) *Varieties Grown.* Information regarding areas cut for hay is available for all States, and details for 1955–56 are given in the following table.

HAY : AREA UNDER VARIOUS KINDS GROWN, 1955-56.
(Acres.)

State.	Wheaten.	Oaten.	Lucerne.	Other.	Total.
New South Wales	84,487	102,173	195,204	179,608	561,472
Victoria	33,003	198,873	69,305	578,107	879,288
Queensland	5,197	4,134	49,946	3,827	63,104
South Australia	61,524	139,325	20,932	103,892	325,673
Western Australia	58,005	133,082	552	77,800	269,439
Tasmania	2,737	23,668	1,276	109,476	137,157
Australian Capital Territory ..	191	1,922	1,306	1,308	4,727
Australia	245,144	603,177	(a)338,522	1,054,018	a 2,240,861

(a) Includes one acre in the Northern Territory.

For all States and the Territories combined, the proportions of the areas sown to the principal kinds of hay in 1955-56 were 27 per cent. for oaten, 11 per cent. for wheaten, 15 per cent. for lucerne, and 47 per cent. for other hay. In that year, oaten hay predominated in the States of South Australia and Western Australia, lucerne in New South Wales and Queensland, and meadow and grass in Victoria and Tasmania.

2. **Value of Hay Crop.**—The following table shows the estimated gross value, and the value per acre, of the hay crop of the several States for the 1954-55 season:—

HAY : VALUE OF CROP, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
Aggregate value £'000	9,228	11,842	2,393	2,861	2,781	1,715	58	30,878
Value per acre ..	£17 12 4	£16 0 6	£31 9 3	£11 3 1	£9 12 3	£17 15 6	£18 17 1	£15 11 3

3. **Farm Stocks of Hay.**—Details of stocks of hay held on farms are now collected at the annual census of farm production. Particulars of stocks so held at 31st March in each year 1952 to 1956 are given in the table below.

STOCKS OF HAY HELD ON FARMS.
(Tons.)

31st March—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
1952 ..	500,596	1,129,163	29,766	418,734	142,711	129,893	2,702	2,353,565
1953 ..	628,977	1,347,363	97,492	402,477	186,523	145,375	5,119	2,813,326
1954 ..	700,367	1,479,299	106,794	420,423	216,023	185,549	4,775	3,113,230
1955 ..	809,263	1,553,289	156,115	447,102	207,664	145,112	3,269	3,321,814
1956 ..	830,619	1,870,214	149,187	474,456	306,586	270,138	7,778	3,908,978

4. **Imports and Exports.**—Under normal conditions, hay, whether whole or in the form of chaff, is somewhat bulky for oversea trade, and consequently does not figure largely amongst the imports and exports of Australia. During 1955-56, exports amounted to 2,064 tons, valued at £43,222.

§ 13. Green Fodder.

1. **Nature and Extent.**—Considerable areas are devoted to the growing of green fodder, mainly in connexion with the dairying industry. Consequently, green fodder ranks after wheat and oats (for grain) as the third most important crop, in area, grown in Australia. The areas recorded in respect of green fodder include areas of crops cut for feeding to live-stock as green fodder, or ensilage, together with areas fed off to stock as green forage. Included with the latter are areas which may have been sown with the intention of harvesting

for grain, but which, due to adverse seasonal conditions, showed no promise of producing grain or even hay and were fed off to live-stock. The principal crops cut for green fodder are oats, wheat and lucerne, while small quantities of barley, sorghum, maize, rye and sugar-cane also are so used. In 1955-56, the area under green fodder (2,648,799 acres) consisted of oats (1,558,256 acres), lucerne (400,486 acres), wheat (120,835 acres), sorghum (71,514 acres), maize (41,569 acres), barley (130,298 acres), rye (30,583 acres), sugar-cane (1,683 acres) and other crops (293,575 acres). Particulars concerning the area of green fodder in the several States during each of the years 1951-52 to 1955-56 are given in the following table, together with the average for the period of ten years ended 1938-39.

GREEN FODDER : AREA.
(Acres.)

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1929-30 to 1938-39 ..	482,989	(a)	347,804	106,820	189,332	24,255	(a)	656	(a)
1951-52 ..	672,633	45,661	604,190	385,079	636,728	57,548	(a)	1,225	2,403,064
1952-53 ..	661,767	40,303	572,212	285,857	574,790	60,142	(a)	1,108	2,196,179
1953-54 ..	761,552	56,210	663,097	365,301	507,756	60,127	(a)	1,218	2,415,261
1954-55 ..	934,395	77,135	649,607	360,359	639,086	70,945	32	988	2,732,547
1955-56 ..	826,789	75,815	689,469	334,957	666,398	54,401	..	970	2,648,799

(a) Not available.

2. Value of Green Fodder Crops.—The value of these crops is variously estimated in the several States, and the Australian total for the season 1954-55, excluding Western Australia, may be taken as approximately £6,440,000.

§ 14. Sugar-cane.

1. Area.—Sugar-cane growing appears to have commenced in Australia in or about 1862, and is confined to New South Wales and Queensland. A brief outline of the development of the industry was included in earlier issues of the Official Year Book (see No. 38, p. 985). The area of sugar-cane in Australia for the seasons 1951-52 to 1955-56 and the averages for the ten-year periods ended 1938-39 and 1954-55 are shown in the following table. In 1955-56, the total area of sugar-cane (excluding areas cut for green fodder) was 499,065 acres which was slightly below the record area of 501,859 acres in 1954-55.

SUGAR-CANE : AREA.(a)
(Acres.)

Season.	New South Wales.			Queensland.			Australia.			Total.
	Area crushed.	Area of stand-over and newly-planted cane.	Area cut for plants.	Area crushed.	Area of stand-over and newly-planted cane.	Area cut for plants.	Area crushed.	Area of stand-over and newly-planted cane.	Area cut for plants.	
Average, 1929-30 to 1938-39 ..	9,106	9,023	140	229,327	75,409	9,368	238,433	84,432	9,508	332,373
1951-52 ..	8,354	5,974	191	273,370	101,731	13,247	281,724	107,705	13,438	402,867
1952-53 ..	5,202	8,581	277	274,757	131,724	13,353	279,959	140,305	13,630	433,894
1953-54 ..	7,787	6,869	468	332,703	120,929	12,846	340,490	127,798	13,314	481,602
1954-55 ..	6,566	8,078	474	367,640	107,512	11,589	374,206	115,590	12,063	501,859
Average, 1945-46 to 1954-55 ..	7,364	7,958	322	270,740	101,803	12,348	278,104	109,761	12,670	400,535
1955-56 ..	7,522	8,728	670	365,252	104,782	12,111	372,774	113,510	12,781	499,065

(a) Excludes areas cut for green fodder.

2. **Productive and Unproductive Cane.**—The areas shown in the preceding table do not include the small acreage cut for green fodder, which in 1955-56 amounted to 1,683 acres. The whole area planted is not cut for crushing during any one season, there being always a considerable amount of young and "stand-over" cane as well as a small quantity required for plants. Thus the season in which the highest acreage is recorded may not show the greatest area of productive cane cut for crushing.

3. **Production of Cane and Sugar.**—For Queensland, statistics of the production of sugar-cane are not available for seasons prior to 1897-98. In that season, the total for Australia was 1,073,883 tons, compared with 8,900,702 tons in the 1955-56 season. The record production was 10,086,517 tons in 1954-55.

The average production of cane during the ten seasons ended 1954-55 was 6,516,573 tons, and of raw sugar 890,048 tons. Particulars of the total production of cane and sugar for the years 1951-52 to 1955-56 and the averages for the ten-year periods ended 1938-39 and 1954-55 are as follows.

SUGAR-CANE : PRODUCTION OF CANE AND SUGAR.

(Tons.)

Season.	New South Wales.		Queensland.		Australia.	
	Cane.	Sugar.(a)	Cane.	Sugar.(a)	Cane.	Sugar.(a)
Average, 1929-30 to						
1938-39	241,402	30,317	4,461,988	626,789	4,703,390	657,106
1951-52	321,388	41,060	5,005,172	704,341	5,326,560	745,401
1952-53	125,714	14,272	6,841,536	934,614	6,967,250	948,886
1953-54	263,249	34,004	8,751,063	1,220,383	9,014,312	1,254,387
1954-55	222,213	26,301	9,864,304	1,301,245	10,086,517	1,327,546
Average, 1945-46 to						
1954-55	264,006	32,515	6,252,567	857,533	6,516,573	890,048
1955-56	284,539	36,028	8,616,163	1,135,685	8,900,702	1,171,713

(a) Raw sugar at 94 net titre.

The production of raw sugar in Australia in 1955-56 amounted to 1,171,713 tons manufactured from 8,900,702 tons of cane, compared with the record production of 1,327,546 tons in 1954-55.

Official annual data are not available regarding the total number of persons engaged in the sugar industry in New South Wales and Queensland. The number of separate holdings of 5 acres or more growing cane was 7,224 in 1955-56.

According to data obtained from the population census of 30th June, 1954, the number of persons engaged in the sugar-cane industry in New South Wales and Queensland comprised 20,185 males and 431 females, a total of 20,616 persons, of whom 4,245 were employers and 5,118 were self-employed.

4. **Average Production of Cane Sugar.**—Owing to climatic variation, comparison between the average yields of cane per productive acre in Queensland and New South Wales cannot be made accurately except on an annual basis. In New South Wales, the crop matures in from 20 to 24 months, whereas in Queensland a period of from 12 to 14 months is sufficient. Allowing for the disparity in maturing periods the average annual yields of cane per productive acre during the ten years ended 1954-55 were 35.85 tons for New South Wales, and 23.09 tons for Queensland. Similarly, the yields of sugar per acre crushed for the same period were estimated at 4.42 tons and 3.17 tons respectively. Apart from the consideration mentioned above, the yields of cane and sugar per acre crushed for Australia for the ten years ended 1954-55 were 23.43 tons and 3.20 tons respectively, as compared with 19.73 tons and 2.76 tons for the ten years ended 1938-39.

SUGAR-CANE AND SUGAR : YIELD PER ACRE.
(Tons.)

Season.	New South Wales.			Queensland.			Australia.		
	Cane per acre Crushed.	Sugar per acre Crushed.	Cane to each ton of Sugar.	Cane per acre Crushed.	Sugar per acre Crushed.	Cane to each ton of Sugar.	Cane per acre Crushed.	Sugar per acre Crushed.	Cane to each ton of Sugar.
Average, 1929-30 to									
1938-39	26.51	3.33	7.96	19.46	2.73	7.13	19.73	2.76	7.15
1951-52	38.47	4.92	7.83	18.31	2.58	7.11	18.91	2.65	7.15
1952-53	24.17	2.74	8.81	24.90	3.40	7.32	24.89	3.39	7.34
1953-54	33.81	4.37	7.74	26.30	3.67	7.17	26.47	3.68	7.19
1954-55	33.84	4.01	8.45	26.83	3.54	7.58	26.95	3.55	7.60
Average, 1945-46 to									
1954-55	35.85	4.42	8.12	23.09	3.17	7.29	23.43	3.20	7.32
1955-56	37.83	4.79	7.90	23.59	3.11	7.59	23.88	3.14	7.60

5. **Quality of Cane.**—The quantity of cane required to produce a ton of sugar varies with the variety planted, the district and the season. For the ten years ended 1954-55 it required on the average 7.32 tons of cane to produce 1 ton of sugar, or 13.7 per cent. of its total weight, as compared with 7.15 tons for the ten years ended 1938-39. As the result of the systematic study of cane culture in Queensland and improvements in field and mill methods the sugar content of the cane has been considerably increased since the turn of the century when over 9 tons of cane were required to produce 1 ton of sugar. It is believed that this is the highest sugar content obtained anywhere in the world.

The Bureau of Sugar Experiment Stations in Queensland is rendering useful service to the sugar industry by advocating and demonstrating better methods of cultivation and the more scientific use of fertilizers, lime, etc., and by producing and distributing improved varieties of cane.

6. **Production and Utilization.**—Details of the production and utilization of raw sugar for the three years ended 1938-39 and each year 1951-52 to 1955-56 are shown below. It should be noted that the details of sugar production refer to the annual periods shown, without regard to the season in which the sugar was produced; and include the small quantities of beet sugar produced in certain of these years. Consumption is shown in terms of refined sugar, including that consumed in manufactured products.

RAW SUGAR : PRODUCTION AND UTILIZATION, AUSTRALIA.

Year.	Changes in Stocks.	Pro-duction.	Exports. (a)	Miscel-laneous Uses.(b)	Consumption in Australia.(a)	
					Total.(c)	Per Head. (c)
	'000 tons.	'000 tons.	'000 tons.	'000 tons.	'000 tons.	lb.
Average, 1936-37 to						
1938-39	+ 6.2	779.3	435.3	11.2	326.6	106.5
1951-52	+24.7	702.2	206.1	23.8	447.6	117.6
1952-53	+ 3.8	948.3	500.8	18.6	425.1	109.0
1953-54	+40.8	1243.6	738.7	17.8	446.3	112.2
1954-55	-24.1	1218.1	761.2	21.7	462.9	114.0
1955-56	+42.1	1158.0	617.0	18.0	480.9	115.7

(a) Includes sugar content of manufactured products. (b) Includes industrial uses and losses in refining. (c) In terms of refined sugar.

7. **Consumption in Factories.**—The quantity of sugar used in factories in 1955-56 amounted to 266,065 tons compared with 252,012 tons in 1954-55 and 123,883 tons in 1938-39. Particulars of sugar used in establishments not classified as factories are not available, and consequently these quantities are deficient to that extent. In 1955-56, consumption by factories engaged in the production of jams, jellies and preserved fruit (including condiments, pickles, etc.) amounted to 71,056 tons and by those producing confectionery, ice cream, etc., amounted to 52,784 tons.

8. **Control of Cane Production in Queensland.**—Agreements between the Commonwealth and Queensland Governments have fixed the wholesale price of sugar and sugar products from time to time. Details of prices are shown in para. 14 of this section (*see* p. 863.)

The Queensland Government acquires the whole of the sugar production of that State and New South Wales by legislation and private agreement respectively. The net proceeds of all sugar sold are pooled and a uniform price paid to mills.

Sugar production barely met local requirements in 1923 but increased rapidly until 1925 when approximately 44 per cent. of the production was exported. Steps were taken by the Government to restrict planting of new areas and production was fairly stable until 1929. In that year, the pool was reorganized and mills received full pool price for sugar up to the amount of their previous maximum production, further supplies being acquired at export prices.

Between 1929 and 1939, production rose by more than 70 per cent. despite the restrictions mentioned above and the fact that export prices were generally less than half the pool price.

In 1939, following the International Sugar Agreement, which limited exports, the Queensland Government limited the pool (mill peaks) to 737,000 tons in respect of Queensland production. Mill quotas were allotted on the understanding that mills would allot quotas to individual growers. Mill peaks have been raised to 942,300 tons in 1950, 1,045,000 in 1953 and 1,170,900 tons in 1954. These latter increases followed the negotiation of the Commonwealth Countries Sugar Marketing Agreement of 1949, which allowed the Queensland Government to initiate a planned expansion of the industry.

9. **Sugar Agreement in Australia—Embargo on Imports, etc.**—Reference was made in Official Year Book No. 37 (pp. 940–41) to the agreement operating between the Commonwealth and Queensland Governments in respect of the sugar industry in Australia. Briefly, the agreement places an embargo on sugar importations and fixes the price of sugar consumed in Australia. A new agreement operating from 7th July, 1951, covers the period up to 31st August, 1956. Some of the terms of the 1951 Agreement (in particular, those relating to sugar prices), were amended in 1952, and incorporated in the Sugar Agreement Act 1954. A further amendment in May, 1956, again increased the price of sugar.

10. **International Sugar Agreement.**—The International Sugar Agreement of 1937 was superseded by a new agreement which came into force on 1st January, 1954. Details of the 1937 Agreement were given in Official Year Book No. 40, pp. 881 and 882, and previous issues.

The new agreement, which was negotiated by 38 countries, is designed to assure supplies of sugar to importing countries and markets to exporting countries at stable and equitable prices. It is also aimed at increasing world consumption of sugar. Basic export quotas have been allocated with provision for reductions or increases to maintain prices within a specified range.

The British Commonwealth, as a whole, has been granted an export quota of 2,375,000 tons, rising to 2,450,000 tons in 1956, which is not subject to the fluctuations mentioned above. The allocation of this total between exporting members of the British Commonwealth is a matter for the countries and territories themselves, Australia's share being fixed at 600,000 tons. Details of the marketing arrangements for Australian sugar are given in para. 15 below.

11. **Net Return for Sugar Crop.**—Details of the disposal of the crop, net value of exports and the average price realized during each of the years 1938–39 and 1951–52 to 1955–56 will be found in the following table:—

RAW SUGAR(a) : NET RETURNS, AUSTRALIA.

Year.	Proportion Exported. (b)	Net Value of Exports per Ton. (b)		Average Price per Ton for Whole Crop.	Estimated Value of Crop.
		£	s. d.	£ s. d.	
1938–39	55.78	8	4 3	15 3 11	12,806
1951–52	21.12	36	15 6	34 7 0	24,912
1952–53	49.66	41	2 0	42 12 9	40,781
1953–54	58.39	38	13 9	42 10 8	52,572
1954–55	59.11	37	8 0	41 6 11	53,984
1955–56	53.46	38	11 4	42 9 0	51,744

(a) 94 net titre.

(b) As supplied by the Queensland Sugar Board.

The estimated value of the raw sugar produced has been based upon details taken from the audited accounts of the Queensland Sugar Board. The values stated represent the gross receipts from sales in Australia and overseas, less refining costs, freight, administrative charges, etc., and export charges, but including concessions to the fruit industry and other rebates which in 1955-56 amounted to £356,689. The value thus obtained represents the net market value of all raw sugar sold, which is divided between the growers and millers in the approximate proportions of 70 per cent. and 30 per cent. respectively.

12. **Exports of Sugar.**—Particulars of the exports of cane sugar (raw and refined) for the five years ended 1938-39 and for each year from 1951-52 to 1955-56 are as follows:—

SUGAR : EXPORTS, AUSTRALIA.

Particulars.		Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Quantity	tons	377,930	167,431	459,370	706,801	592,018	737,108
Value	£'000	3,481	6,896	21,655	31,592	24,703	31,138

13. **Sugar By-products.**—Large quantities of molasses are produced as a by-product in the sugar mills. Details for a series of years of the quantities produced and the amounts used for distilling, fuel, manure and other purposes will be found in Chapter VII.—Manufacturing Industry.

Other by-products include industrial chemicals and building boards. These boards are made from the residue of crushed fibre after removal of the sugar content from sugar-cane and possess high insulating and sound-absorbing properties which make them particularly suitable for use in walls and ceilings.

14. **Sugar Prices.**—The prices of sugar in Australia from 1951 to 1955 in the case of raw sugar, and from 1951 to 1956 in the case of refined sugar, are shown in the following table.

SUGAR : PRICES IN AUSTRALIA.

Year.	Raw Sugar, 94 Net Titre.			Refined Sugar.		
	Average Return per Ton Received by Millers and Growers for—			Date of Determination.	Wholesale Price per Ton.	Retail Price per lb.
	Home Consump- tion.	Exports.(a)	Whole Crop. (a)			
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	d.	
1951 ..	33 14 0	36 15 6	34 7 0	7.7.51 to 23.3.52..	53 6 8	6½
1952 ..	44 3 0	41 2 0	42 12 9	24.3.52 to 12.10.52	65 12 10	8
1953 ..	47 18 6	38 13 9	42 10 8	13.10.52 to 13.5.56	73 16 11	9
1954 ..	47 1 0	37 8 0	41 6 11	14.5.56 to 31.8.61	82 1 0	10
1955 ..	46 18 0	38 11 6	42 9 0			

(a) Including "Excess" Sugar.

15. **Marketing Arrangements.**—Since 1939, the British Ministry of Food has purchased Australia's surplus raw sugar at prices negotiated annually and varying from £ stg. 11 5s. in 1939 to £ stg. 40 15s. in 1956 including tariff preference (for prices in other years see earlier issues of the Year Book). From 1953, the negotiated price applies to 314,000 tons of exports annually, the balance of exports being sold at world prices.

In December, 1949, the United Kingdom Government undertook to find a market for Australia's sugar exports until the end of 1952 when a new British Commonwealth Sugar Agreement came into operation. The new arrangement, as extended annually, provides for Australia to export a maximum of 600,000 tons annually from 1953 to 1964. The United Kingdom Government agreed to take 300,000 tons at annually negotiated prices, the balance to be sold at world prices, plus preference if sold in the United Kingdom or Canada.

The Sugar Bill introduced into the House of Commons on 5th July, 1955, provided for the reversion of dealings in sugar in the United Kingdom to a trader to trader basis as

from 1st January, 1957. However, under the Bill, a Sugar Board was created which is responsible for the purchase of the negotiated price sugar which the United Kingdom Government has contracted to take under the British Commonwealth Sugar Agreement.

16. Fruit Industry Sugar Concession Committee and Sugar Rebates.—The Fruit Industry Sugar Concession Committee was established by agreement between the Commonwealth and Queensland Governments and administers a fund to which the Queensland Government contributes £216,000 annually on behalf of the Sugar Industry (contributions were suspended temporarily while funds exceeded £500,000).

A rebate of £2 4s. per ton of refined sugar used in processing approved fruit products is paid to Australian manufacturers provided they buy the fresh fruit at prices not lower than those declared by the Committee as reasonable.

An export sugar rebate is also paid by the Committee to exporters of approved fruit products to ensure that manufacturers do not pay higher prices for Australian sugar than the price for which the cheapest imported sugar could be landed duty free in Australia.

Any money remaining may be used for the promotion of the use and sale of fruit products, or for scientific research for the purpose of increasing the yield per acre of Australian fruits.

17. Sugar Inquiry Committee.—The Sugar Inquiry Committee was constituted in March, 1952, to investigate the sugar industry and in particular the Sugar Agreement between the Commonwealth and Queensland Governments. As a result of its findings, the wholesale and retail prices of sugar were increased from 13th October, 1952 by £8 per ton and 1d. per lb. respectively.

Other amendments were also made, and incorporated in the Sugar Agreement Act, 1954.

18. Bulk Handling of Sugar.—Terminals for loading raw sugar in bulk are under construction at the ports of Mackay and Lucinda Point. Designs are being prepared for additional terminals at Townsville and Bundaberg. These facilities in Queensland are being constructed under a general scheme laid down in the Queensland Harbours Act, 1955.

Bulk unloading facilities are in operation at Pymont refinery, Sydney. The three raw sugar mills in New South Wales despatch all their raw sugar production in bulk.

§ 15. Vineyards.

1. Progress of Cultivation.—(i) *Area of Vineyards.* Since the early days of Australian settlement, the expansion of the cultivation of vines has been most rapid in Victoria and South Australia, the area under vineyards in the 1956 season in these two States comprising 78 per cent. of the total area. The purposes for which grapes are grown in Australia are (a) for wine-making, (b) for table use, and (c) for drying. The total area of vines in the several States during each of the years 1951–52 to 1955–56 and the averages for the ten-year periods ended 1938–39 and 1954–55 are shown in the following table.

VINEYARDS : AREA.
(Acres.)

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Aust.(a)
Average, 1929–30 to						
1938–39	15,777	40,563	2,142	54,156	5,666	118,304
1951–52	17,047	45,267	2,819	61,214	9,358	135,705
1952–53	18,006	45,968	2,808	60,603	9,233	136,618
1953–54	18,128	45,777	2,884	62,121	9,202	138,112
1954–55	18,205	45,757	2,896	60,612	9,015	136,485
Average, 1945–46 to						
1954–55	17,066	44,865	2,989	60,113	9,522	134,555
1955–56—						
Wine	7,673	4,680	314	42,096	2,814	57,577
Table	2,684	2,727	2,602	287	1,593	9,893
Drying	7,742	37,410	..	17,479	4,700	67,331
Total	18,099	44,817	2,916	59,862	9,107	134,801

(a) Excludes particulars for Australian Capital Territory.

(ii) *Wine Production, Bounties, etc.* The total production of wine (beverage and distillation) in Australia has shown a marked increase in recent years, rising from 14.3 million gallons in 1938-39 to 22.9 million gallons in 1955-56. In the same period, consumption of beverage wine in Australia has expanded from 4.5 million gallons (0.7 gallons per head of population) to 10.9 million gallons (1.2 gallons per head of population). For many years prior to the 1939-45 War, a bounty was paid on wine shipped overseas under the provisions of the Wine Export Bounty Act 1930, as amended from time to time. Details of the bounty, payment of which was discontinued in 1947, may be found in Official Year Book No. 39, p. 992.

The quantity of wine produced in the several States during the 1951-52 to 1955-56 seasons, together with the averages for the ten-year periods ended 1938-39 and 1954-55, are shown in the following table:—

WINE : PRODUCTION.(a)
(‘000 Gallons.)

Season.	N.S.W.	Victoria.	Queensland.	S. Aust.	W. Aust.	Australia.
Average, 1929-30 to 1938-39 ..	2,099	1,449	36	12,127	393	16,104
1951-52.. ..	5,465	3,472	33	25,495	790	35,255
1952-53.. ..	4,250	2,267	42	22,733	731	30,023
1953-54.. ..	5,066	2,327	59	23,497	717	31,666
1954-55.. ..	2,271	1,612	61	19,208	812	23,964
Average, 1945-46 to 1954-55 ..	4,211	2,630	41	22,653	694	30,229
1955-56.. ..	2,327	1,342	37	18,403	787	22,896

(a) Net factory and farm production of beverage and distillation wine excluding the liquid gallonge of spirits added in wine fortifying.

2. *Imports and Exports of Wine.*—(i) *Imports.* The principal countries of origin of wine imported into Australia were, before the 1939-45 War, France, Spain, Portugal and Italy, the bulk of the sparkling wines coming from France. The bulk of the post-war wine imports have been obtained from France. Imports for 1955-56 amounted to 48,547 gallons valued at £106,462 compared with 53,204 gallons valued at £127,470 in the previous year and an average of 36,685 gallons valued at £39,577 for the five years ended 1938-39.

(ii) *Exports.* Before the 1939-45 War, practically all wine exported was sent to the United Kingdom, only about 200,000 gallons per annum being sent elsewhere. Exports in 1955-56 totalled 1,203,992 gallons, of which the United Kingdom received 896,490 gallons, New Zealand 61,972 gallons, Canada 176,852 gallons, and other countries 68,678 gallons.

Exports for the five years ended 1955-56 are shown in the following table in comparison with average exports during the five years ended 1938-39:—

WINE : EXPORTS FROM AUSTRALIA.

Year.	Quantity (Gallons).			Value (£).		
	Sparkling.	Other.	Total.	Sparkling.	Other.	Total.
Average, 1934-35 to 1938-39 ..	3,772	3,559,094	3,562,866	5,400	938,195	943,595
1951-52.. ..	6,685	1,155,610	1,162,295	18,983	711,554	730,537
1952-53.. ..	7,373	1,160,088	1,167,461	21,277	742,649	763,926
1953-54.. ..	4,842	1,390,118	1,394,960	16,631	886,228	902,859
1954-55.. ..	5,570	1,258,503	1,264,073	19,670	797,767	817,437
1955-56.. ..	5,997	1,197,995	1,203,992	19,833	714,235	734,068

3. **Oversea Marketing of Wine.**—(i) *The Wine Overseas Marketing Act 1929–1954.* This Act was introduced to place the oversea marketing of surplus wine on an orderly basis. The Australian Wine Board (formerly The Wine Overseas Marketing Board), consisting of representatives from wineries and distilleries, grape-growers and the Commonwealth Government, supervises the sale and distribution of Australian wine exported and recommends conditions under which export licences should be issued. The Board has a London agency which advises on marketing conditions.

During 1954, the Act was amended to enable the Board to engage in the sales promotion of wine in Australia in addition to overseas.

(ii) *The Wine Grapes Charges Act 1929–1954.* This Act provides for the imposition of a levy on all grapes used in Australia for the manufacture of wines or spirit used for fortifying wine. The proceeds of the levy are used to defray the administrative and other expenses of the Board, and provision is made for such exemptions from the levy as the Board may recommend.

4. **Other Viticultural Products.**—(i) *Table Grapes.* Grapes for table use are grown in all the States except Tasmania, but the area cultivated to this variety is only about 6 per cent. of the productive area of vines. The quantities of table grapes produced during the season 1955–56 in each State are shown in § 3 of this chapter. (See p. 826)

(ii) *Raisins and Currants.* The quantities of raisins (sultanas and lexias) and currants dried during each of the seasons 1951–52 to 1955–56 and the averages for the ten-year periods ended 1938–39 and 1954–55 are shown in the following table. Production in 1955–56 was 60,270 tons, compared with 80,752 tons in 1954–55.

RAISINS^(a) AND CURRANTS : PRODUCTION.

(Tons.)

Season.	N.S. Wales.		Victoria.		South Aust.		Western Aust.		Australia.	
	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.
Average, 1929–30 to 1938–39 ..	4,234	796	35,235	7,995	11,494	8,007	697	1,789	51,660	18,587
1951–52.. ..	7,095	537	44,834	3,858	7,999	4,730	391	2,522	60,319	11,647
1952–53.. ..	9,551	990	55,098	6,589	18,486	7,256	302	2,461	83,437	17,296
1953–54.. ..	8,261	591	51,073	4,669	16,451	6,326	259	2,284	76,044	13,870
1954–55.. ..	7,873	663	49,368	4,675	12,287	3,654	60	2,172	69,588	11,164
Average, 1945–46 to 1954–55 ..	6,606	855	43,365	6,138	10,424	5,224	426	2,574	60,821	14,791
1955–56.. ..	5,600	753	29,417	5,150	11,699	5,009	136	2,506	45,852	13,418

(a) Sultanas and lexias.

5. **Production and Disposal of Dried Vine Fruit.**—As the production of dried vine fruit is far in excess of Australia's requirements, considerable quantities are available for export. The quantities disposed of in Australia and overseas, as recorded by the Commonwealth Dried Fruits Control Board for the season ended December, 1955, totalled 79,469 tons, Australian consumption amounting to 18,036 tons and oversea exports 61,433 tons. Australian consumption includes amounts delivered to biscuit manufacturers, bakeries, etc., as well as retail sales for household consumption.

The following table shows the oversea exports of raisins and currants during each of the years 1951-52 to 1955-56 compared with the average for the five years ended 1938-39.

RAISINS AND CURRANTS(a) : EXPORTS, AUSTRALIA.

Year.	Raisins.		Currants.		Total Raisins and Currants.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	£'000.	Tons.	£'000.	Tons.	£'000.
Average, 1934-35 to 1938-39 ..	43,191	1,686	15,054	549	58,245	2,235
1951-52 ..	32,669	3,961	5,003	646	37,672	4,607
1952-53 ..	58,886	6,395	10,387	1,053	69,273	7,448
1953-54 ..	51,693	5,561	10,731	1,039	62,424	6,600
1954-55 ..	59,934	6,720	8,373	917	68,307	7,637
1955-56 ..	51,734	6,224	9,561	1,151	61,295	7,375

(a) Excludes quantities exported as mincemeat.

The chief countries importing Australian raisins and currants are the United Kingdom, New Zealand and Canada, the quantities exported thereto in 1955-56 being 36,024 tons, 5,852 tons and 15,193 tons respectively.

6. **Post-war Contracts.**—Agreements were negotiated between the Governments of the United Kingdom and Australia for the purchase of Australian dried vine fruits during the period 1946-1953. Up to and including 1951, the quantity of fruit to be purchased was limited but in 1952 and 1953 there was no restriction. In April, 1953, it was agreed to extend the contract for one year but in August, 1953, the United Kingdom Government abolished all controls and on 1st December of that year exports reverted to a trader to trader basis.

The British Ministry of Food agreed to subsidize returns from sales of fruit of the 1954 crop sold in the United Kingdom up to 31st May, 1955, if average returns were less than the level of prices agreed upon. The support prices under this arrangement were: Currants 1 and 2 crown, £87 10s. per ton, Currants 3 and 4 crown, £93 15s.; Sultanas 1 crown and upwards, £100; Lexias 4 and 5 crown seeded, £112 10s., unseeded, £100.

Details of contract prices for the years 1946 to 1953 will be found on p. 783 of Official Year Book No. 41.

7. **Overseas Marketing of Dried Fruits.**—(i) *The Dried Fruits Export Control Act 1924-1953.* This Act was passed to organize overseas marketing of Australian dried vine fruits. The Dried Fruits Control Board, consisting of growers and Government representatives and members with commercial experience and experience in marketing dried fruits, controls the sale and distribution of dried fruit exports and recommends the conditions under which export licences will be issued.

In conjunction with its London agency the Board has improved dried fruit marketing overseas by its system of appraisal, regulation of shipments and advertising.

(ii) *Dried Fruits Export Charges Act 1924-1929.* This Act provides for a levy on exports of dried fruits to defray costs and expenses incurred by the Board. Provision is made for exemption from the levy upon recommendations by the Board.

§ 16. Orchards and Fruit-Gardens.

1. **Area.**—The largest area of orchards and fruit-gardens prior to the 1939-45 War was 281,899 acres which was attained in 1933-34. From that year until 1942-43, when 260,384 acres were under fruit, there was a gradual decline. In each subsequent year, there was a continuous upward movement to 1947-48 when the area reached a new peak of 290,320 acres. Subsequently, there was a continuous decline to about 271,000 acres in 1951-52 and 1952-53. There has been an increase in each year since then to 278,907 acres in 1955-56. The total area of orchards and fruit-gardens in the several States during the years 1951-52 to 1955-56 compared with the average for the ten seasons 1929-30 to 1938-39 is shown in the following table.

ORCHARDS AND FRUIT-GARDENS : AREA.
(Acres.)

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1929-30									
1938-39 ..	84,025	76,643	32,437	29,365	20,703	32,627	(a)	69	275,869
1951-52 ..	89,362	68,715	35,049	29,375	21,719	26,552	(a)	110	270,882
1952-53 ..	90,131	67,234	37,280	28,649	21,492	26,075	(a)	108	270,969
1953-54 ..	90,761	66,180	39,979	29,758	21,542	24,818	(a)	111	273,149
1954-55 ..	91,124	66,091	42,517	30,507	21,475	23,687	102	122	275,625
1955-56 ..	93,482	65,214	41,253	32,998	21,943	23,795	104	118	278,907

(a) Not available.

2. **Varieties of Crops.**—The varieties grown differ in various parts of the States, ranging from such fruits as pineapples, papaws and mangoes in the tropics, to strawberries, raspberries and currants in the colder parts of the temperate zone. In New South Wales, citrus fruits (oranges, lemons, etc.) and bananas are the principal crops, although apples, peaches, plums pears and cherries are extensively grown. The principal varieties grown in Victoria are apples, peaches, pears, oranges, plums and apricots. In Queensland, pineapples, apples, bananas, oranges, mandarins, peaches and plums are the varieties most largely cultivated. In South Australia, in addition to apples, oranges, apricots, plums, peaches and pears, almonds and olives are extensively grown. In Western Australia, apples, oranges, pears, plums, peaches, lemons, apricots and figs are the chief varieties. In Tasmania, apples occupy over three quarters of the fruit-growing area, but small fruits, such as currants, raspberries and gooseberries are extensively grown, while the balance of the area is mainly taken up with pears, apricots and plums. The following table shows the acreage—bearing and non-bearing—of the principal kinds of fruit, and the quantity and value of fruit produced.

ORCHARDS AND FRUIT-GARDENS, 1955-56.

Fruit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
AREA, BEARING AND NON-BEARING (ACRES).									
Apples ..	15,549	20,208	9,420	6,326	12,465	18,269	..	99	82,336
Apricots ..	2,179	4,551	311	4,665	423	926	..	1	13,056
Bananas ..	21,683	..	7,113	..	490	..	45	..	29,331
Cherries ..	2,440	1,814	8	739	37	69	..	..	5,107
Citrus—									
Oranges ..	27,710	5,269	3,657	7,435	3,971	..	22	..	48,064
Mandarins ..	1,964	134	1,521	142	239	..	..	..	4,000
Lemons and									
Limes ..	2,783	1,569	447	308	583	..	9	..	5,699
Other ..	651	293	91	321	150	..	2	..	1,508
Nuts ..	393	605	210	3,722	197	4	..	1	5,132
Peaches ..	7,097	10,557	1,557	3,326	845	97	..	6	23,485
Pears ..	3,277	13,622	446	1,957	1,013	1,708	..	7	22,030
Pineapples ..	565	..	12,316	..	..	..	20	..	12,901
Plums and Prunes	4,648	2,402	1,316	1,429	968	150	..	2	10,915
Small Fruits ..	13	612	179	123	8	2,529	..	..	3,464
Other Fruits ..	2,530	3,578	2,661	2,505	554	43	6	2	11,879
Total	93,482	65,214	41,253	32,998	21,943	23,795	104	118	278,907

PRODUCTION.

Apples '000 bus.	1,645	2,649	734	985	1,516	5,926	..	9	13,464
Apricots " "	345	236	19	664	42	74	..	..	1,380
Bananas " "	4,037	..	626	..	69	..	4	..	4,736
Cherries " "	113	76	..	41	1	6	..	..	237
Citrus—									
Oranges " "	3,561	771	402	1,494	424	..	..	1	6,653
Mandarins " "	186	17	161	32	20	..	..	..	416
Lemons									
and Limes, " "	396	219	68	57	88	..	2	..	830
Other " "	138	57	22	65	27	..	..	..	309
Nuts '000 lb.	146	192	58	1,474	37	4	..	..	1,912
Peaches '000 bus.	897	1,162	93	360	65	8	..	..	2,585
Pears " "	427	2,743	45	354	99	538	..	..	4,206
Pineapples " "	103	..	4,308	..	..	..	1	..	4,412
Plums and									
Prunes " "	386	166	74	118	73	25	..	..	842
Small Fruits									
'000 cwt.	..	10	8	2	..	104	..	..	124

ORCHARDS AND FRUIT-GARDENS, 1955-56—*continued.*

Fruit.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
GROSS VALUE OF PRODUCTION. (£'000.)									
Apples ..	3,190	2,980	1,056	1,624	2,348	5,385	..	11	16,594
Apricots ..	756	295	53	1,026	99	57	..	..	2,286
Bananas ..	4,873	..	616	..	249	..	..	..	5,738
Cherries ..	616	211	1	203	13	9	..	..	1,053
Citrus—									
Oranges ..	3,377	784	455	1,808	604	..	..	..	7,028
Mandarins ..	237	25	248	60	40	..	..	..	610
Lemons and Limes ..	300	174	79	25	94	..	..	..	672
Other ..	114	44	25	34	22	..	..	..	239
Nuts ..	16	32	6	155	5	1	..	..	215
Peaches ..	1,175	1,201	166	675	143	5	..	..	3,365
Pears ..	521	2,743	76	524	206	611	..	..	4,681
Pineapples ..	93	..	2,527	..	..	..	..	..	2,620
Plums and Prunes ..	701	113	196	200	159	11	..	..	1,380
Small Fruits ..	3	116	132	28	4	557	..	..	840
Other Fruits ..	380	73	344	120	88	2	13	..	1,020
Total ..	16,352	8,791	5,980	6,482	4,074	6,638	13	11	48,341

3. **Principal Fruit Crops.**—The area, production and gross value of the principal fruit crops during the periods 1951-52 to 1955-56 compared with the average for the ten seasons 1929-30 to 1938-39 are shown hereunder:—

PRINCIPAL FRUIT CROPS : AREA, PRODUCTION AND GROSS VALUE OF PRODUCTION.

Season.	Apples.	Apricots.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums and Prunes.
AREA, BEARING AND NON-BEARING (ACRES).							
Average, 1929-30 to 1938-39	100,258	11,632	23,353	50,706	23,390	20,725	15,912
1951-52.. ..	80,206	13,282	26,021	58,419	25,603	20,957	11,841
1952-53.. ..	80,210	12,899	27,724	57,605	23,755	21,404	11,485
1953-54.. ..	80,684	12,881	28,799	57,479	23,685	21,040	11,546
1954-55.. ..	79,971	13,106	30,480	57,703	24,079	21,247	11,477
1955-56.. ..	82,336	13,056	29,331	59,271	23,485	22,030	10,915
PRODUCTION ('000 BUSHELS).							
Average, 1929-30 to 1938-39	10,013	1,014	2,270	5,011	1,984	2,130	948
1951-52.. ..	10,743	1,492	2,749	6,168	2,822	3,534	845
1952-53.. ..	9,231	1,265	2,244	6,064	2,677	3,513	913
1953-54.. ..	12,469	1,744	3,322	7,445	3,335	4,442	996
1954-55.. ..	11,678	1,544	3,139	7,086	3,080	4,708	820
1955-56.. ..	13,464	1,380	4,736	8,212	2,585	4,206	842
GROSS VALUE OF PRODUCTION. (£'000.)							
Average, 1929-30 to 1938-39	2,677	326	1,072	1,808	679	559	286
1951-52.. ..	13,346	2,307	6,742	8,355	3,274	3,752	1,379
1952-53.. ..	11,939	2,003	6,171	8,050	3,305	3,911	1,586
1953-54.. ..	14,683	2,788	7,311	7,400	3,489	4,455	1,351
1954-55.. ..	13,969	2,010	7,350	8,639	3,606	4,628	1,220
1955-56.. ..	16,594	2,286	5,738	8,549	3,365	4,681	1,380

4. **Production of Jams and Jellies and Preserved Fruit.**—Considerable quantities of fruit are used in the production of jams and jellies and preserved fruit in Australia. In 1955-56 output of jams and jellies amounted to 84,096,000 lb. whilst output of preserved fruit, excluding preserved apples, amounted to 283,611,000 lb. Production of preserved apples was 20,296,000 lb.

The recorded consumption of fruit in factories for all purposes, including that used for juice and cordial manufacture and for drying, was 231,548 tons in 1955-56.

5. **Consumption of Fruit and Fruit Products.**—Details of the estimated consumption of fruit and fruit products per head of population for a series of years ending 1955-56 are shown in Chapter XXX.—Miscellaneous, of this Year Book.

6. **Imports and Exports of Fruit.**—(i) *General.* The imports of fresh fruit into Australia are negligible, whilst those of dried fruit consist mainly of dates.

A considerable export trade in both fresh and dried fruit is carried on by Australia with oversea countries. The values of the shipments in 1955-56 amounted to £9,138,000 and £7,802,000 respectively. Apples constitute the bulk of the fresh fruit exported, although the exports of citrus fruit and pears are fairly considerable. Shipments of raisins and currants have increased greatly since 1914-15 and are mainly responsible for the growth in the dried fruit exports, although dried tree fruit also figures amongst the exports.

(ii) *Fresh Fruit.* Particulars of the Australian export trade in fresh and frozen fruit for each of the years 1951-52 to 1955-56 and the average of the five years ended 1938-39 are shown in the following table:—

FRESH AND FROZEN FRUIT: EXPORTS, AUSTRALIA.

Year.	Apples.		Pears.		Citrus.		Total.(a)	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 bus.	£'000.	'000 bus.	£'000.	'000 bus.	£'000.	'000 bus.	£'000.
Average, 1934-35 to 1938-39 ..	4,591	1,396	632	268	533	234	5,865	1,981
1951-52 ..	3,263	4,285	808	1,492	432	779	4,601	6,895
1952-53 ..	4,696	6,740	937	1,675	433	742	6,181	9,569
1953-54 ..	4,728	6,089	1,209	2,045	533	809	6,596	9,384
1954-55 ..	4,265	5,444	1,407	2,183	525	783	6,248	8,771
1955-56 ..	5,023	6,513	1,012	1,470	585	869	6,663	9,138

(a) Total, including exports of all other fresh and frozen fruit.

(iii) *Dried Tree Fruit.* The quantity and value of oversea imports and exports of dried fruit, other than raisins and currants, for the years 1951-52 to 1955-56, compared with the average for the five years 1934-35 to 1938-39, are shown below. Normally, the bulk of the imports consists of dates obtained almost entirely from Iraq.

DRIED TREE FRUIT(a): IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Imports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 lb.	£'000.	'000 lb.	£'000.	'000 lb.	£'000.
Average, 1934-35 to 1938-39 ..	12,225	80	4,315	117	7,910	-37
1951-52 ..	12,680	293	4,520	414	8,160	-121
1952-53 ..	5,851	142	3,966	403	1,885	-261
1953-54 ..	11,638	303	6,526	795	5,112	-492
1954-55 ..	(b) 13,176	(b) 373	6,576	804	6,600	-431
1955-56 ..	(b) 8,627	(b) 204	3,681	428	4,946	-224

(a) Excludes raisins and currants referred to separately under Vineyards, § 15, para. 5. (b) Imports of dates and figs only.

NOTE.—Minus (-) denotes net exports.

(iv) *Jams and Jellies.* Exports of jams and jellies reached large proportions immediately following the 1939-45 War and in 1946-47 amounted to 65,434,000 lb., compared with the average for the five years ended 1938-39 of 7,118,000 lb. Since 1949-50, when exports totalled 65,229,000 lb., there has been a marked decline and in 1955-56 exports amounted to only 4,429,000 lb., valued at £265,000. Imports of jams and jellies are negligible.

(v) *Preserved Fruit.* The total quantity of fruit preserved in liquid, or partly preserved in liquid or pulped, imported into Australia during 1955-56, was 992,000 lb. valued at £70,070. Large quantities of fruit preserved in liquid are normally exported from Australia the value of shipments in 1938-39 amounting to £1,271,525. In 1955-56, the value of exports had increased to £15,478,431. In addition, the exports of pulped fruits during 1955-56 amounted to 3,471,000 lb., valued at £245,980. Quantities of fruit preserved in liquid exported from Australia in 1955-56 amounted to 209,231,000 lb. compared with average

exports of 68,896,000 lb. for the five years ended 1938-39. Exports in 1955-56 were principally made up of peaches (61,464,000 lb.), pears (62,406,000 lb.), apricots (29,368,000 lb.) and pineapples (41,320,000 lb.).

7. **Marketing of Apples and Pears.**—(i) *Apple and Pear Organization Act 1938-1953.* This Act, which was passed by the Commonwealth Parliament at the request of the apple and pear industry, provides for the establishment of an Australian Apple and Pear Board comprised of representatives of growers, exporters, employees and the Commonwealth Government. Oversea representatives may also be appointed by the Board.

The function of the Board is the organization and control of exports of fresh apples and pears and it has the power to regulate shipments, determine export quotas and allocate consignments from each State.

(ii) *Apple and Pear Export Charges Act 1938-1947.* This Act provides for an export levy to meet the expenses of the Board.

(iii) *Apple and Pear Acquisition.* Exports of apples and pears were seriously curtailed during the war and the 1940 to 1948 crops were acquired and marketed under National Security and Defence Regulations. Details of the acquisition scheme will be found on pp. 1003 and 1004 of Official Year Book No. 38 and in earlier issues.

8. **Oversea Marketing of Canned Fruit.**—(i) *The Canned Fruits Export Control Act 1926-1956.* This legislation was introduced with the object of organizing the oversea marketing of canned fruit. The Australian Canned Fruits Board, comprising members representing the Commonwealth Government and canners of apricots, peaches, pears, pineapples and fruit salad, was appointed with functions mentioned above and also to recommend conditions under which export licences are issued.

The system of marketing adopted by the Board has resulted in the satisfactory disposal of the exportable surplus of canned fruits.

(ii) *The Canned Fruits Export Charges Act 1926-1938.* This Act provides for a levy on exports to meet the Board's expenses. Provision has been made for certain exemptions when recommended by the Board.

§ 17. Vegetables for Human Consumption.

1. **Area and Production of Fresh Vegetables.**—Details of the areas planted and production of individual kinds of vegetables, excluding potatoes and onions referred to in §§ 10 and 11 of this chapter, are shown below for the seasons 1953-54 to 1955-56.

FRESH VEGETABLES(a) FOR HUMAN CONSUMPTION : AUSTRALIA.

Vegetable.	1953-54.		1954-55.		1955-56.	
	Area Sown.	Production.	Area Sown.	Production.	Area Sown.	Production.
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
Asparagus	3,885	3,592	3,966	4,776	4,140	4,994
Beans, French and Runner	13,269	19,109	14,192	19,516	15,609	21,722
Beans, Navy	2,468	631	1,064	222	1,022	90
Beetroot	1,855	11,242	1,899	11,172	2,134	12,580
Cabbages and Brussels Sprouts	6,676	69,174	6,185	66,284	6,444	65,949
Carrots	3,992	33,399	4,002	32,223	4,196	34,448
Celery(b)	603	9,393	525	7,368	590	7,527
Cucumbers(b)	1,196	4,055	1,267	4,436	1,461	5,205
Cauliflowers	7,362	79,837	6,689	72,488	6,675	70,425
Lettuces	4,012	15,809	3,997	14,313	4,228	15,412
Parsnips	1,450	12,055	1,306	10,679	1,391	11,006
Peas, Blue	5,365	3,053	5,699	3,112	5,887	3,760
Peas, Green	33,191	32,444	36,929	35,235	44,136	44,233
Pumpkins	20,168	60,105	20,795	60,428	25,335	62,698
Tomatoes	13,136	76,683	14,873	84,343	16,774	89,029
Turnips, Swede and White	5,151	24,075	4,782	21,967	5,896	26,862
All Other	7,188	..	7,413	..	9,380	..
Total	130,967	..	135,583	..	155,298	..

(a) Excludes potatoes and onions.

(b) Incomplete; excludes New South Wales.

2. **Production of Canned and Dehydrated Vegetables.**—Total production of canned vegetables in 1955–56 amounted to 77,812,000 lb., which was considerably higher than pre-war production, but only approximately 65 per cent. of the peak war-time production. The principal canned vegetables produced in 1955–56 were green peas 25,465,000 lb., green beans 4,748,000 lb., baked beans (including pork and beans) 16,985,000 lb., tomatoes 3,119,000 lb. and asparagus 7,501,000 lb.

The production of dehydrated vegetables, which was initiated during the 1939–45 War by the Commonwealth Government, rose to a maximum of 22 million lb. in 1945–46, but in 1955–56 had declined to approximately 392,000 lb.

3. **Imports and Exports of Vegetables.**—Oversea exports of pulse and fresh vegetables during 1955–56 consisted of:—Pulse, 14,224 tons, £593,000; onions, 981 tons, £55,000; potatoes, 3,478 tons, £225,000; other vegetables, 1,767 tons, £158,000. Imports of pulse amounted to 4,629 tons, valued at £390,000, whilst imports of fresh vegetables were negligible.

In 1955–56, exports of vegetables preserved in liquid consisted of:—Peas, 375,000 lb., £28,000; tomatoes, 253,000 lb., £16,000; other vegetables, 1,269,000 lb., £167,000.

4. **Consumption of Vegetables.**—Details of the estimated consumption of vegetables for a series of years ending with 1955–56 are shown in Chapter XXX.—Miscellaneous, of this Year Book.

§ 18. Tobacco.

1. **States, Area and Production.**—Tobacco-growing promised years ago to occupy an important place amongst the agricultural industries of Australia. As early as the season 1888–89, the area of this crop amounted to 6,641 acres, of which 4,833 were in New South Wales, 1,685 in Victoria, and 123 in Queensland. Thereafter, the industry fluctuated for many years reaching a peak in 1932–33 when 26,272 acres were planted.

In 1955–56, the acreage planted was 11,306 acres which was approximately the same as the average for the ten years ended 1938–39. Owing to improvement in average yields, however, the production of dried leaf in 1955–56 was 27 per cent. higher than the pre-war average.

In the following table, particulars of the area and production of tobacco are given by States for each of the seasons 1951–52 to 1955–56, together with averages for the ten-year periods ended 1938–39 and 1954–55:—

TOBACCO : AREA AND PRODUCTION.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
AREA (ACRES).							
Average, 1929–30 to 1938–39	1,274	6,237	2,865	292	502	89	11,259
1951–52.. .. .	432	1,500	5,038	..	1,229	..	8,199
1952–53.. .. .	445	1,613	4,339	..	1,525	..	7,922
1953–54.. .. .	501	2,246	4,065	..	1,434	..	8,246
1954–55.. .. .	635	2,471	5,135	..	1,418	..	9,661
Average, 1945–46 to 1954–55	430	1,432	3,314	..	935	..	6,111
1955–56.. .. .	893	2,876	6,301	..	1,235	..	11,306
PRODUCTION OF DRIED LEAF ('000 lb.).							
Average, 1929–30 to 1938–39	860	2,354	1,400	83	361	56	5,114
1951–52.. .. .	518	1,381	4,667	..	988	..	7,554
1952–53.. .. .	514	1,472	3,431	..	1,068	..	6,485
1953–54.. .. .	587	2,155	4,015	..	912	..	7,669
1954–55.. .. .	618	868	4,332	..	1,003	..	6,821
Average, 1945–46 to 1954–55	422	990	2,772	..	744	..	4,928
1955–56.. .. .	547	1,135	3,702	..	721	..	6,106

(a) Excludes Northern Territory for the years up to 1954–55. In that year, 616 lb. and in 1955–56 300 lb. were produced.

2. **The Tobacco Industry.**—(i) *Marketing.* In the early days, purchase of the leaf at the farms was the usual practice but towards the later part of the 1930's the auction system was introduced by arrangement between the growers' associations and the manufacturers.

On the 9th May, 1941, the Australian Tobacco Board was constituted under the National Security (Australian Tobacco Leaf) Regulations for the purpose of facilitating and regulating the marketing of Australian grown tobacco leaf. All leaf was under the control of the Board, the growers being paid on the valuation as appraised by the Board. The Board ceased to function on the 24th September, 1948 and subsequent crops have been

marketed at open auction in the respective States. Queensland has had its own Tobacco Leaf Marketing Board since 1948 and leaf sold in that State has a reserved price, determined by the Board's appraiser. Growers in New South Wales voluntarily submit their leaf to the Queensland Board.

(ii) *Central Tobacco Advisory Committee.* The Australian Agricultural Council formed the Standing Advisory Committee on Tobacco during 1950. This Committee consisted of representatives of tobacco growers, tobacco manufacturers and Commonwealth and State Governments. Its main functions were to review the industry and make recommendations on its problems.

The Committee was reconstituted by the Agricultural Council during 1952-53 and its terms of reference were as follows:—

“To report annually to the Agricultural Council, through the Standing Committee on Agriculture and also to the Commonwealth Minister for Trade and Customs, through the Chairman of the Council, on the following:—

- (i) The percentage of Australian tobacco which should be incorporated in locally manufactured tobacco under Customs regulations, having regard to the anticipated volume of Australian production of usable leaf available for absorption by the manufacturing industry;
- (ii) The progress of the industry during the year with particular reference to—
 - (a) marketing problems encountered,
 - (b) a review of prices being paid to farmers in relation to quality of leaf,
 - (c) such other problems as may be retarding the progressive development of the industry, such as the volume of importation of manufactured tobacco and cigarettes.”

(iii) *Industry Inquiries.* The tobacco industry has been the subject of a number of investigations during the past 30 years. The Tariff Board inquired into the industry in 1923, 1926, 1931 and 1940 and reports were issued in respect of the last three inquiries.

(iv) *Commonwealth Grants.* Details of the recommendations by the Tobacco Inquiry Committee and grants periodically approved by the Commonwealth Government up to 30th June, 1953, were given in Official Year Book No. 40, pp. 895, 896 and in previous issues.

(v) *Research and Investigations.* The Commonwealth Scientific and Industrial Research Organization has been investigating many fundamental problems connected with tobacco culture. One of the major achievements of this organization was the development of a technique to control “Field Blue Mould” and investigations are now being made into the control of this disease in the field. State Departments of Agriculture are also carrying out investigations over a wide range of problems, being concerned mainly with variety trials, irrigation, disease and pest control, crop rotation and cultural practices.

In 1955, the Central Tobacco Advisory Committee formulated a programme for increased research and advisory activities. The capital costs of establishing this programme are estimated at £168,000 of which the Commonwealth Government has agreed to contribute £84,000 and tobacco manufacturers the remaining £84,000. It has been estimated that to maintain the programme, it will cost approximately £63,000 per annum, of which the Commonwealth Government is contributing £21,000, tobacco growers £14,000 and tobacco manufacturers £28,000 per annum. A Tobacco Industry Trust Account has been established to receive these contributions. This programme commenced in 1956.

(vi) *War Service Land Settlement.* Tobacco growing under the War Service Land Settlement Scheme commenced in 1949 and is being carried out on 67 farms in Queensland. Each farm is designed to have a minimum of 40 acres of suitable land to permit ten acres being cropped annually on a one in four rotation.

Due to technical difficulties in certain districts in Western Australia tobacco growing under the War Service Land Settlement Scheme has been considerably curtailed.

(vii) *Tobacco Factories.* Manufacturers of Australian cigarettes and tobacco are granted a lower rate of duty on imported tobacco leaf provided it is blended with a prescribed minimum percentage of Australian leaf. These percentages rose from 3 per cent. for cigarettes and 5 per cent. for tobacco in November, 1946 to 7½ per cent. and 17½ per cent. respectively from 1st July, 1955. The Commonwealth Government has announced that the percentages to apply, from 1st July, 1957, shall be 12½ per cent. and 21 per cent. respectively. In 1955-56, the quantity of cured leaf used in tobacco factories in Australia amounted to 43.6 million lb. of which 5.3 million was of local origin, the balance being imported, chiefly from the United States of America.

3. *Overseas Trade.*—Imports of tobacco and manufactures thereof into Australia during 1955-56 were valued at £16.2 million, including 45.8 million lb. of unmanufactured tobacco valued at £15.1 million. Exports of tobacco and manufactures thereof during 1955-56 were valued at £518,000.

§ 19. Hops.

Hop-growing in Australia is practically confined to Tasmania and some of the cooler districts of Victoria, the total area for 1955-56 being 1,765 acres, of which 1,377 acres were in Tasmania, and 388 acres in Victoria. A small area was also grown in Western Australia, but the details are not available for publication. The Tasmanian area, though still small, has increased during the present century, the total for 1901-2 being 599 acres. The cultivation of hops was much more extensive in Victoria some 60 years ago than at present, the area in 1883-84 being 1,758 acres.

The production of hops in Australia is insufficient to meet local requirements, and additional supplies are imported to meet the needs of the brewing industry. In the following table details of the production, imports and exports of hops and the quantity of hops used in breweries are shown for each of the years 1951-52 to 1955-56 in comparison with the average for the five years ended 1938-39.

HOPS: PRODUCTION AND DISPOSAL, AUSTRALIA.

Year.			Production.		Imports.	Exports.	Net Available Supplies. (a)	Quantity used in Breweries.
			Quantity.	Gross Value.				
			Cwt.	£'000.	Cwt.	Cwt.	Cwt.	
Average, 1938-39	1934-35	to	20,576	173	1,020	78	21,518	18,992
1951-52	..	..	17,914	517	24,592	..	42,506	38,012
1952-53	..	..	32,116	1,021	12,512	11	44,617	40,845
1953-54	..	..	24,666	802	14,675	59	39,282	43,525
1954-55	..	..	34,075	1,106	10,311	..	44,386	42,976
1955-56	..	..	34,374	1,102	16,880	..	51,254	43,638

(a) Disregards movements in stocks.

The Tariff Board conducted an inquiry into the hop-growing industry and issued a report on 12th June, 1945.

§ 20. Flax.

During the 1914-18 and 1939-45 Wars, there was an acute shortage of flax fibre and the expansion of production was encouraged by the Commonwealth Government, the area sown reaching a maximum of more than 61,000 acres in 1944-45.

The growing of flax for fibre purposes is now confined to the States of Victoria, South Australia and Western Australia. In Victoria and South Australia, production is directed and controlled by the Flax Commission which took over the Commonwealth flax undertakings from the Flax Production Committee on the 1st November, 1954. In Western Australia, the industry is carried on by a Co-operative Company.

Following on the Tariff Board's Report on Flax Fibre dated the 5th August, 1954, the Government introduced a bounty on flax fibre for a period of two years to permit the modernization of plant and machinery. The amount of the bounty is related to the difference between overseas prices and local production costs and it came into operation on the 1st November, 1954. The Tariff Board conducted a further inquiry into flax fibre in 1956 and in its report dated 8th February, 1957, recommended the continuance of bounty payments for a further period of three years.

Details of the area under flax and the production of straw are given in the following table:—

FLAX FOR FIBRE: AREA AND PRODUCTION.

Season.	Victoria.	S. Aust.	W. Aust.	Australia.
AREA (ACRES).				
Average, 1934-35 to 1938-39	1,021	..	..	(a) 1,030
1951-52	2,821	1,599	1,965	6,385
1952-53	2,840	1,618	2,423	6,881
1953-54	9,550	3,040	3,105	15,695
1954-55	5,878	1,314	464	7,656
1955-56	2,550	526	1,594	4,670
PRODUCTION (TONS OF STRAW).				
Average, 1934-35 to 1938-39	61	..	..	61
1951-52	4,065	2,214	1,573	7,852
1952-53	4,379	2,967	2,856	10,202
1953-54	12,984	4,647	4,470	22,101
1954-55	7,799	1,888	500	10,187
1955-56	4,637	1,150	1,875	7,662

(a) Includes nine acres of unproductive flax in Queensland.

Prior to 1948-49, the growing of flax for linseed oil had not been developed extensively in Australia. Action has since been taken to develop this industry, however, the ultimate objective being the production of sufficient linseed to meet Australia's total oil requirements. Development of the industry proceeded rapidly until 1951-52 when the record total of 53,741 acres was sown. In 1952-53, there was a decline in the acreage and a further decline in 1953-54 when 6,343 acres only were sown. Since then an increase in the guaranteed price to growers has led to an increase in the area sown to 19,403 acres in 1954-55 and 47,727 acres in 1955-56.

The question of assistance to the industry was investigated by the Commonwealth Tariff Board in 1953 and their conclusions are contained in their Report on *Linseed and Linseed Products* dated 23rd October, 1953.

Details of the area and production of flax for linseed are shown in the following table for the seasons 1951-52 to 1955-56.

FLAX FOR LINSEED: AREA AND PRODUCTION.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
AREA (ACRES).							
1951-52	15,785	4,431	28,580	4,853	12	80	53,741
1952-53	15,439	1,063	25,875	3,961	..	..	46,338
1953-54	1,400	1,226	3,647	70	..	..	6,343
1954-55	1,826	1,829	15,569	171	..	8	19,403
1955-56	1,817	580	45,202	128	..	..	47,727
PRODUCTION (TONS OF LINSEED).							
1951-52	1,617	705	4,174	857	1	39	7,393
1952-53	2,678	176	6,526	551	..	..	9,931
1953-54	256	202	359	5	..	..	822
1954-55	355	358	4,705	28	..	2	5,448
1955-56	400	94	12,738	15	..	..	13,247

§ 21. Peanuts.

The production in Australia of peanuts, or groundnuts, is mainly confined to Queensland, although small quantities are grown in New South Wales, Western Australia and the Northern Territory. Details of the area and production are given in the table below.

PEANUTS: AREA AND PRODUCTION, AUSTRALIA.

Season.	Area (Acres).					Production (Tons).				
	N.S.W.	Qld.	W.A.	N.T.	Aust.	N.S.W.	Qld.	W.A.	N.T.	Aust.
Average, 1929-30 to 1938-39 ..	29	8,320	100	(a)	8,449 (b)	11	3,715	24	(a)	3,750
1951-52 ..	374	13,312	15	(a)	13,701	222	4,535	9	(a)	4,766
1952-53 ..	789	18,920	10	(a)	19,719	409	8,438	7	(a)	8,854
1953-54 ..	1,525	36,617	(c)	(a)	d 38,142	718	17,866	(c)	(a)	d 18,584
1954-55 ..	769	37,971	(c)	780	d 39,520	346	14,001	(c)	135	d 14,482
1955-56 ..	414	31,493	(c)	544	d 32,451	174	8,633	(c)	40	d 8,847

(a) Not available.

(b) Average for five years.

(c) Not available for publication.

(d) Excludes Western Australia for which details are not available for publication.

The gross value of the 1955-56 crop was £888,000 which was approximately £301,000 less than in 1954-55. This decrease was largely the result of the low level of production at 8,847 tons. This was due to very wet conditions at harvest time in Queensland where the yield per acre was the lowest ever recorded in that State.

Considerable quantities of peanut kernels were formerly imported annually, chiefly from India, for oil expression purposes. These imports were suspended from 1946 to 1949, but have since been resumed on an increasing scale. Total supplies available for consumption in Australia in 1955-56, 14,828 tons (shell equivalent), consisted of 14,482 tons grown locally in the 1954-55 season and 346 tons imported.

§ 22. Cotton.

1. **General.**—The production of cotton in Australia is restricted to Queensland, where cultivation began in 1860. Details of areas sown for years prior to 1930 and of Government financial assistance to growers up to 1940 appear in Official Year Book No. 39 and earlier issues.

Australia produces only portion of its requirements of raw cotton, the balance being obtained in 1955-56 chiefly from the United States of America, Mexico, Pakistan, India, and Egypt. Efforts have been directed towards increasing production by an extension of area, the introduction of irrigation methods and payment of bounties, but so far have not met with much success. Production increased very considerably during the early years of the 1939-45 War, reaching a peak of 17,550,000 lb. unginned cotton in 1939-40, but has since fallen away. The expansion of the industries connected with the spinning and weaving of cotton is referred to in Chapter VII.—Manufacturing Industry.

The Raw Cotton Bounty Act 1940 provided an extension until 31st December, 1946, of assistance previously granted by way of bounty. The Act was amended in August, 1946 to provide a guaranteed net average return to cotton-growers of 15d. per lb. of raw cotton for five years from 1st January, 1947. It was superseded by the Cotton Bounty Act 1951, which guaranteed a net average return of 9½d per lb. of seed cotton for five years from 1st January, 1951. The 1951 Act was amended in 1952 to provide for a guaranteed return of 14d. per lb. of seed cotton for the 1953 crop, and for variation by regulation of the guaranteed return, in succeeding seasons, with a minimum of 9½d. per lb. The Cotton Bounty Act extended the period of the guaranteed return for three years to 31st December, 1958. The guaranteed return has remained at 14d. per lb. of seed cotton since the 1953 season and the Government has announced that the guaranteed return for 1957 and 1958 seasons will not be less than 14d. per pound.

2. **Area and Production.**—The area under cultivation and the production in Queensland for the years 1951 to 1955 are shown hereunder together with the average for the period of ten years ended 1939. Details of the production of ginned cotton are derived from published statistics of the Queensland Cotton Marketing Board.

COTTON: AREA AND PRODUCTION IN QUEENSLAND.

Season ended December—	Area Sown.	Production of Cotton.				Average Yield per Acre Sown.	
		Unginned.		Ginned.	Ginned— Equivalent in Bales. (a)	Unginned.	Ginned.
		Quantity.	Gross Value.				
	Acres.	'000 lb.	£'000.	'000 lb.	Bales.	lb.	lb.
Average, 1930 to 1939	58,436	16,617	291	5,564	11,181	284	95
1951	4,480	1,406	127	549	1,124	314	123
1952	5,866	2,184	107	755	1,483	372	129
1953	8,965	5,132	316	2,068	4,229	572	231
1954	8,377	3,597	208	1,365	2,819	429	163
1955	13,290	5,359	307	(b)	4,386	403	(b)

(a) Bales of approximately 500 lb.

(b) Not yet available.

3. **Consumption of Raw Cotton.**—The following table shows the expansion which has taken place in the consumption of raw cotton in Australia since 1938–39.

RAW COTTON: PRODUCTION, IMPORTS AND CONSUMPTION, AUSTRALIA.
(‘000 lb.)

Year.	Production.	Imports.	Total.	Consumption of Raw Cotton in Spinning.
Average, 1936–37 to 1938–39	5,180	9,882	15,062	12,523
1950–51	402	45,201	45,603	40,907
1951–52	549	43,296	43,845	39,030
1952–53	755	24,796	25,551	31,128
1953–54	2,068	44,203	46,271	43,994
1954–55	1,365	43,218	44,583	47,098

§ 23. Financial Assistance to Primary Producers.

NOTE.—See also Chapter XXI.—Public Finance, pp. 767–8.

Direct financial assistance to primary producers by the Commonwealth Government takes the form of bounties, subsidies and other financial assistance. Brief details of some of the more important payments are given below:—

(i) *Cotton Bounty.* The Cotton Bounty Act provides for payment of a bounty on seed cotton delivered by growers to processors. The present rate of bounty is designed to give growers an average return of 14d. per lb. The total payment in 1955–56 was £67,284 in respect of 5,650,785 lb. of cotton. In 1954–55, the total payment was £25,243 in respect of 3,687,828 lb.

(ii) *Tractor Bounty.* Under the Tractor Bounty Act, bounties are payable on tractors produced and sold for use in Australia. The period for payment of bounty was extended, in 1956, for three years from 24th October, 1955. The rate of bounty which has increased from time to time, varies according to the belt horse-power of the engine. Payments in 1955–56 amounted to £55,034 on 253 tractors as compared with £81,786 on 388 tractors in 1954–55.

(iii) *Dairy Products Bounty.* Under the provisions of the Dairy Industry Assistance Act 1952, a subsidy is paid to dairymen to ensure them a return equal to the average cost of production of their produce. In 1955–56, total payments amounting to £14,499,587 were made compared with £15,749,998 in 1954–55.

(iv) *Flax Fibre Bounty.* From November, 1954, a bounty has been paid on scutched flax fibre produced from flax grown in Australia. In 1955–56, payments amounted to £58,070. Expenditure in 1954–55 was £4,907.

Other forms of financial assistance to primary producers include payments for Cattle Tick Control, the Dairy Industry Extension Grant, Flood and Bush Fire Relief, Food Production, Expansion of Agricultural Advisory Services, Assistance to the Tobacco Industry and Wheat Shipped to Tasmania—Freight Subsidy.

§ 24. Fertilizers.

1. **General.**—In the early days of settlement in Australia, scientific cultivation was little understood. It was common, as in other new countries, for the land to be cropped continuously to a degree of exhaustion. This practice is very much less in evidence now than in the early days of Australian agricultural development. Under the guidance of the State Departments of Agriculture, scientific farming is now much more widely practised. The importance of fallowing, crop rotation, and the application of suitable fertilizers in adequate quantities is now appreciated by farmers. The introduction of the modern seed-drill, acting also as a fertilizer-distributor, has greatly facilitated the use of artificial manures and much land formerly regarded as useless for cultivation has now been made productive.

In order to protect the users of artificial fertilizers, legislation has been passed in each of the States regulating the sale and prohibiting the adulteration of fertilizers. A list of these Acts and their main features is given in Official Year Book No. 12, p. 378.

2. **Imports and Exports.**—The Australian output of prepared fertilizers is derived chiefly from imported rock phosphate and is sufficient for local requirements.

The Chief sources of Australia's supplies of rock phosphate are Nauru, Gilbert Islands Group and Christmas Island. Sodium nitrate is obtained chiefly from Chile.

The imports of artificial fertilizers during the five years ended 1955-56, compared with average imports for the period 1934-35 to 1938-39, are shown in the following table:—

ARTIFICIAL FERTILIZERS: IMPORTS INTO AUSTRALIA.

Fertilizer.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Ammonium Sulphate tons	26,090	40,848	384	11,187	35,056	9,466
	£'000	215	1,016	10	242	764	228
Potash Salts tons	10,641	15,978	14,467	22,234	27,403	39,099
	£'000	82	369	314	397	489	652
Rock Phosphate tons	635,097	1,014,100	1,271,139	1,143,330	1,086,884	1,418,527
	£'000	776	2,258	2,478	2,432	2,166	2,828
Sodium Nitrate tons	7,199	15,802	7,848	6,948	11,714	14,102
	£'000	63	363	185	183	250	323
Other .. tons	3,430	2,735	1,837	6,935	399	506
	£'000	8	120	15	151	14	16
Total .. tons	682,457	1,089,463	1,295,675	1,190,634	1,161,456	1,481,700
	£'000	1,144	4,126	3,002	3,405	3,683	4,047

Exports of fertilizers (practically all of which are manufactured locally) amounted to 1,962 tons valued at £37,000 in 1955-56 compared with 2,345 tons valued at £34,000 in 1954-55 and 4,826 tons valued at £34,000 for the average of the five years ended 1938-39. Superphosphate is the principal fertilizer exported and amounted to 1,727 tons in 1955-56.

3. **Quantities Used Locally.**—Information regarding the area fertilized with artificial fertilizers and the quantity of artificial fertilizers (superphosphate, bonedust, nitrates, etc.) used in each State during the 1955-56 season is given in the following table. Details of the area manured with natural manure (stableyard, etc.) are no longer collected.

AREA FERTILIZED AND QUANTITY OF ARTIFICIAL FERTILIZERS USED, 1955-56.

State or Territory.	Area Fertilized ('000 Acres).			Fertilizers Used (Tons).		
	Crops.	Pasture Lands.	Total.	Crops.	Pasture Lands.	Total.
New South Wales	2,401	4,003	6,404	97,818	209,790	307,608
Victoria	3,500	8,537	12,037	173,678	479,913	653,591
Queensland	449	18	467	97,603	1,472	99,075
South Australia	3,405	3,499	6,904	176,935	203,848	380,783
Western Australia	5,208	4,576	9,784	257,263	210,845	468,108
Tasmania	162	830	992	22,752	60,215	82,967
Northern Territory .. ..	..	..	..	67	..	67
Australian Capital Territory ..	5	50	55	333	2,649	2,982
Total	15,130	21,513	36,643	826,449	1,168,732	1,995,181

Particulars of the quantity of artificial fertilizers used in each State and Territory during each of the seasons 1951-52 to 1955-56, compared with the average for the five years ended 1938-39, are shown in the next table. These details include the quantity used in the top-dressing of pasture lands.

QUANTITY OF ARTIFICIAL FERTILIZERS USED.
(Tons.)

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Total.
Average, 1934-35									
1938-39 ..	148,277	305,969	50,651	200,566	2,071,3	30,272	(a)	276	966,724
1951-52 ..	177,120	579,022	72,610	270,046	399,304	56,719	(a)	1,033	1,555,854
1952-53 ..	196,124	619,327	82,222	284,226	409,959	64,439	(a)	1,554	1,657,851
1953-54 ..	251,440	592,403	96,358	325,085	405,012	71,015	(a)	2,304	1,743,617
1954-55 ..	273,548	635,290	91,700	350,351	450,823	75,748	54	2,672	1,880,186
1955-56 ..	307,608	653,591	99,075	380,783	468,108	82,967	67	2,982	1,995,181

4. **Local Production.**—Complete information regarding local production of fertilizers is not available. The number of firms engaged in the manufacture of chemical fertilizers in Australia for the year 1955-56 was 54, made up as follows:—New South Wales, 15; Victoria, 9; Queensland, 8; South Australia, 8; Western Australia, 6 and Tasmania, 8. The production of superphosphate in Australia during 1955-56 amounted to 2,126,000 tons.

§ 25. Ensilage.

1. **Government Assistance in Production.**—The several State Governments devote a considerable amount of attention to the education of the farming community in regard to the value of ensilage. Monetary aid is afforded in the erection of silos, and expert advice is supplied in connexion with the design of the silos and the cutting and packing of the ensilage.

2. **Quantity Made and Stocks Held on Farms.**—Information regarding production and farm stocks of ensilage for the years ended 31st March, 1954, 1955 and 1956 are given in the following table.

ENSILAGE: PRODUCTION AND FARM STOCKS.
(Tons.)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
Production during—								
1953-54 season ..	84,465	69,830	18,513	13,755	12,070	22,459	..	221,092
1954-55 „ ..	102,790	86,373	24,760	22,908	10,105	23,991	20	270,947
1955-56 „ ..	86,125	127,878	36,191	35,457	12,312	47,282	395	345,640
Farm Stocks, as at—								
31st March, 1954 ..	101,262	(a)	18,907	11,497	4,324	19,811	25	(a)
„ „ 1955 ..	99,238	(a)	23,609	17,963	4,837	18,422	85	(a)
„ „ 1956 ..	101,179	(a)	43,155	26,664	8,918	42,863	415	(a)

(a) Not available.

The drought of 1902-3 drew increased attention to the value of stocks of ensilage, and during the four seasons ended 1909-10 there was an increase both in the number of holdings on which ensilage was made and in the quantity produced. The accumulated stocks proved of great value during the 1914 drought, though far less than would have been the case if more attention had been paid to production during the previous years when there was a surplus of green fodder. The quantities made since that date have fluctuated considerably, but the output increased up to 1939-40 in which year the production was 303,495 tons. During subsequent seasons, output declined to the extremely low level of 94,744 tons during the drought year 1944-45 rising to 180,622 tons in 1947-48 but decreasing again in succeeding years to 110,474 tons in 1951-52. Since then production has increased substantially each year up to 1955-56 when a record quantity of 345,640 tons was made.

§ 26. Agricultural Colleges and Experimental Farms.

Agricultural colleges, administered by State Departments of Agriculture, have been established in all States except Tasmania. The primary function of these colleges is the training of students in the various phases of agricultural work and livestock husbandry. Students are required to undertake a considerable amount of practical work in addition to lectures and theory. A secondary function of the colleges is agricultural research and experimentation. To a lesser degree, they carry out extension work in the form of public field days. Upon graduation, students receive diplomas in agriculture, dairying, etc., according to the course undertaken.

Experimental farms have been set up by State Departments of Agriculture in all States. They are primarily concerned with agricultural research and experimentation, each farm concentrating on problems specific to the district in which it is located. The results of the work undertaken are passed on to farmers at field days, which are held at regular intervals, through publication in various agricultural or scientific journals and through the agricultural extension officers of the State Departments of Agriculture.

The Commonwealth Scientific and Industrial Research Organization has field stations scattered throughout Australia, and sometimes undertakes joint research with the appropriate State authorities. In general, however, the Commonwealth Scientific and Industrial Research Organization concentrates on fundamental research, except when otherwise specifically invited, while the State Departments of Agriculture study problems of particular significance within their own boundaries. The universities also carry out valuable research work on their own experimental farms.

§ 27. Tractors on Rural Holdings.

The growth of mechanization in agriculture is indicated by the increase in the number of tractors on rural holdings from 41,943 in 1939 to 201,849 in 1956 or by 381 per cent. Since 1943, the first year in which the collection was made by types, wheeled type tractors have increased by 305 per cent., and crawler types by 156 per cent.

The table below sets out the total number of tractors on rural holdings in 1939, and the number of wheeled type and crawler tractors for the five years ended 1956. More detailed information showing the number of tractors in 1954 classified according to age, horse-power and type of fuel used is available from Primary Industries Bulletin, Part I., 1953-54.

TRACTORS ON RURAL HOLDINGS.

March—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
WHEELED TYPE TRACTORS.									
1952	35,302	33,678	27,084	15,396	14,579	3,857	(a)	142	130,038
1953	39,229	37,484	29,822	16,729	15,381	4,550	(a)	158	143,353
1954	41,195	41,953	32,535	18,228	16,577	5,111	(a)	163	155,762
1955	45,619	45,824	35,024	20,074	17,832	5,699	51	172	170,295
1956	50,005	49,584	37,443	21,155	18,537	6,272	70	193	183,259
CRAWLER OR TRACK TYPE TRACTORS.									
1952	2,828	1,187	3,810	2,788	2,498	342	(a)	6	13,459
1953	3,179	1,271	4,176	3,021	2,932	442	(a)	8	15,029
1954	3,221	1,214	4,547	2,614	3,093	547	(a)	7	15,243
1955	3,479	1,430	4,945	3,036	3,334	660	4	9	16,897
1956	4,001	1,645	5,313	3,190	3,654	745	32	10	18,590
TOTAL TRACTORS.									
1939(b) ..	12,926	8,802	8,541	5,069	5,680	(a)	(a)	25	(c) 41,943
1952	38,130	34,865	30,894	18,184	17,077	4,199	(a)	148	143,497
1953	42,408	38,755	33,998	19,750	18,313	4,992	(a)	166	158,382
1954	44,416	43,167	37,082	20,842	19,670	5,658	(a)	170	171,005
1955	49,098	47,254	39,969	23,110	21,166	6,359	55	181	187,192
1956	54,006	51,229	42,756	24,345	22,191	7,017	102	203	201,849

(a) Not available.

(b) At commencement of year.

(c) Excludes Tasmania.

§ 28. Number and Area of Rural Holdings and Employment Thereon.

NOTE.—In § 1, Introductory, of this chapter, reference was made to the reconciliation carried out in New South Wales, in 1955-56, of the lists of rural holdings used in the collection of agricultural and pastoral statistics with lists of ratable land of 1 acre or more in extent

An approximate classification was, however, made for New South Wales for 1945-46 and details may be found on p. 1018 of Official Year Book No. 39.

2. **Special Tabulation Relating to Rural Holdings, 1949-50.**—With the co-operation of State Statisticians, the second series of special tabulations relating to rural holdings was undertaken for all States for the 1949-50 season. These tabulations have been published in detail in Primary Industries Bulletin No. 44, 1949-50. The following table shows particulars of the number and area of rural holdings classified according to the size of holdings.

RURAL HOLDINGS: NUMBER AND AREA CLASSIFIED IN AREA SERIES, 1949-50.

Area Series (Acres).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.(a)
NUMBER OF HOLDINGS.								
Under 3	941	408	214	317	463	157	..	2,500
3- 4	1,391	967	239	432	469	178	1	3,677
5- 9	3,160	2,445	634	927	1,036	437	14	8,653
10- 24	4,563	6,916	1,596	2,690	1,569	977	9	18,320
25- 49	4,080	5,520	1,852	2,192	761	1,168	15	15,588
50- 99	5,209	7,676	4,060	2,182	663	2,048	9	21,847
100- 149	4,627	6,816	3,733	1,187	745	1,662	4	18,774
150- 249	6,656	8,742	6,720	1,732	1,279	1,708	6	26,843
250- 499	9,034	11,118	7,386	2,969	1,699	1,472	16	33,694
500- 749	6,478	7,047	3,380	2,650	898	510	18	20,981
750- 999	4,657	3,794	1,527	1,897	887	226	16	13,004
1,000- 1,499	6,695	4,128	1,957	2,631	1,905	288	34	17,638
1,500- 2,499	5,925	2,881	1,549	2,584	3,083	256	46	16,324
2,500- 4,999	5,559	1,401	1,523	1,991	2,718	229	21	13,442
5,000- 9,999	2,517	424	1,185	806	746	134	7	5,819
10,000-19,999	1,107	123	1,200	311	143	59	2	2,945
20,000-49,999	832	61	1,640	173	52	32	3	2,793
50,000-99,999	369	11	608	78	37	7	..	1,110
100,000 and over	187	8	557	151	412	..	..	1,315
Total	73,987	70,486	41,560	27,900	19,565	11,548	221	245,267
AREA OF HOLDINGS.								
('000 ACRES.)								
Under 3	2	1	..	..	1	..	..	4
3- 4	5	3	1	1	2	1	..	13
5- 9	20	16	4	6	7	3	..	56
10- 24	71	113	25	45	24	16	..	294
25- 49	148	197	68	77	26	43	..	559
50- 99	375	555	301	157	47	148	..	1,583
100- 149	561	824	457	144	90	197	..	2,273
150- 249	1,292	1,680	1,264	339	246	324	1	5,146
250- 499	3,249	3,931	2,633	1,112	595	502	6	12,028
500- 749	3,976	4,345	2,060	1,630	549	308	11	12,879
750- 999	4,050	3,288	1,315	1,647	796	194	14	11,304
1,000- 1,499	8,173	5,021	2,362	3,205	2,302	345	41	21,449
1,500- 2,499	11,374	5,410	3,009	4,876	6,048	496	93	31,306
2,500- 4,999	19,090	4,677	5,301	6,793	9,275	811	69	46,016
5,000- 9,999	2,809	2,809	8,349	5,470	4,810	904	56	39,330
10,000-19,999	14,918	1,672	17,274	4,344	1,869	763	25	40,865
20,000-49,999	26,454	1,755	51,240	5,406	1,879	899	87	87,721
50,000-99,999	25,780	685	42,108	5,502	2,711	457	..	77,243
100,000 and over	33,557	1,359	218,032	105,809	179,780	..	..	538,537
Total	170,027	38,342	355,803	146,563	211,057	6,411	403	928,606

(a) Excludes Northern Territory.

3. **Employment on Rural Holdings.**—The following table shows, for each State of Australia, the recorded number of persons permanently and temporarily working on rural holdings as at 31st March, 1956. Additional particulars relating to the number of males employed in agriculture are available up to 1941-42 in Official Year Book No. 36, p. 852 and previous issues. Similar details for later years are not available.

PERSONS PERMANENTLY AND TEMPORARILY ENGAGED ON RURAL HOLDINGS AT 31st MARCH, 1956.

Particulars.	N.S.W. (a)	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.(b)	A.C.T.	Aust.
<i>Permanent—</i>									
Owners, Lessees or Share-farmers	74,571	68,397	45,759	27,303	20,053	9,211	172	155	245,621
Males	1,544	3,743	9,138	3,004	444	630	29	5	18,537
Relatives of Owner, Lessee or Share-farmer over 14 years of age, not receiving wages or salary	7,732	5,808	3,946	2,012	1,546	154	17	17	21,232
Males	6,762	1,282	6,403	979	1,033	53	24	11	16,547
Employees, including Managers and Relatives working for wages or salary	31,379	17,099	20,099	8,020	7,861	4,243	494	139	89,334
Males	976	1,379	3,474	687	254	196	38	16	7,020
Females									
<i>Total Permanent—</i>									
Males	113,682	91,304	69,804	37,335	29,460	13,608	683	311	356,187
Females	9,282	6,404	19,015	4,670	1,731	879	91	32	42,104
<i>Persons</i>	122,964	97,708	88,819	42,005	31,191	14,487	774	343	398,291
<i>Temporary—</i>									
Males	27,049	16,629	16,370	12,323	5,321	5,339	1,517	59	84,607
Females	1,826	1,335	845	3,253	241	1,714	413	11	9,638
<i>Persons</i>	28,875	17,964	17,215	15,576	5,562	7,053	1,930	70	94,245
<i>Total Persons</i>	151,839	115,672	106,034	57,581	36,753	21,540	2,704	413	492,536

(a) Not strictly comparable with previous years. See special note at beginning of § 28. (b) 1,365 male and 407 female full-blood aboriginals employed are included as temporary employees.

The next table shows for Australia as a whole the number of persons working full-time on rural holdings as at 31st March of the six years 1951 to 1956.

PERSONS PERMANENTLY AND TEMPORARILY ENGAGED ON RURAL HOLDINGS, AUSTRALIA.

Particulars.	As at 31st March—					
	1951.(a)	1952.(a)	1953.(a)	1954.(a)	1955.(a)	1956.
<i>Permanent—</i>						
Males—						
Owners, Lessees or Share-farmers	237,251	236,330	241,368	241,149	240,879	245,621
Relatives of Owner, Lessee or Share-farmer over 14 years of age, not receiving wages or salary	24,676	24,589	23,157	22,736	23,529	21,232
Employees, including managers and relatives working for wages or salary	91,226	88,264	91,864	93,748	91,479	89,334
Total, Males	353,153	349,183	356,389	357,633	355,887	356,187
Females	52,346	46,603	48,234	49,782	46,656	42,104
Total Permanent	405,499	395,786	404,623	407,415	402,543	398,291
<i>Temporary—</i>						
Total, Males	83,190	88,356	91,656	86,644	87,400	84,607
Females	8,663	8,576	8,037	8,365	9,238	9,638
Total Temporary	91,853	96,932	99,693	95,009	96,638	94,245
Grand Total	497,352	492,718	504,316	502,424	499,181	492,536

(a) Excludes Northern Territory.

4. Salaries and Wages Paid to Employees on Rural Holdings.—Particulars of salaries and wages paid to permanent and temporary employees (including amounts paid to contractors) working full-time on rural holdings have been collected uniformly in all States from 1949–50. Details for each State are set out below for the year 1955–56 and for Australia as a whole for the years 1952–53 to 1955–56.

RURAL HOLDINGS: SALARIES AND WAGES^(a) PAID TO PERMANENT AND TEMPORARY EMPLOYEES, 1955-56.

(£'000.)

Particulars.	N.S.W. (b)	Vic.	Q'ld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Permanent—Males ..	19,879	10,744	12,344	4,904	4,838	2,600	333	110	55,752
Females ..	297	476	1,278	225	90	61	24	5	2,456
Temporary(c)—Males ..	15,800	8,621	17,555	4,325	4,952	1,584	146	68	53,051
Females ..	425	266	204	255	101	180	1	4	1,436
Total	36,401	20,107	31,381	9,709	9,981	4,425	504	187	112,695

(a) Including value of keep.
note at beginning of § 28.

(b) Not strictly comparable with previous years. See special
(c) Includes amounts paid to contractors.

RURAL HOLDINGS: SALARIES AND WAGES^(a) PAID TO PERMANENT AND TEMPORARY EMPLOYEES, AUSTRALIA.

(£'000.)

Particulars.	1952-53.(b)	1953-54.(b)	1954-55.(b)	1955-56.
Permanent—Males	47,623	52,240	53,951	55,752
Females	2,270	2,406	2,468	2,456
Temporary(c)—Males	44,715	51,282	53,855	53,051
Females	1,151	1,190	1,323	1,436
Total	95,759	107,118	111,597	112,695

(a) Including value of keep.
to contractors.

(b) Excludes Northern Territory.

(c) Includes amounts paid

CHAPTER XXIII.

PASTORAL PRODUCTION.

NOTE.—Except where otherwise indicated, values of Australian oversea trade shown throughout this chapter are expressed as f.o.b., Australian currency, port of shipment.

§ 1. Initiation and Growth of Pastoral Industry.

1. **Livestock Numbers.**—A detailed account of the various enumerations of livestock in Australia made prior to 1860 was given in previous issues of the Year Book. Since 1860, annual enumerations have been made, based, with few exceptions, on actual collections made through the agency of the State Police or by post. Particulars concerning the numbers of each of the principal kinds of livestock in Australia at decennial intervals from that year to 1950, and from 1952 onwards in single years, are given in the following table, and are shown continuously on the graph on p. 899.

LIVESTOCK : AUSTRALIA.
(‘000.)

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.	Horses.	Cattle.	Sheep.	Pigs.
1860 ..	432	3,958	20,135	351	1940 ..	1,699	13,080	119,305	1,455
1870 ..	717	4,276	41,594	543	1950 ..	1,057	14,640	112,891	1,123
1880 ..	1,069	7,527	62,184	816	1952 ..	937	14,893	117,647	1,022
1890 ..	1,522	10,300	97,881	891	1953 ..	895	15,247	123,072	993
1900 ..	1,610	8,640	70,603	950	1954 ..	850	15,601	126,944	1,197
1910 ..	2,166	11,745	98,066	1,026	1955 ..	803	15,836	130,849	1,297
1920 ..	2,416	13,500	81,796	764	1956 ..	770	16,457	139,124	1,166
1930 ..	1,793	11,721	110,568	1,072					

While livestock numbers (particularly sheep) have increased substantially since 1860, marked fluctuations have taken place during the period, mainly on account of droughts which have from time to time left their impress on the pastoral history of Australia. These occurred in 1868, 1877, 1883-4, 1892, 1893, 1895, 1901-2, 1912, 1914, 1918, 1919, 1922-23, 1925-26, 1927-28, 1929-30, 1940-41 and 1944-45 to 1946-47.

The years in which the numbers of livestock attained their maxima are as follows:—Horses, 1918 (2,527,000); cattle, 1956 (16,457,000); sheep, 1956 (139,124,000); and pigs, 1941 (1,797,000).

The distribution throughout Australia of beef cattle, dairy cattle, sheep and pigs as at 31st March, 1955 is shown in the maps on pp. 909-12.

The numbers of horses, beef cattle and sheep in each State and Territory are shown later in this chapter; similar information for dairy cattle and pigs appears in Chapter XXIV.—Farmyard, Dairy and Bee Products.

2. **Minor Classes of Livestock.**—Statistics of the minor classes of livestock (goats, camels, mules, donkeys, etc.) have not been collected in recent years. The last year in which all States, other than Victoria, collected this information was 1941, when total numbers were as follows:—Goats, 80,366; camels, 2,267; and mules and donkeys, 10,881. Of these, goats were most numerous in Queensland, and camels, mules and donkeys in Western Australia. Further details have been published in earlier issues of the Official Year Book.

3. **Carrying Capacity of Pastoral Holdings.**—The carrying capacity of pastoral holdings has been increased in recent years by the succession of good seasons since 1946-47. Other important contributing factors have been the reduction of rabbit infestation by the introduction of myxomatosis, and increased attention to pasture improvement.

Since myxomatosis was first introduced in 1950 there has been a dramatic increase in the spread of the disease over much of Australia and in many areas the rabbit population is at the lowest level for many years.

Statistics of the area under sown grasses and clovers have been collected on a uniform basis in all States since 1952-53 only, but here also there are indications that the area sown has been considerably increased. In 1954-55, the area under sown grasses and clovers (excluding native grasses) totalled 26.1 million acres, an increase of 2.3 million acres (9.9 per cent.) over 1953-54 and 5.0 million acres (23.6 per cent.) over 1952-53. In recent years the sowing and top-dressing of pastures has been facilitated by the increasing use of aircraft in these operations.

4. Value of Pastoral Production.—(i) *Gross, Local and Net Values, 1954-55.* Values of pastoral production for each State are shown for 1954-55 in the following table. Further details of the source of the information and an explanation of the terms used in this compilation will be found in Chapter XXX.—Miscellaneous. Maintenance costs have not been computed in all States and depreciation has not been deducted; consequently the net values are inflated to the extent of these costs.

GROSS, LOCAL AND NET VALUES OF PASTORAL PRODUCTION, 1954-55.
(£'000.)

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Farm Costs.		Net Value of Production. (a)
				Seed used, and Fodder for Farm Stock.	Value of other Materials used in Process of Production.	
N.S. Wales ..	197,213	12,709	184,504	5,990	(b) 3,068	175,446
Victoria ..	130,681	11,257	119,424	2,617	4,611	112,196
Queensland ..	93,388	6,469	86,919	3,189	1,550	82,180
S. Australia ..	50,530	2,869	47,661	807	1,634	45,220
W. Australia ..	43,717	2,641	41,076	1,927	2,955	36,194
Tasmania ..	10,781	594	10,187	2,194	(b) 346	7,647
Northern Territory	2,142	349	1,793	..	..	1,793
Aus. Cap. Territory	916	58	858	32	38	788
Total ..	529,368	36,946	492,422	16,756	14,202	461,464

(a) No deduction has been made for depreciation and maintenance.

(b) No allowance has been made for costs of power, power kerosene, petrol and other oils.

(ii) *Net Values, 1934-35 to 1954-55.* The net value of pastoral production by States and the net value per head of population for the years 1950-51 to 1954-55 together with the average for the years 1934-35 to 1938-39 are shown below.

NET VALUE OF PASTORAL PRODUCTION, (a)

Year.	N.S.W. (b)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas. (b)	Australia.
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NET VALUE. (c)
(£'000.)

Average, 1934-35 to 1938-39 ..	30,592	16,784	13,384	4,583	4,307	1,429	71,079
1950-51 ..	302,642	162,409	100,526	65,797	61,463	11,972	704,809
1951-52 ..	154,386	99,808	67,080	38,965	34,442	5,812	400,493
1952-53 ..	206,872	108,459	82,442	49,918	38,642	7,412	493,745
1953-54 ..	202,439	108,930	81,989	47,423	43,784	7,151	491,716
1954-55 ..	175,446	112,196	82,180	45,220	36,194	7,647	d 461,464

For footnotes see following page.

NET VALUE OF PASTORAL PRODUCTION—*continued.*

Year.	N.S.W.(b)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(b)	Australia.
NET VALUE PER HEAD OF POPULATION.(c)							
(£ s. d.)							
Average, 1934-35 to 1938-39	11 8 0	9 1 3	13 11 10	7 15 6	9 9 2	6 2 7	10 8 8
1950-51 ..	93 9 1	72 8 2	83 5 5	91 2 11	107 15 3	42 4 6	85 5 7
1951-52 ..	46 12 4	43 4 4	54 2 1	52 8 5	58 7 9	19 16 3	47 3 8
1952-53 ..	61 9 1	45 14 5	64 16 0	65 2 5	63 4 6	24 10 0	56 16 2
1953-54 ..	59 8 11	44 19 2	63 0 11	60 6 9	69 8 3	23 2 2	55 10 7
1954-55 ..	50 14 3	45 1 10	62 0 0	55 19 11	55 15 7	24 8 7	d50 15 4

(a) Excludes payments to wool-growers of profits from the war-time wool disposal plan. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils. (c) No deduction has been made for depreciation and maintenance. (d) Includes estimates for Northern Territory and Australian Capital Territory.

5. Indexes of Quantum and Price of Pastoral Production, 1950-51 to 1954-55.—For details of the methods of calculating these indexes and of the weights used see Chapter XXX.—Miscellaneous.

INDEXES OF QUANTUM(a) AND PRICE OF PASTORAL PRODUCTION:
AUSTRALIA.

(Base: Average 3 years ended June, 1939 = 100.)

Particulars.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Quantum(a) produced—</i>					
Wool	116	112	131	128	132
Other products ..	100	95	119	117	120
<i>Total Pastoral</i> ..	109	105	126	123	127
Total per Head of Population ..	90	84	97	95	96
<i>Price—</i>					
Wool	1,098	552	623	621	540
Other products ..	386	423	389	401	409
<i>Total Pastoral</i> ..	818	501	531	534	489

(a) Index of value at constant prices, i.e., quantities revalued at average unit values of base years (1936-37 to 1938-39).

6. Consumption of Meats.—The quantity of meat (including cured and canned meat) in terms of carcass weight and edible offal available for consumption in Australia in 1955-56 was 949,500 tons. This is equivalent to 228.4 lb. per head compared with 228.7 lb. per head in 1954-55, 223.5 lb. in 1953-54 and an average of 253.0 lb. during the years 1936-37 to 1938-39.

Although it is not easy to obtain strictly comparable particulars for other countries, it appears from data published by the Food and Agricultural Organization of the United Nations in its *Food Balance Sheets* that in recent years consumption of meat in Australia has been at approximately twice the level of that in Canada and about one and a half times the level of that in the United States of America.

7. **Marketing of Meat.**—(i) *General.* The Australian Meat Board, consisting of representatives of producers, processors, exporters and the Commonwealth Government, is responsible for the control of all exports of Australian meat and meat products. Further information on the powers, etc., conferred on the Board under the Meat Export Control Act 1935–1953 was given on p. 801 of Official Year Book No. 40.

(ii) *United Kingdom Long-term Purchase Agreements.* Details of the long-term meat contracts with the United Kingdom Government from the outbreak of the 1939–45 War up to 30th June, 1952 and of the Fifteen Year Meat Agreement (1952–67) were given on p. 710 of Official Year Book No. 41 and in earlier issues of the Year Book.

The Fifteen Year Meat Agreement (1952–67) between the United Kingdom and Australian Governments has as its objectives the promotion of meat production in Australia enabling increased exports to be made to the United Kingdom and the provision of a satisfactory market in the United Kingdom for that meat. It covers chilled and frozen beef, frozen veal, frozen mutton and lamb, frozen cattle and sheep sundries and edible offal.

Pig meats were not included in the Fifteen Year Meat Agreement, but a two-year arrangement terminating on 30th September, 1954 was negotiated. This arrangement did not limit shipments of pig meats to other markets.

(iii) *Cessation of Bulk Purchasing.* Following the announcement in September, 1953, that the United Kingdom Ministry of Food would cease bulk purchasing of meat, arrangements were made between the Australian Meat Board and the Ministry for the reversion to private trading in the United Kingdom. The main features of the arrangements are:—

(a) Mutton and lamb exported after 1st July, 1954, and beef, veal and pig meats exported after 1st October, 1954, direct to United Kingdom importers are to be sold on the open market under methods similar to those which applied pre-war.

(b) The following minimum prices, to operate until 30th September, 1955 were agreed upon:—Beef and veal, 13.18d. stg. f.o.b. per lb.; lamb, 13.61d. stg. f.o.b. per lb.; and mutton, 6.05d. stg. f.o.b. per lb. The minimum prices are to be reviewed for subsequent years.

(c) In the event of market prices for the various classifications of meat averaging below the minimum, the Ministry is to make a payment to the Australian Government corresponding to the amount of the deficiency. So as to determine the extent of any deficiency, a procedure designed to measure as accurately as possible the weighted average level of wholesale prices of Australian meat on the United Kingdom market has been agreed upon.

(iv) *Private Trading.* After eight months of open trading, the Board estimated that a deficiency payment would be received in respect of beef for the first year. In order to make arrangements for this anticipated deficiency to be passed on to the producer, the Meat Agreement (Deficiency Payments) Act was passed by the Commonwealth Government in May, 1955. Under this Act, the Board paid to exporters a deficiency payment of 1½d. per lb. on beef delivered into store during the months of May, June, July and August, 1955 and subsequently exported to the United Kingdom. The rate for September was reduced to 1d. per lb. These payments were made on the understanding that they were, or would be, reflected in the price paid to producers.

To make provision for recoupment by the Board of any overpayment, the Meat Export (Additional Charge) Act was also passed in May, 1955.

Negotiations were made in Australia during August and September, 1955, to review minimum prices and the working of the Agreement generally. The following minimum prices were fixed for the three years ended 30th September, 1958:—For beef and veal and lamb the same as for the year ended 30th September, 1955, and for mutton the average prices realized to the end of April, 1955 (approximately 5.8d. stg. per lb.). In addition, minimum beef and veal prices were fixed for the three years 1958–61 at 5 per cent. below those for the 1955–58 period. Australia will, under the terms of the Agreement, be entitled to export 10,000 tons of beef, veal, lamb and mutton to destinations other than the United Kingdom and the Colonies. Additional free quotas can be requested and sympathetic consideration can be expected for any such requests should depressed prices or other circumstances justify an approach of this kind.

Under this arrangement, for the year ended 30th September, 1956, an additional 5,000 tons of beef for export to any destination was agreed upon.

Because of a rise in beef prices in the United Kingdom, the deficiency payments made by the Board during the year ended 30th September, 1955, exceeded the sum received from the United Kingdom for the same period. In an endeavour to recoup some of this overpayment, under the terms of the Meat Export (Additional Charge) Act, a levy of one eighth of a penny per lb. was imposed on certain classes of beef exported to the United Kingdom out of stocks placed into store from 1st February to 16th April, 1956.

During the season commencing on 1st October, 1955, beef prices in the United Kingdom were consistently below the level of the guarantee and consequently Australia

“earned” regular deficiency payments. The United Kingdom Government agreed, in July, 1956, to make an advance payment to Australia in respect of estimated deficiency earnings over the season. In anticipation of substantial deficiency earnings during the season, the Australian Meat Board made deficiency payments on beef delivered into store from 16th April to 29th September and subsequently exported to the United Kingdom. The payment from 16th April to 28th July was 2d. per lb.; from 29th July to 29th September, it was 1½d. per lb.

In July and August, 1956, the annual review of the operation of the Agreement took place in London. It was agreed that Australia be entitled to export 15,000 tons of beef, veal, mutton and lamb to destinations other than the United Kingdom and Colonies during each of the meat years 1956-57 and 1957-58.

The Australian Meat Board continued to make deficiency payments on beef delivered into store during 1956-57, the rate to 29th December, 1956 being 1½d. per lb. and to 31st March, 1957, 3d. per lb.

§ 2. Horses.

1. **Distribution throughout Australia.**—About 80 per cent. of the total number of horses in Australia are in the States of New South Wales, Queensland and Victoria. In the following table, figures are shown for each State and Territory for the years 1952 to 1956 in comparison with the average for the years 1935 to 1939:—

HORSES : NUMBER.
(’000.)

Year.	N.S.W.	Vic.	Q’land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1935 to 1939 ..	537	355	444	198	154	31	33	1	1,753
1952 ..	311	169	289	63	53	19	32	1	937
1953 ..	298	154	282	57	50	18	35	1	895
1954 ..	280	141	273	52	49	17	37	1	850
1955 ..	258	132	267	49	47	16	33	1	803
1956 ..	247	119	261	44	46	15	37	1	770

The number of horses in Australia attained its maximum during 1918, when a total of 2,527,149 was recorded. The United States of America recorded its highest number in the same year and Canada in 1921. The number in Australia has declined considerably since 1918 owing to the mechanization of transport and farming. During the period 1918 to 1956, the decrease in numbers has averaged 46,000 per annum.

The number of horses in Australia from 1860 onwards may be obtained from the graph on p. 899.

The percentage distribution of the number of horses in each State and Territory for 1956 was:—New South Wales, 32; Victoria, 15; Queensland, 34; South Australia, 6; Western Australia, 6; Tasmania, 2; and Northern Territory, 5.

2. **Oversea Trade in Horses.**—(i) *Exports.* The export of horses from Australia during the early years of this century was fairly considerable, averaging about 15,000 head per annum between 1901 and 1920, exclusive of those used for war purposes during the 1914-18 War. Since then, exports have gradually declined and averaged only about 4,000 for the five years ended 1938-39 and just under 800 for the five years ended 1955-56.

(ii) *Imports.* The few horses imported into Australia consist mainly of valuable stud animals from the United Kingdom and racehorses from New Zealand. During the five years ended 1955-56, an average number of 448 horses valued at £382,000 (equivalent to £855 per head) was imported annually.

§ 3. Cattle.

1. **Purposes for which Raised.**—Cattle-raising is carried out in all the States, the main object in certain districts being the production of stock suitable for slaughtering purposes, and in others the raising of profitable dairy herds. The great impetus which the development of the export trade in Australian butter gave to the dairying industry led to a considerable increase in numbers and an improvement in quality of the dairy herds in the coastal districts of Victoria, New South Wales and southern Queensland in particular, the portion of Australia in the temperate zone which is best adapted to this industry. On the other hand, beef-producing cattle are more widely distributed particularly in the eastern States and are raised in areas unsuitable for dairy cattle, such as the tropical area of northern Queensland, the Northern Territory, and the Kimberley district in the north of Western Australia.

2. **Distribution throughout Australia.**—Until 1880, New South Wales was the principal cattle-raising State, but in that year Queensland occupied the leading position, which it has since maintained. There was a very rapid increase in the number of cattle in Australia up to the year 1894, when 12,312,000 head were depastured. From 1895 onwards, however, the effects of droughts and the ravages of tick fever reduced the number to 7,063,000 in 1902. Following the disastrous drought which terminated in the latter year, the herds were gradually built up, and, despite recurring droughts, they continued to increase up to 14,441,000 in 1921. After that year the number dropped continuously till 1929, largely owing to the decline in the oversea demand for frozen beef. With the expansion of dairying it recovered to 14,049,000 in 1934, but from that year declined continuously to 1939 when it stood at 12,862,000. The upward movement which commenced in 1940 was continued until 1944, the total number of cattle (14,184,000) in the latter year being at its highest level since 1923. Drought conditions and other factors caused a decline in numbers to 13,427,000 in 1947. This was followed by a general upward movement in numbers to a record 16,457,000 in 1956. A graph showing the number of cattle in Australia from 1860 appears on p. 899.

The numbers of cattle (beef and dairy) in the several States and Territories in each year 1952 to 1956 compared with the average for the years 1935 to 1939 are shown below.

CATTLE : NUMBER.

(‘000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Aust.
Average, 1935 to 1939	3,198	1,952	6,018	331	819	262	889	9	13,478
1952	3,621	2,215	6,435	437	852	265	1,058	10	14,893
1953	3,649	2,297	6,751	483	846	275	936	10	15,247
1954	3,554	2,370	7,086	491	830	295	966	9	15,601
1955	3,461	2,456	7,238	524	861	319	969	8	15,836
1956	3,678	2,616	7,331	566	897	332	1,028	9	16,457

Although the proportion is not as high as it has been in the past, Queensland was carrying 45 per cent. of the cattle in Australia in 1956. The percentage in each State and Territory during that year was:—New South Wales, 22; Victoria, 16; Queensland, 45; South Australia, 3; Western Australia, 6; Tasmania, 2; and Northern Territory, 6.

Maps showing the distribution of beef and dairy cattle in Australia at 31st March, 1955 appear on pp. 909–10. Similar maps showing the distribution in earlier years appeared in previous issues of the Official Year Book (see No. 39, pp. 905–6, for 1948; No. 34, pp. 453–4, for 1938–39; and No. 22, p. 660, for 1924–25).

3. **Classification of Cattle According to Purpose.**—Of the total number of cattle in Australia in 1956, 11,478,000 or 70 per cent. were classified as beef cattle. The numbers classified as beef cattle in the several States and Territories during the years 1943 and 1952 to 1956 were as follows:—

BEEF CATTLE : NUMBER.

(‘000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Aust.
1943	1,676	577	4,893	171	605	102	978	5	9,007
1952	2,416	776	5,138	201	621	110	1,058	7	10,327
1953	2,405	820	5,378	231	612	113	936	6	10,501
1954	2,316	829	5,703	230	600	121	966	6	10,771
1955	2,242	856	5,861	255	633	129	969	5	10,950
1956	2,421	954	5,946	302	673	148	1,028	6	11,478

A classification of numbers on this basis is not available prior to 1943.

Particulars relating to dairy cattle numbers will be found in Chapter XXIV.—Farm-yard, Dairy and Bee Products.

4. **Size Classifications of Cattle Herds.**—A special series of tabulations relating to rural holdings in Australia was compiled for 1949-50 and published in Primary Industries Bulletin No. 44. The tables relating to beef and dairy cattle show classifications according to size of herd and area of holding.

5. **Comparison with other Countries.**—The following table shows the number of cattle in Australia and in some of the principal cattle-raising countries of the world for the years 1936-40 and at the latest available date. The figures, which, in general, have been compiled by the United States Department of Agriculture for publication in *Foreign Crops and Markets*, relate to areas embraced by post-war boundaries, but do not cover identical areas for the two periods in all cases.

CATTLE : NUMBER IN VARIOUS COUNTRIES.

(⁰000.)

Country.	Average, 1936-40.(a)	Year and Month.	Number.
India(b)	180,000	1955 (January) ..	209,000
United States of America	66,706	1956 (January) ..	97,465
U.S.S.R.	59,800	1955 (October) ..	64,900
Brazil	40,807	1955 (December) ..	64,000
Argentina	33,762	1955 (July) ..	44,000
Pakistan(b)	33,000	1955 (January) ..	29,500
China	25,600	1953 (May) ..	28,800
Ethiopia	18,000	1954 (July) ..	20,000
France	15,504	1955 (October) ..	17,560
Australia	13,285	1956 (March) ..	16,457
Mexico	11,716	1955 (December) ..	16,000
Colombia	8,010	1953 (December) ..	13,650
Turkey(b)	8,611	1954 (December) ..	12,005
Union of South Africa	11,636	1954 (August) ..	11,604
Germany, Federal Republic of	12,114	1955 (December) ..	11,552

(a) In some cases census for a single year, and in others an average for two to four years. (b) Includes buffaloes.

6. **Imports and Exports of Cattle.**—The products of the cattle-raising industry figure largely in the export trade of Australia, although the export of live cattle has never been large. The number of cattle imported is also small, consisting, as in the case of horses, mainly of valuable animals for stud purposes. Details for the years 1951-52 to 1955-56 compared with the average for the years 1934-35 to 1938-39 are as follows.

CATTLE : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
Average, 1934-35 to 1938-39 ..	295	£'000 22	308	£'000 6	13	— 16
1951-52.. ..	318	214	681	58	363	— 156
1952-53.. ..	494	201	1,643	81	1,149	— 120
1953-54.. ..	153	102	1,214	95	1,061	— 7
1954-55.. ..	1,679	155	6,786	346	5,107	191
1955-56.. ..	304	229	8,025	475	7,721	246

NOTE.—The minus sign (—) signifies net imports.

The average value per head of the cattle imported during the last five years was £305, while the average value per head of the cattle exported during the same period was £58.

7. **Cattle Slaughtered.**—The numbers of cattle slaughtered during each of the years ended June, 1952 to 1956 compared with the average for the years 1934–35 to 1938–39 are shown in the following table:—

CATTLE (INCLUDING CALVES) SLAUGHTERED.

('000.)

Year ended June—	Slaughtering passed for Human Consumption.									Total Slaughtering including Boiled Down.
	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	
Average, 1935 to 1939	(a)1,112	812	1,046	(b)156	(b)124	45	(b) 4	2	3,301	3,331
1952	1,247	966	1,029	197	152	71	15	9	3,686	3,738
1953	1,406	848	1,272	194	154	70	14	8	3,966	4,008
1954	1,564	1,008	1,366	220	172	62	15	8	4,415	4,475
1955	1,518	1,024	1,430	233	181	75	16	8	4,485	4,550
1956	1,547	1,023	1,502	227	191	88	25	9	4,612	4,675

(a) Year ended March.

(b) Year ended previous December.

8. **Production of Beef and Veal.**—Details of the production of beef and veal in each State and Territory are shown in the following table for the years indicated:—

PRODUCTION OF BEEF AND VEAL (BONE-IN WEIGHT): AUSTRALIA.

('000 tons.)

Year ended June—	N.S.W.	Vic.	Qld.	S. Aust.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Average 1935 to 1939	(a)173	115	181	(b) 25	(b) 27	9	(b) 1	..	531
1952	184	138	178	31	32	14	3	2	582
1953	217	124	253	31	32	14	3	1	675
1954	221	140	258	34	35	11	3	2	704
1955	215	143	272	34	37	14	3	2	720
1956	222	139	292	38	38	15	5	2	751

(a) Year ended March.

(b) Year ended previous December.

9. **Consumption of Beef and Veal.**—For the three years 1936–37 to 1938–39, the average annual production of beef and veal in Australia was 569,000 tons of which 127,000 tons were exported, leaving a balance of 442,000 tons (or the carcass equivalent of 144 lb. per head per annum) available for consumption as fresh and canned meat.

Due mainly to the effects of rationing, during the 1939–45 War and the immediate post-war years, civilian consumption of carcass beef and veal (including the carcass equivalent of canned meat) was considerably lower than previously but following the return to more normal conditions, it rose to 135.6 lb. per head in 1950–51. From 1951–52, consumption fell again and in 1955–56 amounted to 122.9 lb. per head.

In the following table, details of the production and disposal of beef and veal are shown for the periods stated.

**PRODUCTION AND DISPOSAL OF BEEF AND VEAL (BONE-IN WEIGHT) :
AUSTRALIA.
('000 tons.)**

Year.	Changes in Stock.	Production.	Exports.	For Canning.	Consumption in Aus- tralia as Human Food.	
					Total.	Per Head per Annum.
Average, 1936-37 to 1938-39		569	127	(a)	442	lb. 144.1
1951-52	- 4	582	52	81	453	118.9
1952-53	+ 6	675	96	106	467	119.7
1953-54	- 7	704	155	101	455	114.6
1954-55	+ 4	720	137	107	472	116.3
1955-56	- 7	751	167	110	483	116.0

(a) Included with exports.

10. **Exports of Frozen Beef and Veal.**—The export of frozen meat from Australia dates from about 1881, and since that year the trade has grown considerably. The quantity of frozen beef and veal exported in 1938-39 amounted to 271,964,000 lb., valued at £4,324,000, but there was a decline during the war years owing to reduced production and the diversion of supplies to meet the requirements of the Australian and Allied Services based on Australia. By 1947-48, the quantity exported had risen again to 237,150,000 lb., valued at £6,193,000, but this was followed by a steady decline until 1951-52 when exports amounted to only 95,876,000 lb. valued at £5,230,000. The following three years were, however, at a record level, the quantity exported in 1955-56 being 311,043,000 lb. valued at £22,520,000. The quantities and values of frozen beef and veal exported during the five pre-war years ended 1938-39 and in each year 1951-52 to 1955-56 are shown in the following table:—

EXPORTS OF FROZEN BEEF AND VEAL : AUSTRALIA.

Year.	Exports of Frozen and Chilled Beef.		Exports of Frozen Veal.	
	Quantity.	Value.	Quantity.	Value.
	'000 lb.	£'000	'000 lb.	£'000
Average, 1934-35 to 1938-39 ..	231,355	3,188	10,353	165
1951-52	92,926	5,009	2,950	221
1952-53	189,176	13,443	3,324	339
1953-54	313,198	21,697	3,779	349
1954-55	271,772	21,408	4,626	491
1955-56	306,354	22,025	4,689	495

The largest purchaser of Australian beef and veal is the United Kingdom, which during 1938-39 took about 90 per cent. of the total shipments. In 1954-55, shipments to the United Kingdom were valued at £16,708,000 or 76 per cent. of the total value of beef and veal exports compared with £17,993,000 or 82 per cent. in 1953-54. Exports to other British countries amounted to £2,335,000 or 11 per cent. of the total in 1954-55 and £2,099,000 or 10 per cent. in 1953-54.

In view of the preference overseas for chilled beef, the Australian beef industry was at a serious disadvantage until investigations proved that beef could be successfully transported from Australia to the United Kingdom in a chilled condition. Trial shipments of 254,000 lb. in 1932-33 and 1,515,000 lb. in 1933-34 were made, and the exports in subsequent years increased to a maximum of 58,963,000 lb. in 1938-39. However, the advent of war seriously affected the export trade in chilled beef, which declined to a negligible amount after 1939-40.

§ 4. Sheep.

1. **Initiation of the Pastoral Industry.**—The suitability of the Australian climate and general conditions for the production of a high class of wool were recognized at an early date by Captain Macarthur, one of the pioneer sheep-breeders of New South Wales. While it would appear that the introduction of the merino sheep into Australia was not due to Macarthur, a great deal of the credit for having successfully established the pastoral industry in Australia must certainly be his.

2. **Movement in Sheep Numbers in Australia.**—Fluctuations in the number of sheep recorded in Australia for each year from 1860 onwards may be seen from the graph on p. 899. Up to 1945, there were five marked periods of decline, but the losses were made up rapidly. In each of the years 1925 to 1945, the sheep flocks exceeded 100 million, reaching 125.2 million in 1942. During the three years ended 1947 however, a sharp decline to 95.7 million occurred. This was largely attributable to the severe drought conditions experienced during 1944, 1945 and 1946. The passing of the drought and consequent re-stocking have resulted in a steady increase in sheep numbers which at 31st March, 1956 amounted to 139.1 million, the highest ever recorded.

The following table shows the approximate movement in sheep numbers in Australia in 1938–39 and 1951–52 to 1955–56.

SHEEP AND LAMBS : ANALYSIS OF MOVEMENT IN NUMBERS, AUSTRALIA.
(^{'000.})

Season.	Lambs Marked.	Excess of Exports.	Sheep and Lambs Slaughtered.	Estimated Number of Deaths from Disease, Drought, etc.(a)	Number at 31st March.	Annual Net Increase (+) or Decrease(—)
1938–39	25,469	67	18,900	8,817	(b)111,058	— 2,315
1951–52	27,183	79	15,418	9,635	117,647	+ 2,051
1952–53	31,778	84	21,034	5,235	123,072	+ 5,425
1953–54	32,231	86	20,922	7,351	126,944	+ 3,872
1954–55	32,804	97	22,454	6,348	130,849	+ 3,905
1955–56	36,914	102	20,998	7,539	139,124	+ 8,275

(a) Balance figure. (b) As at 1st January, 1939—Queensland, South Australia, Western Australia Tasmania, Northern Territory; as at 1st March, 1939—Victoria.

3. **Distribution throughout Australia.**—With the exception of a short period in the early sixties, when the flocks of Victoria outnumbered those of New South Wales, the latter State has occupied the premier position in sheep-raising, depasturing about one half of the sheep of Australia.

A map showing the distribution of sheep in Australia at 31st March, 1955, appears on p. 911. Similar maps showing the distribution in earlier years appeared in previous issues of the Official Year Book (see No. 39, p. 907, for 1948; No. 34, p. 432, for 1938–39; and No. 22, p. 659, for 1924–25).

The numbers of sheep in the several States and Territories at 31st March of each year 1952 to 1956 compared with the average for the years 1935 to 1939 are shown in the following table:—

SHEEP : NUMBER.

(^{'000.})

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
Average, 1935 to 1939	51,774	17,555	21,061	8,515	9,839	2,312	23	240	111,319
1952	53,676	21,537	16,164	11,470	12,188	2,338	31	243	117,647
1953	57,461	21,368	17,030	12,036	12,475	2,421	34	247	123,072
1954	59,639	21,438	18,194	11,838	13,087	2,465	31	252	126,944
1955	59,200	22,330	20,222	12,817	13,411	2,595	29	245	130,849
1956	62,988	23,343	22,116	13,585	14,128	2,673	33	258	139,124

Except when affected by drought, the relative number of sheep depastured in the different States in recent years has remained fairly constant.

The percentage distribution in 1956 was:—New South Wales, 45 ; Victoria, 17 ; Queensland, 16 ; South Australia, 10 ; Western Australia, 10 ; and Tasmania, 2.

4. Classification of Sheep According to Age, Sex and Breed.—In the following table, numbers of sheep in Australia are classified according to age and sex at 31st March of the years 1952 to 1956. Data in this form are not available prior to 1943.

SHEEP : AGE AND SEX, AUSTRALIA.
(’000.)

Description.	31st March—				
	1952.	1953.	1954.	1955.	1956.
Rams, 1 year and over ..	1,507	1,560	1,610	1,647	1,721
Breeding ewes (including ewes intended for mating) ..	52,954	55,351	55,528	58,614	62,480
Other ewes, 1 year and over ..	7,451	7,039	8,430	7,847	7,553
Wethers, 1 year and over ..	34,032	34,304	36,069	37,645	39,145
Lambs and hoggets, under 1 year ..	21,703	24,818	25,307	25,096	28,225
Total, Sheep and Lambs	117,647	123,072	126,944	130,849	139,124

Particulars relating to the principal breeds of sheep at 31st March, 1956, are shown in the following table:—

SHEEP : PRINCIPAL BREEDS, 31st MARCH, 1956.
(’000.)

Breed.	N.S.W.	Victoria.	Q’land.	S. Aust.	W. Aust.	Tas.	N.T.(a)	A.C.T.	Aust.
Merino ..	49,994	9,934	21,777	11,482	12,987	301	33	236	106,744
Other recognized breeds ..	3,491	5,314	71	910	439	1,345	..	13	11,583
Merino comebacks(b) ..	3,792	2,449	64	281	140	377	..	4	7,107
Crossbreeds(c) ..	5,711	5,646	204	912	562	650	..	5	13,690
Total ..	62,988	23,343	22,116	13,585	14,128	2,673	33	258	139,124

(a) As at 31st December, 1955. (b) Merino comeback is the progeny of a crossbred merino ewe and a merino ram, i.e., finer than half-bred. (c) Half-bred and coarser.

5. Numbers of Sheep on Rural Holdings.—A special series of tabulations relating to rural holdings in Australia was compiled for 1949–50 and published in *Primary Industries*, Bulletin No. 44. The tables relating to sheep farming show classifications according to areas of the holdings on which the sheep were carried.

6. Comparison with other Countries.—As regards the size of its flocks and the quantity and quality of wool produced, Australia has long occupied a leading position amongst the sheep raising countries of the world. In 1954–55, Australian flocks numbered 131 million sheep, compared with the estimate of 195 million for the U.S.S.R., China and Eastern Europe, with about 52 million in Argentina and about 39 million in New Zealand. The total world sheep population was estimated at about 887 million in 1954–55. Further details of sheep numbers in the principal wool producing countries of the world for 1938–39, 1953–54 and 1954–55 are given in the table on p. 903.

7. Oversea Imports and Exports of Sheep.—As in the case of cattle, the oversea exports of live sheep from Australia are of comparatively little importance. On 27th November, 1929, the export of stud merino sheep was prohibited, except with the approval of the

Minister for Trade and Customs. Exports of sheep are now principally for slaughter overseas. Consignments for this purpose in recent years were made chiefly to Singapore from Western Australia. The following table shows the imports and exports of all sheep for the years 1951-52 to 1955-56 compared with the average for the years 1934-35 to 1938-39.

SHEEP : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value.	No.	Value.	No.	Value.
Average, 1934-35 to 1938-39 ..	3,795	£'000. 30	65,188	£'000. 67	61,393	£'000. 37
1951-52.. ..	300	14	79,177	369	78,877	355
1952-53.. ..	267	10	84,397	278	84,130	268
1953-54.. ..	247	14	86,526	304	86,279	290
1954-55.. ..	232	13	97,146	340	96,914	327
1955-56.. ..	4,437	89	101,837	332	97,400	243

8. **Sheep Slaughtered.**—The following table shows the numbers of sheep slaughtered in the several States during each of the years ended June, 1952 to 1956 compared with the average for the years ended June, 1935 to 1939:—

SHEEP (INCLUDING LAMBS) SLAUGHTERED.
('000.)

Year.	Slaughterings Passed for Human Consumption.									Total Slaughterings including Boiled Down.
	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	
Average, 1934-35 to 1938-39 ..	a 6,474	7,797	1,101	b 1,703	b 1,178	358	(b) ..	25	18,636	18,693
1951-52.. ..	5,521	6,082	829	1,680	1,319	482	1	53	15,967	16,019
1952-53.. ..	7,065	8,405	1,076	2,740	1,817	577	3	68	21,751	21,833
1953-54.. ..	7,360	7,709	1,081	2,637	1,545	594	3	63	20,992	21,065
1954-55.. ..	7,318	8,714	1,009	2,799	1,673	643	3	74	22,233	22,303
1955-56.. ..	6,840	7,860	1,186	2,358	1,796	645	2	73	20,760	20,797

(a) Average, years ended March.

(b) Average, years ended December 1934 to 1938.

9. **Production of Mutton and Lamb.**—Details of the production of mutton and lamb in each State and Territory are shown below:—

PRODUCTION OF MUTTON AND LAMB.
(Tons.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Average, 1934-35 to 1938-39 ..	103,706	135,149	20,166	29,710	20,476	6,035	1	396	315,639
1951-52 ..	94,076	108,983	14,420	31,222	23,686	8,975	34	960	282,356
1952-53 ..	125,731	153,030	20,371	51,484	32,506	10,656	82	1,230	395,090
1953-54 ..	124,530	135,622	19,692	45,471	27,266	11,073	72	1,086	364,812
1954-55 ..	122,499	155,611	18,550	49,853	28,413	11,901	78	1,259	388,164
1955-56 ..	120,615	146,228	23,020	44,339	32,759	11,778	59	1,333	380,131

10. **Consumption of Mutton and Lamb.**—For the three years 1936-37 to 1938-39, the annual production of mutton and lamb averaged 319,000 tons of which 88,900 tons were exported leaving a balance of 230,100 tons (or the carcass equivalent of 74.8 lb. per head per annum) available for consumption.

Civilian consumption of mutton and lamb (in carcass equivalent weight including that used for canning) during the 1939-45 War rose substantially. This was a direct result of the preference of Defence Service and export demand for beef and of the system of rationing which was introduced (the coupon rating for mutton and lamb being low compared with beef). Consumption per head fell steeply in 1946-47 and up to 1951-52 was lower than in pre-war years. It rose during the years 1952-53 to 1954-55 to a steady level of about 78.3 lb. per head, but fell again in 1955-56 to 74.3 lb. per head.

In the following table details of the production and disposal of mutton and lamb are shown for the periods stated:—

PRODUCTION AND DISPOSAL OF MUTTON AND LAMB (BONE-IN WEIGHT) :
AUSTRALIA.

('000 tons.)

Year.	Changes in Stock.	Pro-duction.	Exports.	For Canning and Dehydra-tion.	Consumption in Australia.	
					Total.	Per Head per Annum. (lb.)
MUTTON.						
Average 1936-37 to 1938-39 .. .. .	.. .. .	201	17	..	184	59.8
1951-52	+ 5	176	3	12	156	40.9
1952-53 .. .. .	.. .. .	249	36	20	193	49.5
1953-54	- 7	238	25	16	204	51.4
1954-55	- 1	240	15	14	212	52.2
1955-56	- 1	231	15	16	201	48.4
LAMB.						
Average 1936-37 to 1938-39 .. .. .	.. .. .	118	72	..	46	15.0
1951-52	+ 4	107	11	..	92	24.0
1952-53	- 5	146	39	..	112	28.8
1953-54	+ 1	127	19	..	107	26.9
1954-55 .. .. .	.. .. .	148	42	..	106	26.0
1955-56 .. .. .	.. .. .	144	36	..	108	25.9

11. **Exports of Frozen Mutton and Lamb.**—The export trade in mutton and lamb preserved by cold process expanded rapidly up to 1913 when 205 million lb. were shipped. Progress was interrupted during the 1914-18 War and, owing probably to high wool prices, the exports of mutton and lamb for a number of years after were considerably less than earlier shipments. Exports commenced to rise again in 1929-30 and from that year onwards they continued to expand almost uninterruptedly until 1942-43, in which year 203,682,000 lb. of mutton and lamb, valued at £5,496,000, were exported. In earlier years, shipments consisted mainly of frozen mutton, but in 1923-24 lamb supplanted mutton and the exports of lamb were largely responsible for the increase in total shipments during the ten years to 1942-43. Due to reduced production as a result of drought conditions and the diversion of supplies to meet the requirements of the Australian and Allied Services based in Australia, there was subsequently a marked decline in mutton and lamb exports, which fell to 56,575,000 lb., valued at £1,540,000, in 1945-46. The maximum quantity exported in any year since the 1939-45 War was 193,092,000 lb. (£7,453,000) in 1949-50. In 1950-51 and 1951-52, exports fell steeply, but recovered again during succeeding years. In 1955-56, exports amounted to 116,283,000 lb. (£9,752,000).

The quantities and values of exports of frozen mutton and lamb in each year 1951–52 to 1955–56 compared with the average for the five years ended 1938–39 are shown in the following table:—

EXPORTS OF FROZEN MUTTON AND LAMB : AUSTRALIA.

Year.	Exports of Frozen Mutton.		Exports of Frozen Lamb.		Exports of Frozen Mutton and Lamb.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 lb.	£'000.	'000 lb.	£'000.	'000 lb.	£'000.
Average, 1934–35 to 1938–39 ..	40,584	656	153,606	4,208	194,190	4,864
1951–52	5,907	297	25,246	1,621	31,153	1,918
1952–53	80,774	2,790	86,070	5,971	166,844	8,761
1953–54	55,590	1,964	44,102	3,298	99,692	5,262
1954–55	33,811	1,626	94,982	10,191	128,793	11,817
1955–56	34,657	1,885	81,626	7,867	116,283	9,752

As with beef, the principal customer in this trade is normally the United Kingdom. In 1955–56, exports of mutton and lamb to this country represented 71 per cent. and 89 per cent., respectively of the total quantities exported.

§ 5. Wool.

1. **General.**—Australia is the leading wool-growing country in the world. With less than one-sixth of the world's sheep, Australia produces more than one-quarter of the world's wool, and about one-half of the total fine-quality merino wool. The bulk of the production is exported, mainly as greasy wool, although substantial amounts of scoured and carbonized wool and wool on sheep skins and small quantities of semi-manufactured wool are also shipped. The remainder, which is used by Australian manufacturers, amounted to only five per cent. of the total production (greasy basis) in 1955–56.

The important position held by Australia among the principal sheep and wool producing countries of the world is shown in the table on p. 903.

2. **Greasy and Scoured Wool.**—Whether the weight of the wool clip should be stated as “in the grease” or as “clean” is a matter which seriously affects comparisons between the clips of different seasons and of different countries. The quantity of grease and other extraneous matter in a fleece differs, not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, and with the breed and the condition of the sheep.

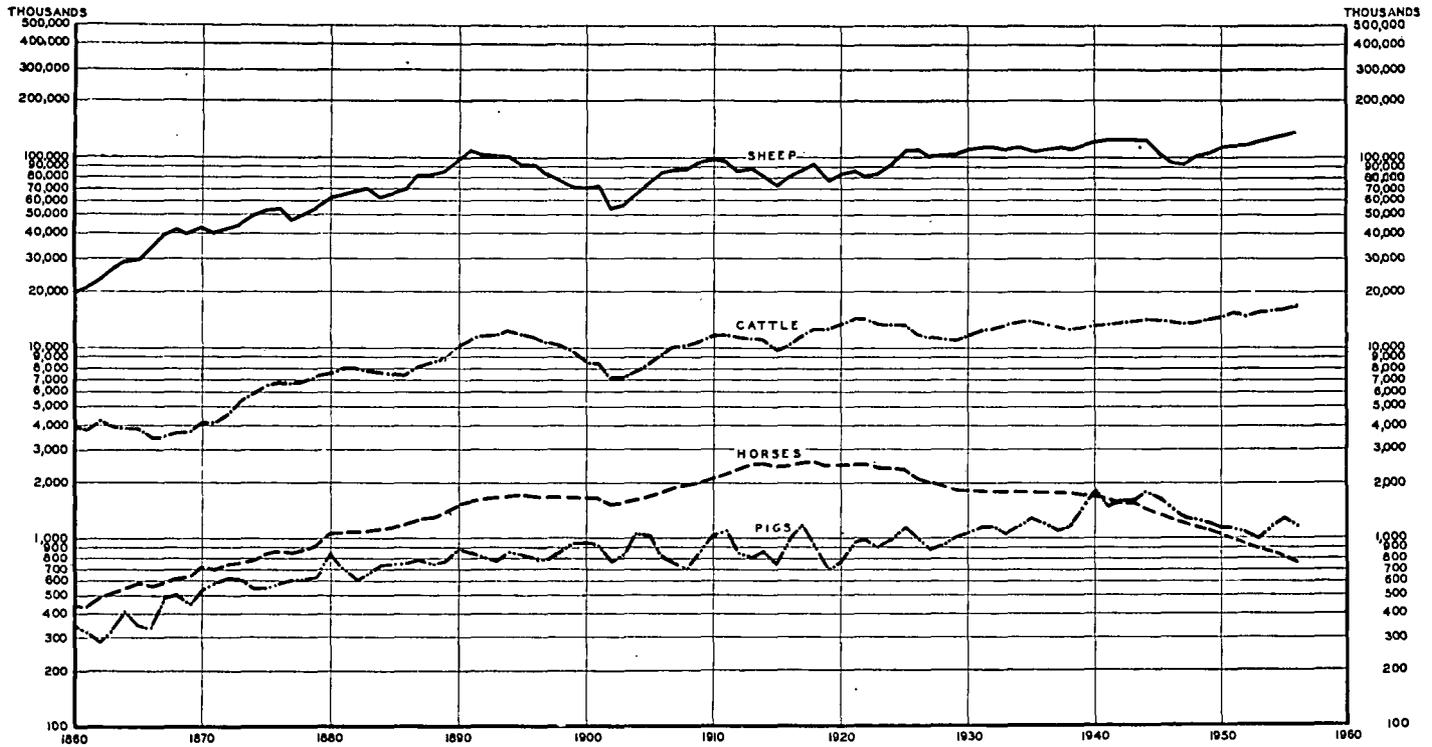
From 1946–47 to 1952–53, the Australian Wool Realization Commission, and from 1953–54, the Wool Statistical Service, has assessed annually the clean yield of the Australian wool clip. A steady rise was recorded from 53.4 per cent. clean yield from greasy in 1946–47 to 57.5 per cent. in 1951–52 and 1952–53, but this was followed by a fall to 55.7 per cent. in 1953–54, 56.0 per cent. in 1954–55, and 56.8 per cent. in 1955–56. A standard factor of 93 per cent. is taken as the clean yield of Australian scoured wools.

Wool scoured, washed and carbonized in Australia before export, however, has a clean yield somewhat lower than for the whole clip, because the grade of greasy wool treated locally for export as scoured, washed or carbonized includes a large proportion of dirty and low-grade wool. In recent years, it has approximated 50 per cent. The quantity of this wool exported during the five years ended 1955–56 was approximately 14 per cent. of the total raw wool exports (excluding wool exported on skins) in terms of greasy.

3. **Production.**—The bulk of the Australian wool production is shorn from live sheep; in recent years, approximately 4 per cent. has been obtained by fellmongering and about 5 per cent. has been on skins exported. Statistics of wool production are compiled from data received from growers, fellmongers, etc. The following table shows the production for the five years 1951–52 to 1955–56 compared with average production for the five years ended 1938–39. Particulars of the gross value of wool produced are based, for shorn wool, upon the average price realized for greasy wool sold at auction, and for skin wools on prices recorded by fellmongers and skin exporters.

LIVESTOCK: AUSTRALIA, 1860 to 1956

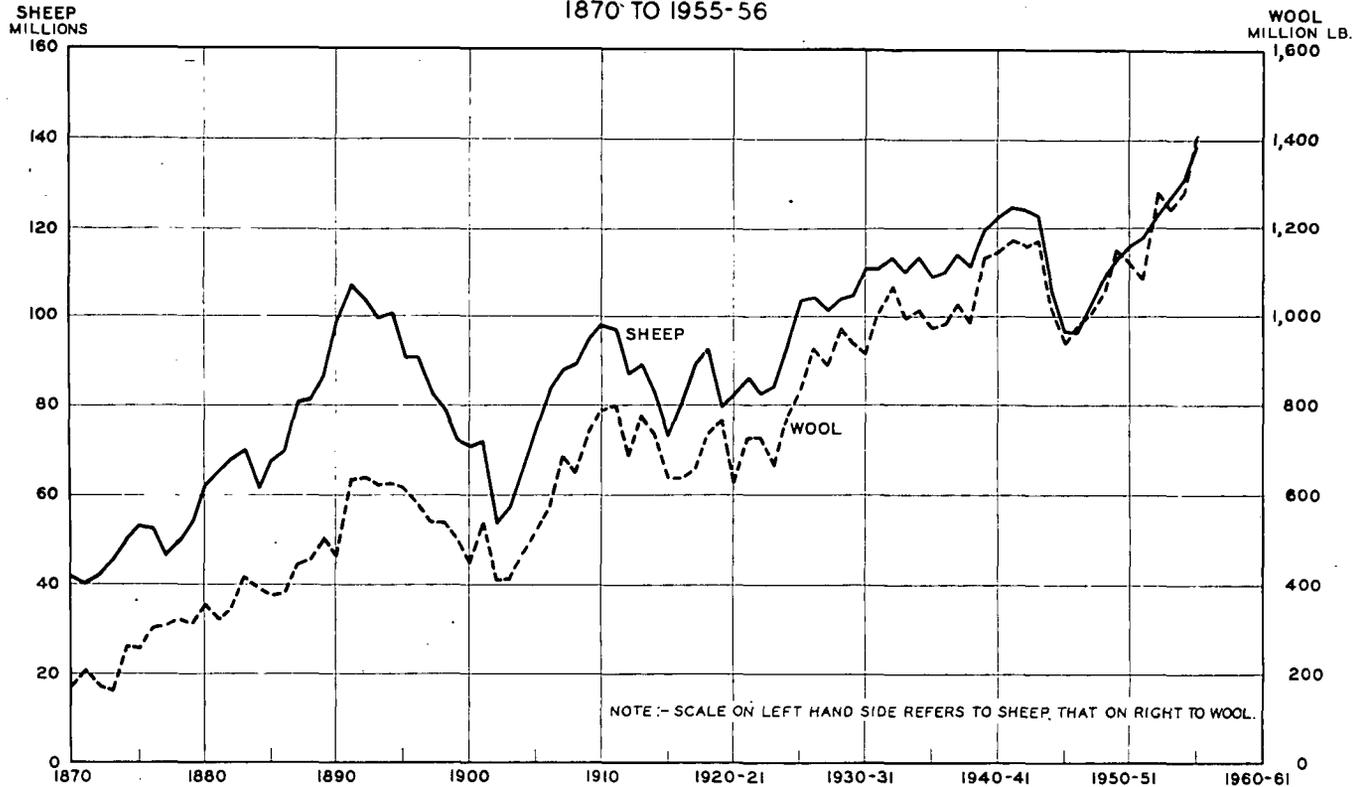
RATIO GRAPH



NOTE:-- VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE, ACTUAL NUMBERS ARE INDICATED BY SCALE.

SHEEP NUMBERS AND WOOL PRODUCTION: AUSTRALIA

1870 TO 1955-56



WOOL : TOTAL PRODUCTION (AS IN THE GREASE).

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
New South Wales	480,670	437,837	556,552	544,934	540,977	593,712
Victoria	165,586	224,958	252,195	223,481	253,364	273,356
Queensland	164,971	138,767	163,149	174,414	176,548	186,406
South Australia	85,120	135,484	158,658	145,509	155,761	173,697
Western Australia	81,543	120,401	128,148	134,442	129,667	156,454
Tasmania	15,504	20,513	19,807	20,116	23,797	23,418
Northern Territory(a)	35	252	332	290	311	393
Australian Capital Territory	1,827	1,765	2,245	2,276	2,232	2,328
<i>Australia—</i>						
Shorn (including Crutchings)	888,677	998,708	1,168,699	1,138,108	1,173,906	1,296,341
Dead and Fellmongered	50,396	36,124	45,493	47,000	44,422	44,046
Exported on Skins	56,183	45,145	66,894	60,354	64,329	69,377
<i>Total—Quantity</i>	<i>995,256</i>	<i>1,079,977</i>	<i>1,281,086</i>	<i>1,245,462</i>	<i>1,282,657</i>	<i>1,409,764</i>
„ <i>Value</i>	£'000. 51,182	£'000. 322,615	£'000. 425,807	£'000. 409,768	£'000. 367,138	£'000. 351,940

(a) Estimated.

4. Care Needed in Comparing Clips.—In comparing successive clips, allowance must be made for the circumstance that, owing to climatic or other conditions, the time of shearing may be so far delayed in some areas that one clip may include almost thirteen months' growth of wool, while the succeeding one may include little more than eleven months' growth.

5. Average Weights of Fleeces Shorn.—The average weights of sheep and lamb fleeces shorn in each of the States of Australia and in the Australian Capital Territory are shown in the following table for each season 1951-52 to 1955-56 compared with the average for the five seasons 1934-35 to 1938-39.

AVERAGE WEIGHT OF SHEEP AND LAMB FLEECES SHORN.

(lb.)

State.	Average, 1934-35 to 1938-39. (a)	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
SHEEP.						
New South Wales	8.87	8.43	10.18	9.53	9.32	10.01
Victoria	7.84	9.62	9.63	9.04	9.83	10.41
Queensland	7.98	8.08	9.78	9.87	9.23	9.55
South Australia	10.06	12.62	13.14	11.72	11.86	12.68
Western Australia	8.53	10.27	10.16	10.53	9.76	11.33
Tasmania	7.62	8.88	8.17	8.13	9.31	8.85
Australian Capital Territory	8.32	7.66	9.81	9.38	9.03	9.75
<i>Australia(b)</i>	<i>8.57</i>	<i>9.18</i>	<i>10.26</i>	<i>9.78</i>	<i>9.69</i>	<i>10.39</i>
LAMB.						
New South Wales	2.75	2.74	3.24	3.02	2.90	3.11
Victoria	2.14	2.87	2.83	2.53	2.62	2.78
Queensland	2.89	3.23	3.72	3.66	3.61	4.01
South Australia	2.57	3.70	3.83	3.35	3.29	3.92
Western Australia	2.57	2.90	2.82	2.79	2.50	2.88
Tasmania	1.37	2.05	2.10	2.04	2.14	2.36
Australian Capital Territory	1.11	1.04	1.26	1.31	1.16	1.33
<i>Australia(b)</i>	<i>2.57</i>	<i>2.94</i>	<i>3.19</i>	<i>2.97</i>	<i>2.91</i>	<i>3.20</i>

(a) Mean of average weights in each season.

(b) Excludes Northern Territory.

6. **Wool classified according to Quality.**—Under control exercised during the 1939–45 War, records were kept of the classification of each lot of wool appraised according to quality, degree of fault and combing or carding type for each of the years 1940–41 to 1945–46. From the resumption of auctions in 1946–47 to 23rd October, 1953, this analysis was continued by the Australian Wool Realization Commission and from 23rd October, 1953, by the Wool Statistical Service, but the basis of the data has been changed to the catalogues of auction sales, and not upon appraisement as previously. The following table provides a detailed analysis of wool sold at auction according to quality, for the years 1951–52 to 1955–56. "Quality" ("64's, 60's, 58's," etc.) is a measure of the fineness and texture of wool for spinning purposes. Broadly, it means the maximum number of hanks of yarn, each of 560 yards length, which can be spun from 1 lb. of combed wool. For instance, wool of 64's quality is of a fineness and texture which will produce 64 hanks, each of 560 yards, from 1 lb. of tops (combed wool) of that particular wool.

CLASSIFICATION OF GREASY WOOL SOLD AT AUCTION(a) : AUSTRALIA.

(Bales of approximately 300 lb.)

Pre-dominating Quality.	1951–52.		1952–53.		1953–54.		1954–55.		1955–56.	
	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.
70's and finer	141,234	4.3	110,903	3.0	98,307	2.7	95,055	2.5	86,925	2.1
64/70's ..	579,117	17.6	451,393	12.0	441,906	12.0	415,012	10.9	424,946	10.2
64's ..	536,872	16.4	557,885	14.9	612,776	16.6	595,519	15.6	583,929	14.0
64/60's ..	229,926	7.0	418,288	11.2	357,936	9.7	376,607	9.9	390,633	9.4
60/64's ..	458,170	13.9	690,981	18.4	702,871	19.1	752,490	19.7	833,228	20.0
60's and 60/58's ..	449,716	13.7	580,944	15.5	596,709	16.2	641,970	16.8	746,019	17.9
Total 60's and finer	2,395,035	72.9	2,810,394	75.0	2,810,505	76.3	2,876,633	75.4	3,065,680	73.6
58's ..	406,786	12.4	413,901	11.0	377,931	10.2	416,419	10.9	503,868	12.1
56's ..	306,996	9.4	324,074	8.6	293,926	8.0	312,055	8.2	350,219	8.4
50's ..	119,758	3.7	131,823	3.5	123,609	3.3	125,878	3.3	146,640	3.5
Below 50's ..	30,460	0.9	35,821	1.0	41,907	1.1	42,523	1.1	47,505	1.1
Oddments ..	24,643	0.7	35,617	0.9	39,212	1.1	44,209	1.1	53,747	1.3
Grand Total	3,283,678	100.0	3,751,630	100.0	3,687,090	100.0	3,817,737	100.0	4,167,659	100.0

(a) All greasy wool sold at auction except "wool re-offered account buyer".

7. **World Sheep Population and Wool Production.**—The following table shows particulars of the sheep population and total production of wool, in terms of greasy, in the principal wool-producing countries of the world, together with estimates of world production of merino, crossbred and carpet type wool for each season 1953–54 and 1954–55 compared with pre-war years. The data for countries other than Australia have been taken from reports published by the Commonwealth Economic Committee compiled from questionnaires prepared by the Committee and the International Wool Textile Organization.

In 1954–55, Australia produced 28 per cent. of the world total of all types of wool, the share of the British Commonwealth representing approximately 50 per cent. The principal wool producers, other than Australia, are New Zealand with 10 per cent. of the world total, Argentina, 8 per cent., United States of America, 7 per cent., and Union of South Africa, 7 per cent. Production in the U.S.S.R., China and Eastern European countries together amounted to 16 per cent. World production of wool (all types) in 1954–55 was about 823 million lb. (22 per cent.) greater than the average for 1934–38.

Australia's wool clip is predominantly merino; New Zealand and Argentina produce mainly crossbred wool, while the clip of the U.S.S.R. is largely of the carpet type. World production of merino wool in 1954–55 was 13 per cent. above the average for 1934–38, and the production of crossbred types has risen by about 42 per cent. Carpet wool production has risen by about 9 per cent.

ESTIMATED WORLD SHEEP POPULATION AND PRODUCTION OF WOOL.

Country and Type.	Sheep Numbers ('000,000).			Wool Production ('000,000 lb.— in terms of greasy).		
	1938-39.	1953-54.	1954-55. (a)	Average, 1934-38.	1953-54.	1954-55. (a)
<i>British Commonwealth—</i>						
Australia	111.1	126.9	130.8	995	1,246	1,283
New Zealand	31.9	38.0	39.1	300	425	455
South Africa (b)	39.0	36.0	37.1	261	283	306
Other Commonwealth	97.0	92.1	94.0	230	224	229
<i>Total</i>	<i>279.0</i>	<i>293.0</i>	<i>301.0</i>	<i>1,786</i>	<i>2,178</i>	<i>2,273</i>
<i>Foreign—</i>						
U.S.S.R., China, Eastern Europe (c)	142.0	183.0	195.0	435	723	733
Argentina	45.9	53.5	51.5	376	397	364
United States of America	51.3	31.4	31.6	470	304	310
Uruguay	18.0	26.8	27.5	114	203	198
Other Foreign	239.8	278.3	280.4	607	725	733
<i>Total</i>	<i>497.0</i>	<i>573.0</i>	<i>586.0</i>	<i>2,002</i>	<i>2,352</i>	<i>2,338</i>
Grand Total	776.0	866.0	887.0	3,788	4,530	4,611
Type of Wool.						
<i>Apparel Type—</i>						
Merino .. ..	..	..	..	1,579	1,740	1,785
Crossbred .. ..	..	..	..	1,265	1,769	1,797
Carpet type .. ..	..	..	..	944	1,021	1,029

(a) Provisional. (b) Basutoland and S.W. Africa Territory excluded from sheep population, but included in wool production. (c) Comprising U.S.S.R., Poland, Czechoslovakia, Hungary, Romania, Bulgaria, Eastern Germany, Albania, China and Dependencies, Outer Mongolia and Tibet.

8. War-time Contracts.—(i) *Wool*. Details of the contract entered into between the Governments of Australia and the United Kingdom for the purchase of the surplus wool clip of Australia for the duration of the war and one full clip thereafter (1939-40 to 1945-46) will be found in Official Year Book No. 36, p. 1106.

(ii) *Sheepskins*. Details of the war-time contract arrangements for the period April, 1940, to June, 1946, between the Australian and United Kingdom Governments for the purchase of Australia's exportable surplus of woolled sheepskins will be found in Official Year Book No. 37, p. 875.

9. Australian Wool Realization Commission.—The Australian Wool Realization Commission was the Australian subsidiary of a Joint Organization (commonly referred to as "J.O.") set up by the Governments of the United Kingdom, the Commonwealth of Australia, the Dominion of New Zealand and the Union of South Africa, under the title of "U.K.—Dominion Wool Disposals Limited" to dispose of accumulated war-time stocks of Dominion wool held by the United Kingdom Government at the end of the war. Details of the functions and operations of these organizations appear in earlier issues of the Year Book, particularly No. 38 (pp. 919-923).

By the end of 1951, the Joint Organization had disposed of all stocks of wool held and shortly after, it went into voluntary liquidation. Liquidation proceedings were completed on 15th February, 1954.

Australia's share of the profits arising from the operations of J.O. amounted to approximately £93 million (including interest). The task of distributing the profits to growers was entrusted to the Australian Wool Realization Commission and up to May, 1956, all but £2.5 million of the total value of the profits, plus a small amount representing mainly unclaimed moneys, had been distributed to growers.

The distribution of the remaining £2.5 million was held up by the protracted litigation known as the "Poulton Case". The moneys concerned represented the profits on wool which was submitted by growers for wartime appraisalment through dealers. Mr. Poulton, a dealer, sought to establish the right of the dealers to these profits, but the High Court ruled against him on two occasions. The single High Court judgment was given in November 1953, and the unanimous decision of the Full High Court was given in December 1953.

However, as the possibility existed that Mr. Poulton might seek leave to appeal to the Privy Council against the High Court's decision, the Government withheld distribution for that reason.

By May, 1956, Mr. Poulton had not taken any action to seek leave to appeal to the Privy Council and the Government, after consulting its legal advisers, decided to distribute the profits to the growers.

10. **Australian Wool Bureau.**—(i) *General.* The Australian Wool Bureau was constituted under the Wool Use Promotion Act 1953 and replaced the Australian Wool Board which was established in 1936. The Bureau's main function is to promote the use of wool by publicity and other means in Australia and overseas.

The Bureau consists of seven members. Of these, six represent wool-growers (three nominated by the Australian Woolgrowers' Council and three by the Australian Wool and Meat Producers' Federation) and are appointed by the Governor-General for a period of three years, while one (the Commonwealth Wool Adviser) represents the Commonwealth Government and is appointed by the Minister for Primary Industry.

Particulars of the wool promotional activities of the Bureau are given in paragraph 12, Wool Publicity and Research.

(ii) *Wool Statistical Service.* The Wool Statistical Service, formerly conducted by the Australian Wool Realization Commission, was taken over by the Australian Wool Bureau on 23rd October, 1953. The statistical Service is responsible for the preparation and publication of statistical material relating to the Australian wool market and the composition of the Australian clip and other special statistical work which may be assigned to it.

It is financed out of the income received by the Australian Wool Bureau from wool stores under its control and from an annual contribution by the Commonwealth Government.

A Statistical Service Committee, consisting of the representatives of the Australian Wool Bureau, the Commonwealth Government, wool buyers, wool growers and wool selling brokers' organizations, acts in an advisory capacity to the Australian Wool Bureau.

(iii) *Wool Stores.* Some three hundred wool stores, formerly the property of the Joint Organization and purchased from it by the Commonwealth Government, were transferred to the ownership of the Australian Wool Bureau by virtue of the Wool Stores Act 1953. The Bureau formally assumed control of these stores on 11th January, 1954, and at the same time received a substantial sum of money representing accumulated rentals and receipts from sales which had come to hand whilst the stores were held by the Commonwealth Government. Under the Act, the Bureau may only dispose of these stores with the permission of the Minister for Primary Industry and, in the event of war, may be required to return the stores without compensation to the Commonwealth Government. The stores are being let by the Wool Bureau as a commercial proposition. The rental income is used to meet the expenses of maintaining, managing and insuring the stores, to defray the cost of operating the Wool Statistical Service and to help finance the wool promotion activities of the Bureau.

(iv) *The Contributory Charge.*—Associated legislation, namely, the Wool (Contributory Charge) Act 1945 (subsequently replaced by the Wool (Contributory Charge) Act (No. 1) 1950–1951 and the Wool (Contributory Charge) Act (No. 2) 1950–1951) and the Wool (Contributory Charge) Assessment Act 1945–1951, provided for a contributory charge to be imposed on all wool produced in Australia and sold, purchased or processed by a manufacturer or exported on or after a date fixed by proclamation. The passage of amending Wool Tax legislation in June, 1952, made it possible to cease collection of the contributory charge at 30th June, 1952, and the legislation under which it was imposed was repealed. Further particulars of the Wool Contributory Charge and the amounts collected appear in Year Book No. 40, pp. 675 and 819.

(v) *The Wool Levy.* Whilst the contributory charge legislation, mentioned above, was in force, the Wool Levy, which was imposed by the Wool Tax Act 1936 and the Wool Tax Assessment Act 1936, was temporarily suspended. When the Wool Levy was first imposed in 1936, the rate of tax was 6d. per bale of wool delivered into the store of a wool dealer or wool selling broker or exported. The proceeds were paid into the Wool Publicity and Research Fund administered by the Australian Wool Board.

When collection of the contributory charge ceased, (i.e., from July 1st, 1952), the Wool Levy again became operative but at a higher rate. This rate was provided for in the Wool Tax Acts (No. 1 and 2) of 1952, under which a rate can be prescribed between the limits of 2s. and 5s. per bale of shorn wool produced. For the years 1952–53 to 1955–56 the rate imposed was 4s. per bale.

11. **Marketing of Wool.**—(i) *Minimum Reserve Price Plan.* Details of the minimum reserve price plan which was completed by the Governments of Australia, New Zealand, South Africa and the United Kingdom in May, 1951, and which was subsequently rejected at a referendum of wool-growers in Australia, may be found in Official Year Book No. 39, p. 925.

(ii) *Subsidy on Woollen Goods, 1950-51.* Details of the subsidy paid on woollen goods manufactured for consumption in Australia from wool sold during the 1950-51 season will be found in Official Year Book No. 41, p. 727.

12. **Wool Publicity and Research.**—(i) *Wool Use Promotion.* The Wool Use Promotion Act of 1953 defines the powers and functions of the Australian Wool Bureau as including measures for promoting, by publicity or other means, the use of wool in Australia or in other countries.

The Bureau is also authorized to take measures for improving the production of wool in Australia and encouraging research directed to the promotion of the use of wool.

By virtue of its powers, the Bureau is represented on the International Wool Secretariat, which was established in 1937 with head-quarters in London, to promote the use of wool through a broad programme of publicity, education and research.

The activities of the Australian Wool Bureau are financed from the Wool Use Promotion Fund into which are paid the proceeds of the Wool Levy, and contributions from the rental income of the wool stores as mentioned in 10 (iii) above.

(ii) *Research.* Until 1945, the Australian Wool Board was responsible for the supervision of economic and scientific research but in that year the Commonwealth Scientific and Industrial Research Organization was made responsible for scientific, technical and biological research into sheep raising and wool production, as well as wool textile research. Economic wool research is the responsibility of the Bureau of Agricultural Economics, a division of the Commonwealth Department of Primary Industry. The economic research work falls into two main categories, namely, farm production economics dealing with economics of wool growing and sheep-station management generally, and commodity research dealing with the economic aspects of the wool industry in Australia and of wool as a commodity in world trade.

To finance the research programme, the Wool Research Trust Account was established under the Wool Use Promotion Act in 1945. Originally, a sum equal to the amount raised by the Wool Levy was paid annually into this account from Consolidated Revenue. The Wool Use Promotion Act, 1953, fixed the rate of contribution at 2s. per bale of shorn wool produced.

In addition, funds are available for research from the Wool Industry Fund. This Fund was established in 1946 from various moneys accumulated by the Central Wool Committee in war-time.

Ample opportunity is afforded for co-operation in these research activities, with State Departments of Agriculture and other organizations.

13. **Consumption of Wool.**—(i) *Consumption of Raw Wool.* Statistics of raw wool consumption published in recent years for the purposes of broad international comparisons are based on the quantities of scoured or carbonized wool used on the woollen and worsted systems (mill consumption) plus quantities used in such processes as felting. Consumption estimates compiled on this basis have obvious defects as they disregard oversea trade in semi-processed wool (e.g., tops and yarn) as well as woollen goods. They are, however, comparatively simple to calculate and are useful in providing an approximate indication of trends in wool consumption. Estimates of raw wool used on the woollen and worsted systems and by felt manufacturers in Australia are shown below for the years 1938-39 and 1951-52 to 1955-56.

ESTIMATED CONSUMPTION OF RAW WOOL IN AUSTRALIA.

(’000 lb.)

Year.	Greasy Basis.			Clean Basis.		
	Used on Woollen and Worsted Systems.	Used for Felt Manufacture (including Hats).	Total.	Used on Woollen and Worsted Systems.	Used for Felt Manufacture (including Hats).	Total.
1938-39.. ..	77,947	2,248	80,195	39,599	1,068	40,667
1951-52.. ..	72,868	5,546	78,414	42,731	2,634	45,365
1952-53.. ..	69,868	5,622	75,490	41,745	2,670	44,415
1953-54.. ..	88,106	8,376	96,482	52,975	3,979	56,954
1954-55.. ..	81,893	7,552	89,445	48,930	3,587	52,517
1955-56.. ..	87,324	8,372	95,696	52,175	4,186	56,361

(ii) *Consumption of Locally Processed Wool.* As considerable quantities of tops, noils and yarn are exported from Australia, the series on raw wool consumption shown above is over-stated to this extent. The series entitled "Consumption of Locally Processed Wool" provides a more reliable indication of wool consumption in Australia, as allowance has been made for exports of wool in semi-processed form. This series is shown below for the years 1938-39 and 1951-52 to 1955-56. Briefly, the series measures consumption of wool in terms of yarn used in Australian mills and other factories to produce woollen cloth and other woollen goods, yarn used for hand knitting purposes, and scoured wool used for felt manufacture. No allowance has been made for oversea trade in woollen piece goods, clothing, etc., because of the obvious difficulties of accurately estimating the wool content of these products.

ESTIMATED CONSUMPTION OF LOCALLY PROCESSED WOOL IN AUSTRALIA.
(*000 lb.)

Year.	Greasy Basis.				Clean Basis.			
	Worsted Yarn Used. (a)(b)	Woollen Yarn Used. (b)	Scoured Wool used for Felt Manufacture (including Hats).	Total.	Worsted Yarn Used. (a)(b)	Woollen Yarn Used. (b)	Scoured Wool used for Felt Manufacture (including Hats).	Total.
1938-39 ..	c 31,568	21,393	2,248	55,209	c 16,353	11,130	1,068	28,551
1951-52 ..	41,360	25,079	5,546	71,985	23,606	15,081	2,634	41,321
1952-53 ..	37,490	23,240	5,622	66,352	22,065	14,402	2,670	39,137
1953-54 ..	44,698	28,639	8,376	81,713	26,245	17,650	3,979	47,874
1954-55 ..	38,916	26,423	7,552	72,891	22,711	16,178	3,587	42,476
1955-56 ..	40,865	27,068	8,372	76,305	23,840	16,564	4,186	44,590

(a) Includes hand knitting yarns used from 1950-51. (b) Includes wool content of yarns containing a mixture of wool and other fibres. (c) Includes woollen yarn; excludes hand knitting yarns.

14. *Exports of Wool.*—(i) *Greasy—Quantities.* Prior to the 1939-45 War, Australian greasy wool exported overseas was sent principally to the United Kingdom and other European countries. In 1938-39, 42 per cent. of total shipments were sent to the United Kingdom, other important consignees being France, 20 per cent., Belgium, 13 per cent., and Japan, 9 per cent. During the 1939-45 War, exports to the United Kingdom declined and shipments to the European continent and to Japan virtually ceased, while the quantity shipped to the United States of America showed great expansion. Of the total quantity of greasy wool exported overseas during the five years ended 1955-56, 30 per cent. was sent to the United Kingdom and 13 per cent. to the United States of America. Of the total shipments in 1955-56, 26 per cent. went to the United Kingdom, 19 per cent. to France, 18 per cent. to Japan and 9 per cent. each to Belgium and Italy. The following table shows the quantities of greasy wool exported, and the principal countries of recorded destination.

EXPORTS OF GREASY AND SLIPE WOOL (AUSTRALIAN PRODUCE).
(*000 lb. actual weight.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
United Kingdom ..	288,436	238,748	353,195	286,495	299,564	275,572
Other British Countries ..	2,158	4,589	8,705	9,672	9,973	9,315
Belgium ..	107,928	58,936	76,327	87,814	90,079	93,668
France ..	100,476	134,199	154,441	162,537	159,763	199,797
Germany ..	36,955	25,437	40,446	53,149	64,778	74,936
Italy ..	21,748	84,212	92,943	114,353	89,457	93,266
Japan ..	131,302	96,002	147,612	95,121	124,718	189,852
United States of America ..	25,739	129,691	69,021	62,889	58,961	48,059
Other Foreign Countries ..	48,138	52,149	38,803	117,979	65,374	82,339
Total ..	762,880	823,963	981,493	990,009	962,667	1,066,804

(ii) *Scoured and Washed and Carbonized—Quantities.* The exports of "scoured and washed" wool, whether carbonized or not, are shown below according to principal countries of destination.

**EXPORTS OF WOOL—SCOURED AND WASHED AND CARBONIZED
(AUSTRALIAN PRODUCE).
(⁰000 lb. actual weight.)**

Country to which Exported.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
United Kingdom ..	32,806	19,977	32,629	28,111	26,227	24,276
Canada ..	2,394	4,572	5,593	4,093	4,120	5,356
Other British Countries ..	935	886	1,181	1,709	1,098	1,285
Belgium ..	8,226	4,651	4,837	6,098	5,127	3,602
France ..	9,301	7,218	7,291	7,890	5,994	5,309
Germany ..	3,007	3,692	4,264	5,594	5,819	8,329
Italy ..	360	6,821	5,913	6,314	4,657	6,017
Japan ..	724	1,085	6,596	1,699	836	2,428
United States of America ..	668	23,215	8,012	9,141	16,866	16,919
Other Foreign Countries ..	5,754	10,155	7,782	10,119	11,474	11,423
Total ..	64,175	82,272	84,098	80,768	82,218	84,944

(iii) *Tops, Noils and Waste.* Particulars of the exports of tops, noils and waste are shown in the following table.

**EXPORTS OF WOOL TOPS, NOILS AND WASTE (AUSTRALIAN PRODUCE).
(⁰000 lb. actual weight.)**

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Tops ..	5,948	3,725	8,423	4,970	5,911	11,107
Noils ..		2,647	2,805	3,722	3,625	4,486
Waste—Soft wool ..		1,438	2,960	3,705	2,236	7,094
Hard wool ..		7,692	9,258	3,258	3,928	3,617

(iv) *Total Exports—Greasy and Clean Bases.* The following table shows the estimated greasy and clean weights of exports of raw and semi-processed wool for the years 1938-39 and 1951-52 to 1955-56.

**EXPORTS OF WOOL—GREASY AND CLEAN BASES.
(⁰000 lb.)**

Particulars.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
GREASY BASIS.						
<i>Raw Wool—</i>						
Greasy and Slips ..	795,728	823,963	981,493	990,023	963,583	1,067,090
Scoured and Washed and Carbonized ..	137,391	172,150	159,277	155,620	155,423	153,794
Exported on Skins ..	58,187	45,145	66,894	60,354	64,329	69,377
Total ..	991,306	1,041,258	1,207,664	1,205,997	1,183,335	1,290,261
<i>Semi-processed Wool—</i>						
Tops ..	10,124	7,078	14,993	8,946	10,285	19,290
Yarn ..	58	861	54	189	229	123
Total Wool ..	1,001,488	1,049,197	1,222,711	1,215,132	1,193,849	1,309,674
CLEAN BASIS.						
Raw Wool ..	(a)	589,674	696,985	676,033	667,347	737,987
Semi-processed Wool ..	5,071	4,552	8,791	5,376	6,160	11,378
Total Wool ..	(a)	594,226	705,776	681,409	673,507	749,365

(a) Not available.

(v) *Total Value of Exports.* The value of wool of Australian origin (other than wool on sheepskins) exported from Australia during the five years ended 1955–56 averaged 48 per cent. of the total value of exports of merchandise of Australian origin, and during 1955–56 the proportion was 45 per cent. The value during the period under review, together with the principal countries to which wool was exported, is shown in the following table.

VALUE OF WOOL EXPORTS^(a) (AUSTRALIAN PRODUCE).
(£'000.)

Country to which Exported.	Average, 1934–35 to 1938–39.	1951–52.	1952–53.	1953–54.	1954–55.	1955–56.
United Kingdom ..	19,233	89,067	142,277	117,704	107,914	83,088
Other British Countries ..	703	5,999	6,837	6,901	6,839	8,060
Belgium ..	5,863	17,036	23,897	27,522	25,620	21,391
France ..	5,618	43,813	54,910	58,448	50,474	53,388
Germany ..	2,602	11,443	17,447	22,010	22,926	23,600
Italy ..	1,340	30,357	38,287	47,323	32,379	29,259
Japan ..	7,727	40,624	66,686	43,685	46,077	63,661
United States of America ..	2,252	59,047	30,992	30,239	29,801	21,627
Other Foreign Countries ..	3,429	26,042	21,572	56,588	31,076	33,434
Total ..	48,767	323,428	402,905	410,420	353,106	337,508

(a) Excludes wool exported on sheepskins.

15. *Local Sales of Wool.*—In 1946–47, following the cessation of the war-time acquisition scheme which ended with the 1945–46 season, auction sales were resumed in Australia. Sales are conducted at Sydney, Goulburn, Newcastle, Albury, Melbourne, Geelong, Ballarat, Brisbane, Adelaide, Perth, Hobart and Launceston, and are attended by buyers representing manufacturers and merchants in the United Kingdom, France, the United States of America, Japan, U.S.S.R. and many other countries. More than 95 per cent. of the Australian wool clip is now disposed of at auction in Australia.

16. *Stocks of Wool.*—Stocks of raw wool held in Australia at 30th June, 1956 amounted to 68.6 million lb. (as in the grease) of which 51.3 million lb. (35.4 million lb. as greasy and 15.9 million lb. as scoured and carbonized) were held by woollen mills, wool scourers and fellmongers and 17.3 million lb. (unsold wool assumed to be all greasy) were held by brokers. These stocks exclude wool on skins, since this wool is not recorded as production until fellmongered in Australia or exported on skins.

Stocks at 30th June, 1956 were slightly lower than at 30th June, 1955, but both years were higher than in any of the three preceding years, when they were at their lowest level since the outbreak of the 1939–45 War. During the war and post-war years up to 1951 raw wool stocks were exceptionally high because of the large quantities held in Australia by the Australian Wool Realization Commission on account of Joint Organization. They reached a maximum of 1,749.9 million lb. at 30th June, 1945, but declined in each successive year to 30th June, 1952 by which time all Joint Organization stocks had been sold.

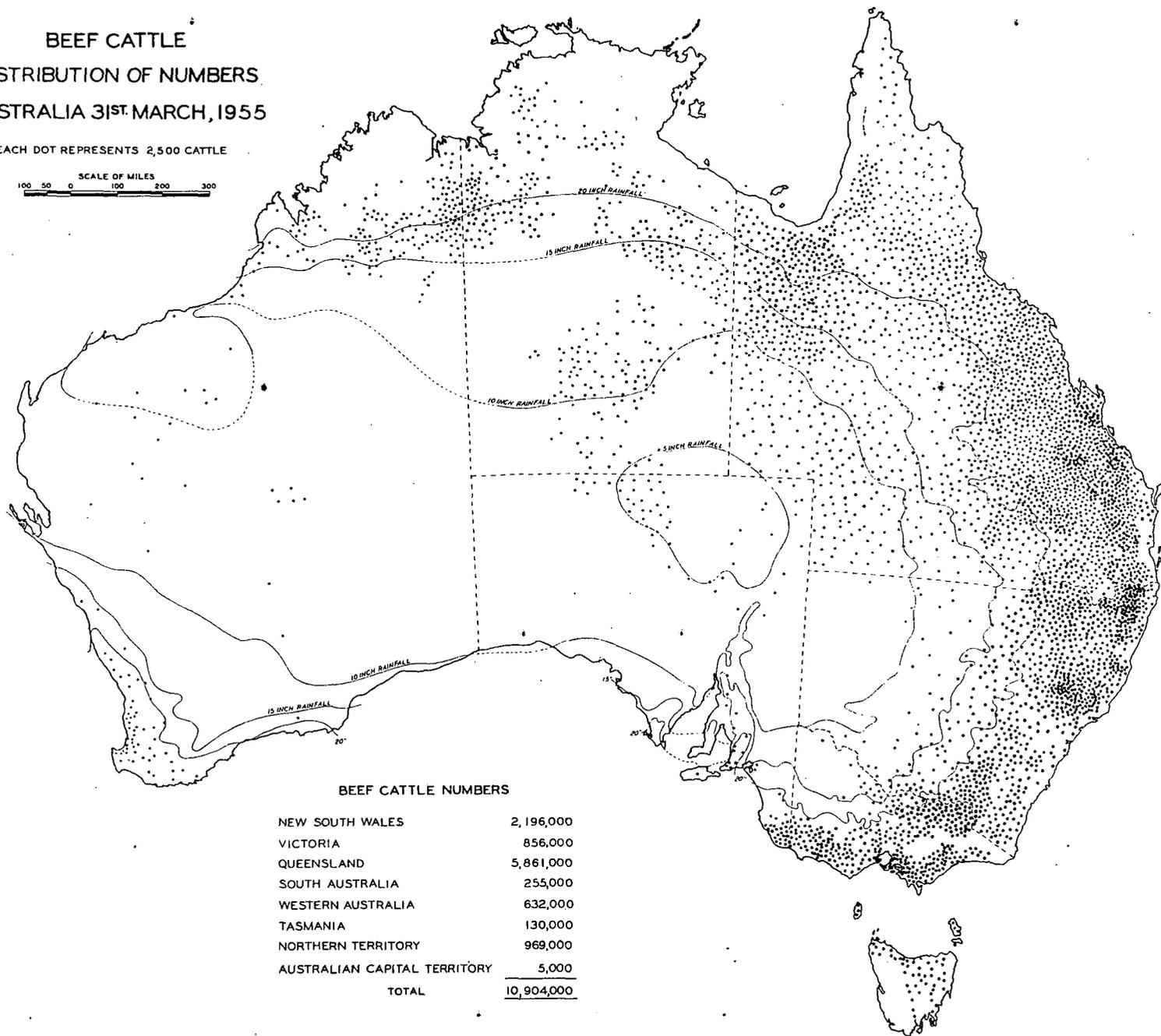
17. *Price.*—Wool is the chief factor in the pastoral wealth of Australia and the nation's prosperity is largely dependent upon its satisfactory sale. During the five years ended 1955–56, the price of greasy wool sold in the selling centres of Australia averaged 73.3d. per lb. compared with the average United Kingdom contract price of 14.59d. per lb. during the years 1939–40 to 1945–46 and the average selling price of 11.5d. per lb. during the ten years ended 1938–39. The average for the nine years ended 1928–29 was 18d. per lb., and for the seven years ended 1913–14, 9d. per lb.

As indicated in para. 8 above, the price of wool during the 1939–45 War was determined by the British Government wool contract. With the return to auction sales since 1945–46, the average price of greasy wool sold rose rapidly from the contract price of 15.45d. per lb. applicable to 1945–46 to the unprecedented level of 144.19d. per lb. in 1950–51. This was followed by a sharp fall in 1951–52 to 72.42d. per lb. or slightly more than half the price in 1950–51. There was, however, a partial recovery to 81.80d. per lb. in 1952–53 and 81.50d. per lb. in 1953–54. There was a further decline in the two following years to 70.88d. per lb. in 1954–55 and 61.46d. per lb. in 1955–56. The prices realized in 1955–56 were the lowest since 1948–49.

**BEEF CATTLE
DISTRIBUTION OF NUMBERS
AUSTRALIA 31ST MARCH, 1955**

EACH DOT REPRESENTS 2,500 CATTLE

SCALE OF MILES
100 50 0 100 200 300

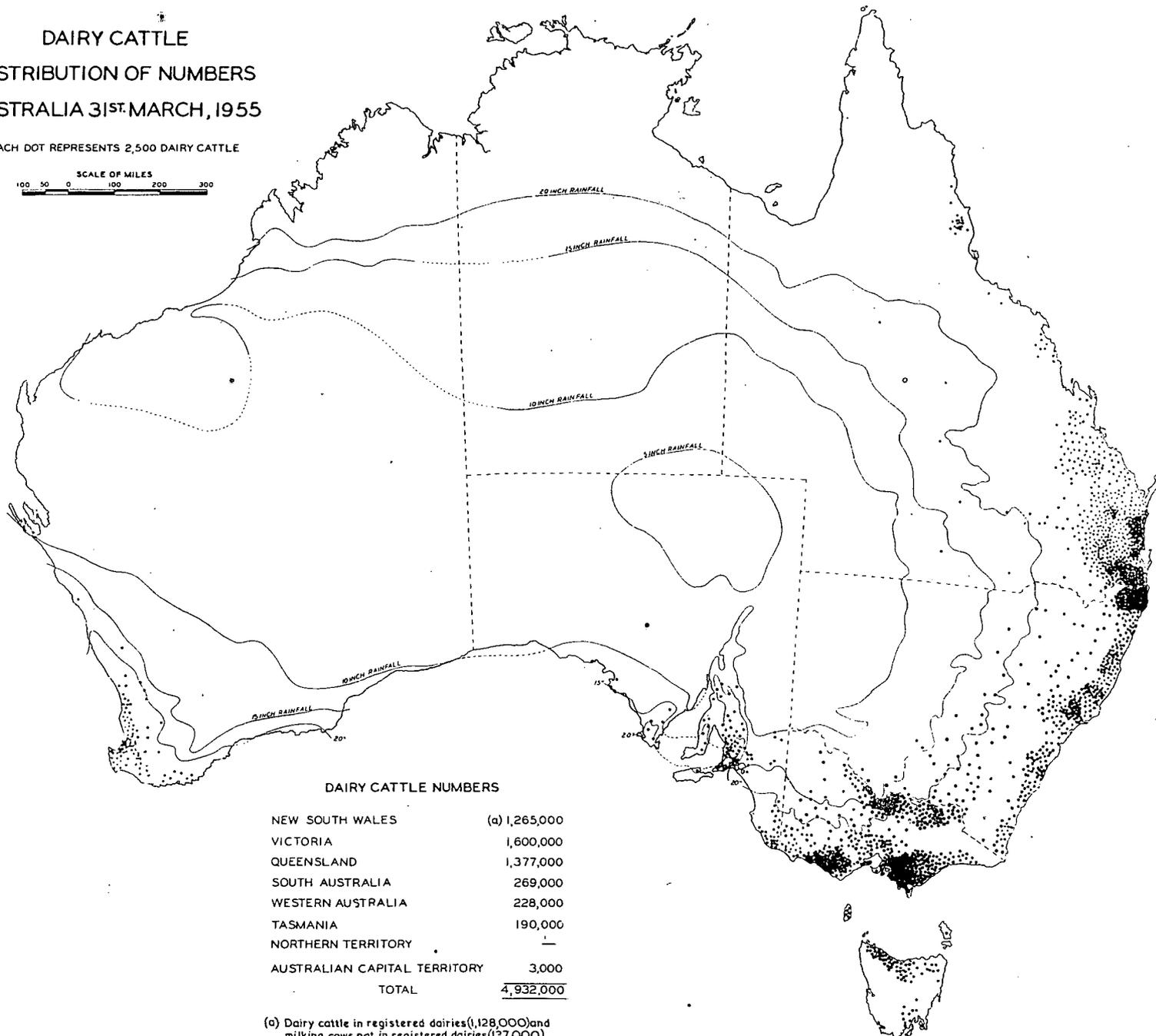
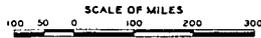


BEEF CATTLE NUMBERS

NEW SOUTH WALES	2,196,000
VICTORIA	856,000
QUEENSLAND	5,861,000
SOUTH AUSTRALIA	255,000
WESTERN AUSTRALIA	632,000
TASMANIA	130,000
NORTHERN TERRITORY	969,000
AUSTRALIAN CAPITAL TERRITORY	5,000
TOTAL	<u>10,904,000</u>

DAIRY CATTLE
DISTRIBUTION OF NUMBERS
AUSTRALIA 31ST. MARCH, 1955

EACH DOT REPRESENTS 2,500 DAIRY CATTLE

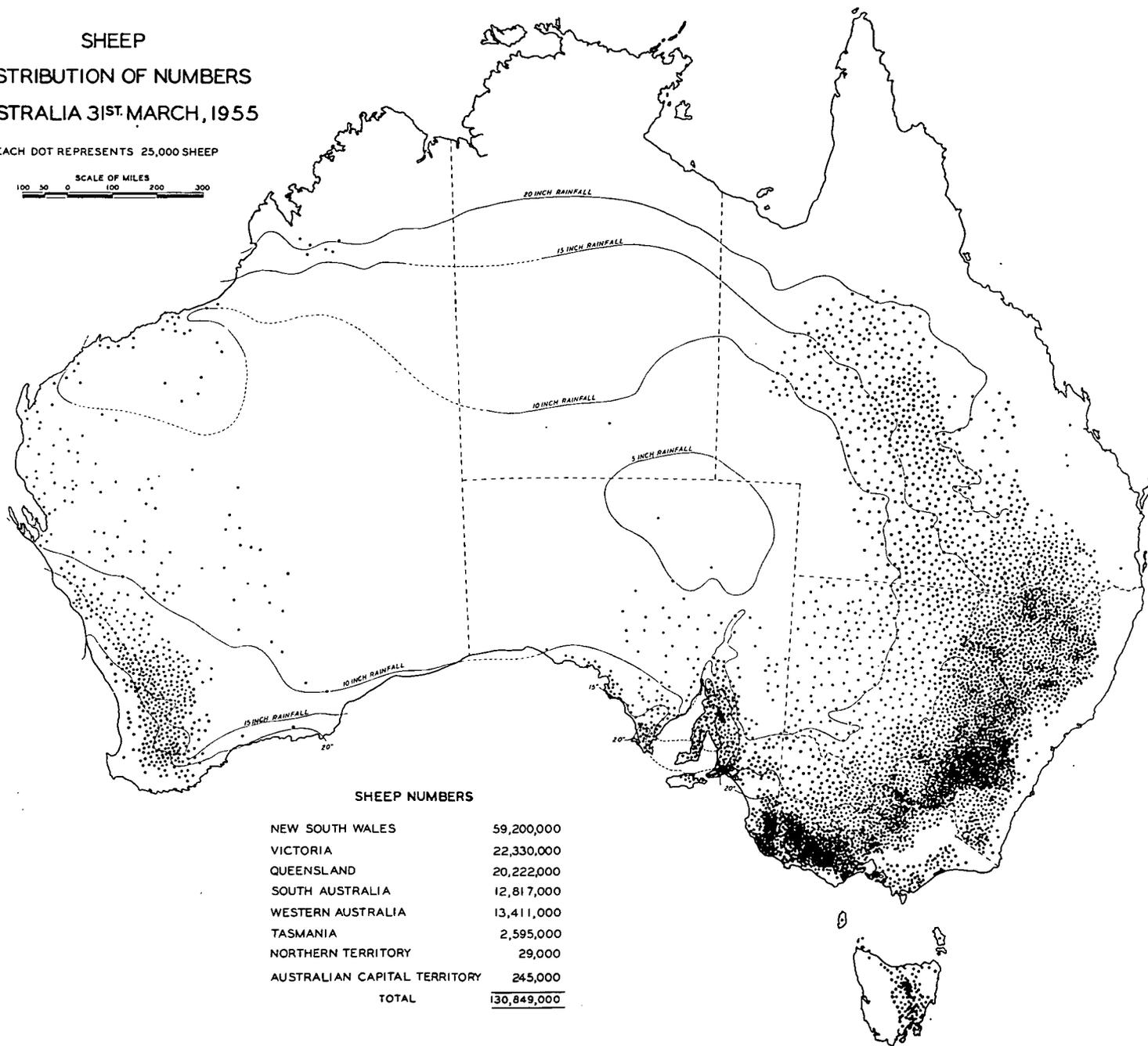


(a) Dairy cattle in registered dairies (1,128,000) and milking cows not in registered dairies (137,000).

**SHEEP
DISTRIBUTION OF NUMBERS
AUSTRALIA 31ST MARCH, 1955**

EACH DOT REPRESENTS 25,000 SHEEP

SCALE OF MILES
100 30 0 100 200 300



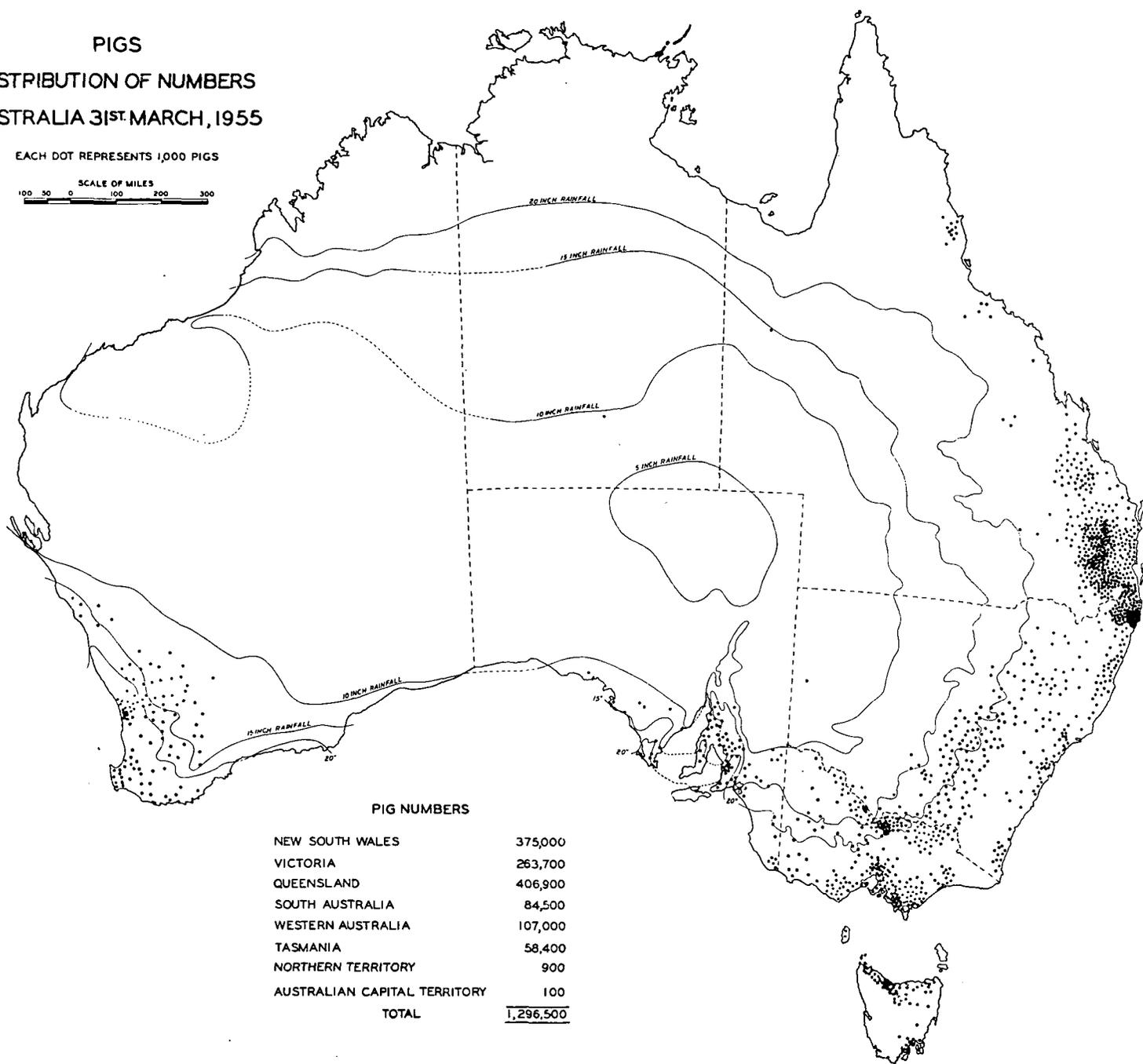
SHEEP NUMBERS

NEW SOUTH WALES	59,200,000
VICTORIA	22,330,000
QUEENSLAND	20,222,000
SOUTH AUSTRALIA	12,817,000
WESTERN AUSTRALIA	13,411,000
TASMANIA	2,595,000
NORTHERN TERRITORY	29,000
AUSTRALIAN CAPITAL TERRITORY	245,000
TOTAL	<u>130,849,000</u>

PIGS
DISTRIBUTION OF NUMBERS
AUSTRALIA 31ST MARCH, 1955

EACH DOT REPRESENTS 1,000 PIGS

SCALE OF MILES
100 50 0 100 200 300



The prices quoted above, except for United Kingdom contract prices, are as compiled by the National Council of Wool Selling Brokers and represent the average price realized for all greasy wool, of whatever type or quality, marketed during the years indicated.

18. Value.—Fluctuation in Australian wool prices has a marked effect on the nation's rural income. In 1945-46, the gross value of wool production was £58,597,000 representing 17.4 per cent. of the gross value of all rural industries whilst in 1950-51, when prices reached a peak, wool was valued at £651,902,000 or 55.6 per cent. of the total for all rural industries. The value of wool production fell in subsequent years and in 1955-56 was £351,939.

Details of the value of wool production for the years 1951-52 to 1955-56 compared with the average for the three pre-war years are shown below.

WOOL (AS IN THE GREASE)—ESTIMATED GROSS VALUE OF TOTAL PRODUCTION.(a)
(£'000.)

Season.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	N.T.(b)	A.C.T.	Aust.
Average, 1936-37 to 1938-39	26,276	9,322	9,247	4,111	3,389	980	2	98	53,425
1951-52(c)	135,864	63,638	47,190	36,197	33,187	5,891	86	562	322,615
1952-53(c)	192,124	78,761	59,903	48,579	39,164	6,380	103	793	425,807
1953-54(c)	180,781	73,384	61,125	44,434	42,523	6,655	90	776	409,768
1954-55(c)	155,335	75,125	52,109	41,602	35,013	7,232	68	654	367,138
1955-56(c)	149,128	69,020	51,017	39,911	35,881	6,190	85	708	351,940

(a) Including shorn, dead and fellmongered wool and wool exported on skins. (b) Estimated.

(c) Excludes distributions of profits under the Wool Disposal Plan; 1951-52, £23,662,000; 1952-53, £15,140,000; 1953-54, £14,279,000; 1954-55, £12,104,000; 1955-56, not yet available.

19. United Kingdom Importation of Wool.—The important position which Australia occupies in the supply of wool to the United Kingdom is indicated in the following statement of the quantities of wool imported into that country from the principal wool-producing countries during 1938 and each year 1951 to 1955.

WOOL(a): IMPORTS INTO UNITED KINGDOM.
(⁰⁰⁰ lb.)

Country of Origin.	1938.	1951.	1952.	1953.	1954.	1955.
Australia	365,519	255,941	320,653	364,931	291,704	338,463
New Zealand	197,995	138,546	190,007	191,781	186,352	186,083
Union of South Africa ..	106,601	45,900	64,015	57,200	61,826	64,420
India and Pakistan	46,049	27,184	26,492	30,794	35,235	30,682
Other British Countries ..	14,269	11,747	13,772	19,073	17,968	21,166
Argentina	79,303	7,698	23,643	60,953	21,784	31,877
France	25,211	8,793	13,812	16,850	15,707	18,093
Uruguay	22,072	723	26,548	65,992	37,070	18,885
Other Foreign Countries	24,307	9,380	15,931	19,687	16,348	14,626
<i>Total Quantity</i> ..	<i>881,326</i>	<i>505,912</i>	<i>694,873</i>	<i>827,261</i>	<i>683,994</i>	<i>724,295</i>
Total Value (£'000 sterling)	40,996	238,394	170,957	229,408	184,670	177,708

(a) Greasy and Scoured.

(b) Not available.

Australian wool represented 45.7 per cent. of the total quantity imported into the United Kingdom during the five years ended 1955. New Zealand supplied 26.0 per cent. and South Africa 8.5 per cent., while the total quantity received from British countries constituted 87.1 per cent. of all United Kingdom imports.

20. Principal Importing Countries and Sources of Supply.—The following table furnishes, in respect of the principal importing countries, details of their production and imports of wool for 1955 together with the chief sources of supply. The quantities imported refer to the actual weight of wool without distinguishing between greasy and scoured except in the case of the United States of America where estimated clean content of raw wool is quoted.

WOOL: PRINCIPAL IMPORTING COUNTRIES AND SOURCES OF SUPPLY, 1955.
(Million lb.)

Importing Country.	Pro- duction of Importing Country. (a)	Quantity Imported from(b)—					Total Imports.
		Australia.	Union of South Africa.	Argen- tina.	New Zealand.	Other Countries.	
United Kingdom ..	104	338.5	64.4	31.9	186.1	103.4	724.3
Belgium	(c)	100.7	11.8	6.4	20.0	24.7	163.6
France	55	197.2	44.6	19.5	77.7	20.5	359.5
Germany (Federal Republic) ..	(c)	85.4	42.6	18.7	38.8	46.9	232.4
Italy	36	87.9	19.5	6.5	11.0	31.0	155.9
Japan	(c)	157.4	11.6	14.7	5.1	9.2	198.0
United States of America	304	(d) 53.2	(d) 17.8	(d) 69.3	(d) 25.8	(d) 82.3	(d) 248.4

(a) As in the grease, 1954-55. (b) Actual weight of greasy and scoured wool. (c) Not available. (d) Imports are in terms of estimated clean content of greasy and scoured wool. Actual weight of total United States of America imports was 354.8 million lb.

As a considerable transit trade exists between continental countries, it must not be assumed that the whole of the imports recorded by these countries are retained for their own consumption. The countries chiefly concerned with the transit trade are the United Kingdom (10 per cent. of total imports re-exported in 1955) and Belgium.

§ 6. Trade in Hides and Skins.

1. **Extent of Trade.**—In addition to the hides and skins treated locally, considerable quantities are exported: the value of cattle and horse hides, and sheep and other skins, sent overseas during the five years ended 1955-56 amounted to £97,288,000 or an average of £19,458,000 per annum.

2. **Sheepskins with Wool.**—The exports of sheepskins with wool, aggregating £76,348,000 during these five years, constitute the most important item in the values referred to in the preceding paragraph. During 1938-39, France was the largest purchaser of sheepskins with wool, taking 74 per cent. of the total consignments, while the United Kingdom ranked next with 15 per cent., followed by Germany with 7 per cent. In 1955-56, France obtained 80 per cent. of total exports and the United Kingdom 13 per cent. The exports of sheepskins with wool during each of the years 1951-52 to 1955-56 compared with the average for the years 1934-35 to 1938-39 were as follows:—

EXPORTS OF SHEEPSKINS WITH WOOL : AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
		Number .. '000	12,009	10,611	15,681	13,647	14,841	14,891
Value.. .. £'000	2,780	13,159	16,584	15,769	15,569	15,268

3. **Sheepskins without Wool.**—Up to 1943-44, sheepskins without wool were exported chiefly to the United States of America. During 1943-44, that country accounted for 97 per cent. of the total shipments while the remaining 3 per cent. were exported to the United Kingdom, Canada and the U.S.S.R. In subsequent years, however, there has been a decline in shipments to the United States of America and an increase in the quantities shipped to the United Kingdom and other countries; in 1955-56 the United States of America received 55 per cent. of total shipments; the United Kingdom 15 per cent. and

other countries 30 per cent. Quantities and values for the five years 1951-52 to 1955-56 compared with the average for the years 1934-35 to 1938-39 are shown in the table hereunder:—

EXPORTS OF SHEEPSKINS WITHOUT WOOL: AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Number .. '000	808	1,454	3,242	2,482	2,147	1,771
Value.. .. £'000	70	518	749	671	372	424

4. Hides.—(i) *Exports.* The export trade in cattle hides and calf skins during 1955-56 was distributed as follows:—Japan, £456,000; Netherlands, £440,000; Italy, £425,000; Federal Republic of Germany, £423,000; United Kingdom, £402,000; Sweden, £107,000 and other countries, £469,000.

The exports during each of the five years 1951-52 to 1955-56 compared with the average for the years 1934-35 to 1938-39 are shown in the table below:—

EXPORTS OF CATTLE HIDES AND CALFSKINS: AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Number .. '000	1,677	179	282	(a)18,761	(a)33,817	(a)45,976
Value.. .. £'000	957	1,109	1,161	1,381	1,874	2,722

(a) '000 lb.

Horse hides exported during the five years ended 1955-56 weighed 14,274,000 lb. and were valued at £1,050,000.

(ii) *Imports.* The imports of cattle hides and calfskins are fairly large, the chief sources of supply being New Zealand and the Pacific Islands. The quantities and values of cattle hides, including calfskins, imported into Australia during the years 1951-52 to 1955-56 compared with the average for the years 1934-35 to 1938-39 were as follows:—

IMPORTS OF CATTLE HIDES AND CALFSKINS: AUSTRALIA.

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Quantity .. cwt.	70,781	28,590	11,183	16,960	12,391	10,537
Value.. .. £'000	279	402	64	174	108	58

5. Furred Skins.—The exports of furred skins were valued as follows:—

EXPORTS OF FURRED SKINS: AUSTRALIA.

(£'000.)

Description.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Rabbit and Hare ..	(a) 1,150	1,358	924	849	1,100	1,711
Opossum ..	125	26	31	104	42	15
Kangaroo and Wallaby ..	191	538	187	202	281	285
Other.. ..	69	10	9	1	7	2
Total	1,535	1,932	1,151	1,156	1,430	2,013

(a) Excludes hare skins.

These skins were shipped principally to the United States of America, the United Kingdom and Belgium and Luxemburg, the values taken by each in 1954-55 and 1955-56 being shown in the following tables:—

FURRED SKINS : EXPORTS TO PRINCIPAL COUNTRIES OF DESTINATION.
(£'000.)

Country.	Rabbit and Hare.	Kangaroo and Wallaby.	Other Furred Skins.	Total.
1954-55.				
United Kingdom	164	6	19	189
United States of America	863	268	30	1,161
Belgium and Luxemburg	31	(a)	..	31
Other Countries	42	7	..	49
Total	1,100	281	49	1,430
1955-56.				
United Kingdom	374	29	4	407
United States of America	1,167	247	13	1,427
Belgium and Luxemburg	146	(a)	..	146
Other Countries	24	9	..	33
Total	1,711	285	17	2,013

(a) Less than £500.

6. Marketing of Hides and Skins.—(i) *Sheepskins with Wool*. Details of the agreement between the United Kingdom and Commonwealth Governments for the purchase by acquisition of the "exportable surplus" of woolled sheepskins in Australia during the 1939-45 War were given in Official Year Book No. 37, p. 886. The contract expired on 30th June, 1946, and sheepskins have since been marketed mostly at open auction.

(ii) *Sheep and Lamb Pelts*. Details of the marketing control of sheep and lamb pelts were given in Official Year Book No. 38, p. 930. Pelts have reverted to open marketing without export restrictions.

(iii) *Hides and Leather*. A hide acquisition and marketing scheme operated from November, 1939 to August, 1954. Until 31st December, 1948, the scheme operated under the National Security Regulations. From 1st January, 1949, it continued under a Commonwealth Act and supporting State Acts. In June, 1952, the Tasmanian legislation lapsed and the scheme did not operate in Tasmania after that date. By August, 1954, the wide gap which had existed between fixed local prices and export prices for hides and leather had almost disappeared and, having in view certain legal difficulties which were hampering the operation of the scheme, the Commonwealth Government decided on its immediate termination.

The Australian Hide and Leather Industries Board, which administered the scheme, acquired all cattle hides and yearling and calf skins produced in Australia at set prices and allocated them to tanners at these prices. The prices were 15 per cent. to 20 per cent. above August, 1939 levels until May, 1952 when they were increased by an average of 50 per cent. Surplus hides were disposed of by tender or open auction. The Board retained the amounts realized in excess of appraised values, and supplemented the price to the producers in cases where the realized amount was less than the appraisal values.

Returns from sales of surplus hides and deferred payments levied on leather exported, based on the difference between world and Australian prices for the hides involved, were paid into a fund by the Board. From this fund, premiums were paid to producers as a proportion of appraised values. These premiums compensated hide producers to some extent for the margin between local and oversea prices. Further details of the war-time operations of the scheme will be found in Official Year Book No. 37, p. 887 and Official Year Book No. 38, pp. 930-1.

Pre-war, about 40 to 45 per cent. of Australian production was exported, but with the development of the local tanning industry, the proportion now is approximately 30 per cent.

(iv) *Rabbit Skins.* A marketing control scheme for rabbit skins was introduced under the National Security (Rabbit Skins) Regulations on 10th June, 1940, and terminated in April, 1949. Details of the scheme will be found in Official Year Book No. 38, p. 931.

§ 7. Tallow and Lard.

1. **Production.**—Australia's production of tallow and lard is in excess of local requirements and considerable quantities are normally available for export. Before 1952-53, the collection of details of tallow and lard was somewhat defective. In that year, a collection was instituted covering both slaughtering establishments and factories on a fiscal year basis. Details of the production of edible and inedible tallow and lard in each State are shown in the table below for the year 1954-55.

TALLOW AND LARD : PRODUCTION. (cwt.)

State.	1954-55.		
	Tallow.		Lard.
	Edible.	Inedible.	
New South Wales	92,553	463,839	4,145
Victoria	308,026	495,870	7,919
Queensland	378,218	221,601	19,421
South Australia	56,106	112,446	6,921
Western Australia	15,165	66,807	3,353
Tasmania	1,227	33,153	1,176
Australia	851,295	1,393,716	42,946

2. **Consumption of Tallow in Factories.**—Details of consumption are collected from the principal factories using tallow (soap and candle, chemical and woollscouring works).

Total consumption of tallow in factories as shown in the table below for the years 1938-39 and 1951-52 to 1955-56 is deficient, however, to the extent that no allowance is made for the small unrecorded amounts used in other types of establishments.

TALLOW : CONSUMPTION IN FACTORIES, AUSTRALIA. (cwt.)

Year.	Quantity Used.	Year.	Quantity Used.
1938-39.. .. .	539,095	1953-54	1,172,710
1951-52.. .. .	1,205,307	1954-55	1,193,368
1952-53.. .. .	1,068,181	1955-56	1,210,694

3. **Exports of Tallow and Lard.**—Particulars of exports of edible (including lard) and inedible tallow are shown in the following table for the five years 1951-52 to 1955-56 in comparison with the average for the five years ended 1938-39.

TALLOW AND LARD : EXPORTS, AUSTRALIA. (cwt.)

Particulars.	Average, 1934-35 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Edible	(a)	27,331	111,020	158,875	74,401	142,498
Inedible	606,934	126,618	430,227	823,816	365,985	829,403
Total	(a)	153,949	541,247	982,691	440,386	971,901

(a) Not available.

4. Marketing of Tallow.—Until 30th September, 1952, the bulk of Australia's exportable surplus tallow, other than collar white mutton tallow was sold to the United Kingdom Ministry of Food under a series of annual contracts. The 1951-52 contract was not renewed and on 9th November, 1952 tallow export control was removed following termination of the industry's equalization pool arrangement and price de-control in most States.

§ 8. Net Exports of Principal Pastoral Products.

The quantities and values by which the exports of the principal pastoral products of Australia exceeded the imports for the years 1953-54 to 1955-56 were as follows:—

NET EXPORTS OF PASTORAL PRODUCTS: AUSTRALIA.

Product.	Unit of Quantity.	Quantity.			Value (£'000.)		
		1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
Animals (living)—							
Cattle	No.	1,061	5,107	7,721	6	191	246
Horses	"	153	74	229	253	249	119
Sheep	"	86,279	96,914	97,400	290	327	243
Bones	cwt.	25,125	23,050	24,007	50	50	49
Glycerine	'000 lb.	68	232	1,367	—	29	128
Hair and Bristles	cwt.	13,220	7,161	18,181	647	508	879
Hoofs	"	10,417	10,447	10,461	15	18	24
Horns	"	8,510	10,014	9,347	63	69	76
Meats—							
Frozen Beef and Veal(a)	'000 cwt.	2,828	2,464	2,877	22,027	21,862	23,385
" Mutton and Lamb	"	890	1,150	1,038	5,261	11,817	9,752
" Rabbits and Hares	'000 lb.	27,674	15,702	18,390	2,380	1,478	1,855
" Other	'000 cwt.	253	293	280	1,881	2,795	3,012
Preserved in Tins, etc. .. .	"	1,113	1,194	1,136	17,397	19,107	17,531
Other (excluding Bacon and Ham)	'000 lb.	1,870	5,081	3,727	906	1,172	944
Sausage Casings	'000 bundles	(b)	(b)	1,737	1,012	1,291	1,766
Hides and Skins—							
Cattle	'000 lb.	17,034	31,563	41,954	1,247	1,698	2,116
Calf	"	173	567	2,847	40	68	548
Horse	"	2,373	2,303	2,204	182	138	136
Sheep and Lamb	No. '000.	16,130	16,988	16,661	16,433	15,937	15,689
Rabbit and Hare	'000 lb.	4,169	4,524	3,231	797	1,072	1,679
Tallow (Edible and Inedible)	cwt.	994,500	437,055	971,894	2,622	1,698	4,070
Wool—							
Greasy	'000 lb.	983,697	954,080	1,058,662	363,209	309,542	292,589
Scoured, Tops, Noils, Waste	"	95,190	99,662	113,505	45,047	41,563	43,305

(a) Includes chilled beef. (b) Not available.

NOTE.—Minus sign (—) signifies net imports.

CHAPTER XXIV.

FARMYARD, DAIRY AND BEE PRODUCTS.

NOTE.—Values of Australian oversea trade shown throughout this chapter are expressed as £A. f.o.b. Port of Shipment, except where otherwise indicated.

§ 1. Introductory.

1. **General.**—The introduction of cattle into Australia and the early history of the dairying industry are referred to in some detail in earlier issues of this publication. It may be noted here that an increased and improved milk supply has resulted from the crossing of imported stud cattle with the original stock and from the further judicious crossing of strains. In Australia, dairy cattle thrive in the open throughout the year, local climatic conditions demanding no protection other than tree plantations for shelter and, in certain districts, rugging in the coldest weather. Indigenous and imported grasses furnish food during the greater part of the year, and winter fodder, when necessary, is given to the cattle in the fields. With the wider application of scientific methods in the treatment of animals and pasturages and in the processes of manufacture, coupled with herd testing and effective State supervision, the dairying industry has shown rapid expansion. It has been demonstrated that Australian production and marketing methods do not adversely affect the vitamin content of the butter and that the loss during cold storage even for as long as two years is insignificant.

2. **Mixed Farming.**—Dairying is not, as formerly, wholly confined to agriculturists since many graziers also give it their attention. In non-coastal regions, it is generally carried on in conjunction with agriculture and sheep-raising, sufficient fodder being grown to carry the cattle through the winter months. Local wants are thus met, and in many places remote from the metropolis well-equipped factories have been established. The extent to which dairy cattle were run in conjunction with pig raising and wheat growing in 1947–48 is shown in the relevant tables published in the section “Special Tabulations Relating to Rural Holdings, 1947–48” of *Primary Industries 1947–48*, Bulletin No. 42.

3. **Employment.**—The numbers of persons employed in rural industries are ascertained at the annual census of rural production. The particulars collected are in respect of those persons who were permanently engaged in the actual work of the farm and include owners, lessees, tenants or sharefarmers, relatives over 14 years of age not receiving wages, and other permanent employees, including managers and relatives, working for wages or salary. For some earlier years, and uniformly from March, 1950, particulars have also been collected as to numbers of temporary employees at 31st March of each year. Details of the numbers so engaged are given in Chapter XXII.—Agricultural Production, § 28.

For the years up to 1939–40, information was also collected which enabled the classification of each holding according to the chief purpose for which it was used, thus obtaining a distribution of employment in the three main classes, Agriculture, Pastoral and Dairying.

However, because of difficulties in determining with precision the chief purpose for which holdings are used, this information has since been omitted from the schedules. Consequently, it has not been possible to continue to compile details of employment in the dairying industry from data obtained from this source.

Persons who described themselves at the population census as being engaged in dairy farming comprised 96,508 males and 10,018 females, a total of 106,526 persons at the Census of 30th June, 1947, and 100,553 males and 11,004 females, a total of 111,557 persons, at the Census of 30th June, 1954.

4. **Growth of the Dairying Industry.**—The following table gives some indication of the growth of the dairying industry since 1918–19:—

DAIRYING INDUSTRY : AUSTRALIA.

Year.	Number of Dairy Cows at 31st March.			Production of—			Milking Machines (No. of Stands). ^(a)
	In Milk.	Dry.	Total.	Milk for all Purposes.	Butter (Factory and Farm).	Cheese (Factory and Farm).	
				Million Gallons.	Tons.	Tons.	
1918–19 ..	1,319,588	582,448	1,902,036	529.6	81,162	10,621	(b)
1928–29 ..	1,744,728	600,342	2,345,070	815.4	129,817	13,490	(b)
1938–39 ..	2,600,707	608,812	3,209,519	1,189.9	203,500	29,304	(b)
1948–49 ..	2,339,885	818,725	3,158,610	1,208.9	165,830	43,202	144,916
1951–52 ..	2,098,560	874,192	2,972,752	1,047.4	135,319	40,598	171,712
1952–53 ..	2,223,410	863,133	3,086,543	1,215.2	167,480	46,606	179,853
1953–54 ..	2,262,783	948,215	3,210,998	1,189.7	159,585	49,057	189,542
1954–55 ..	2,338,658	897,949	3,236,607	1,325.8	191,078	45,193	196,877
1955–56 ..	2,393,870	929,517	3,323,387	(c)1,405.2	(c)208,590	(c)38,693	204,369

(a) "Number of Stands" indicates the number of cows that can be milked simultaneously—i.e., the cow capacity of installed milking machines. (b) Not available. (c) Subject to revision.

5. **Official Supervision of Dairying Industry.**—Dairy experts of the various State Agricultural Departments give instruction in approved methods of production, and inspect animals, buildings and marketable produce. A high standard of cleanliness, both of *personnel* and *matériel*, prevails.

The export trade is regulated by the terms of the Commonwealth Customs Act 1901–1954 and the Commonwealth Commerce (Trade Descriptions) Act 1905–1950, and regulations thereunder. It will be sufficient to state here that the true trade description, etc., must be marked on all produce intended for export, while official inspection ensures the maintenance of purity and quality. Upon request of the exporter, the goods are given a certificate by the inspector.

6. **Australian Agricultural Council.**—General information on the constitution and functions of the Australian Agricultural Council is given on p. 822 of Chapter XXII—Agricultural Production. Details were given on pp. 833–4 of Official Year Book No. 40, of the production aims for the five-year period ending 1957–58 (including specific targets for the principal dairy products) as set by the Council at its 36th Meeting in April, 1952.

§ 2. Value of Farmyard, Dairy and Bee Production and Indexes of Price and Quantum of Production.

1. **Gross Value of Farmyard, Dairy and Bee Production, 1936–37 to 1938–39 and 1950–51 to 1954–55.**—The following table shows the gross value of recorded farmyard and dairy production at the principal markets in Australia.

GROSS VALUE OF FARMYARD, DAIRY AND BEE PRODUCTION: AUSTRALIA.(a)
(£'000.)

Particulars.	Average 1936-37 to 1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Whole Milk(b) used for—						
Butter	22,550	35,044	36,009	58,995	57,004	67,801
Cheese	1,505	5,506	6,872	9,377	10,077	9,218
Condensing, Concentrating, etc.	1,094	6,223	7,948	10,860	9,583	7,537
Human Consumption and other purposes	7,971	28,315	37,261	46,092	49,205	50,377
Subsidy Paid on Whole Milk for—						
Butter, Cheese, Condensing, Concentrating, etc. .. .. .	..	15,169	17,735	15,265	15,468	16,081
Human Consumption .. .. .	..	..	..	..	..	..
Total Whole Milk (in- cluding Subsidy)	33,120	90,257	105,825	140,589	141,337	151,014
Pigs Slaughtered	5,526	15,358	18,516	21,703	23,773	21,263
Dairy Cattle Slaughtered	1,591	4,872	5,966	6,569	8,437	9,652
Eggs	9,117	28,047	37,534	43,637	43,569	40,650
Poultry	2,386	9,408	10,985	11,231	11,396	10,835
Honey	154	871	800	1,113	1,473	1,465
Beeswax	10	71	62	84	120	133
Total	51,904	148,884	179,688	224,926	230,105	235,012

(a) Prior to 1954-55 excludes Australian Capital Territory and Northern Territory, details for which are not available. (b) Excludes Commonwealth subsidy which is shown separately below.

2. Gross and Net Values, 1954-55.—The values of dairy, poultry and bee farming on gross, local and net bases are shown in the following table. Further information on values, including definitions of the terms used, is given in Chapter XXX.—Miscellaneous.

GROSS, LOCAL AND NET VALUE OF FARMYARD, DAIRY AND BEE
PRODUCTION, 1954-55.
(£'000.)

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Farm Costs.		Net Value of Pro- duction. (a)
				Fodder Fed to Farm Stock.	Value of Other Materials Used in Process of Pro- duction.	

DAIRY PRODUCTION.

New South Wales	57,426	6,792	50,634	5,642	(b) 244	44,748
Victoria	62,001	2,323	59,678	10,466	2,784	46,428
Queensland	34,296	1,204	33,092	4,033	3,989	25,070
South Australia	12,519	209	12,310	871	773	10,666
Western Australia	8,171	368	7,803	3,116	1,461	3,226
Tasmania	7,319	341	6,978	1,157	(b) 311	5,510
Northern Territory	22	1	21	..	..	21
Australian Capital Ter- ritory	175	10	165	35	1	129
Total	181,929	11,248	170,681	25,320	9,563	135,798

(a) No deduction has been made for depreciation and maintenance. (b) No allowance has been made for costs of power, power kerosene, petrol and other oils.

GROSS, LOCAL AND NET VALUE OF FARMYARD, DAIRY AND BEE PRODUCTION, 1954-55—*continued.*

(£'000.)

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Farm Costs.		Net Value of Production. (a)
				Fodder Fed to Farm Stock.	Value of Other Materials Used in Process of Production.	
POULTRY PRODUCTION.						
New South Wales ..	20,765	2,694	18,071	5,232	(b)	12,839
Victoria ..	19,824	1,487	18,337	6,541	(b)	11,796
Queensland ..	2,535	312	2,223	1,052	74	1,097
South Australia ..	3,864	411	3,453	1,747	(b)	1,706
Western Australia ..	2,605	383	2,222	859	(b)	1,363
Tasmania ..	1,711	171	1,540	659	(b)	881
Northern Territory ..	57	3	54	9	..	45
Australian Capital Territory ..	124	16	108	48	..	60
Total ..	51,485	5,477	46,008	16,147	(c) 74	29,787

BEE PRODUCTION.

New South Wales ..	816	80	736	..	} (b) }	736
Victoria ..	437	84	353	..		353
Queensland ..	80	10	70	..		70
South Australia ..	142	16	126	..		126
Western Australia ..	106	9	97	..		97
Tasmania ..	16	1	15	..	15	
Northern Territory ..	..	..	..	..	..	..
Australian Capital Territory ..	1	..	1	..	..	1
Total ..	1,598	200	1,398	..	(b)	1,398

TOTAL FARMYARD, DAIRY AND BEE PRODUCTION.

New South Wales ..	79,007	9,566	69,441	10,874	(d) 244	58,323
Victoria ..	82,262	3,894	78,368	17,007	2,784	58,577
Queensland ..	36,911	1,526	35,385	5,085	4,063	26,237
South Australia ..	16,525	636	15,889	2,618	773	12,498
Western Australia ..	10,882	760	10,122	3,975	1,461	4,686
Tasmania ..	9,046	513	8,533	1,816	311	6,406
Northern Territory ..	79	4	75	9	..	66
Australian Capital Territory ..	300	26	274	83	1	190
Total ..	235,012	16,925	218,087	41,467	9,637	166,983

(a) No deduction has been made for depreciation and maintenance. (b) Not available.
(c) Incomplete, Queensland only. (d) Incomplete, see individual industries above.

3. Net Value of Production, 1934-35 to 1938-39 and 1950-51 to 1954-55.—In the following table the net values of farmyard, dairy and bee production (total and per head of population) are shown by States.

NET VALUE OF FARMYARD, DAIRY AND BEE PRODUCTION.(a)

Year.	N.S.W. (b)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(b)	Total.
NET VALUE. (£'000.)							
Average, 1934-35 to 1938-39	11,848	12,238	7,118	1,938	979	943	35,064
1950-51	38,852	39,650	21,141	8,513	3,886	2,755	114,797
1951-52	44,508	51,935	19,412	11,029	5,265	3,955	136,104
1952-53	60,642	57,842	31,402	11,708	5,460	4,970	172,024
1953-54	58,985	60,595	29,758	12,525	5,540	5,761	173,164
1954-55	58,323	58,577	26,237	12,498	4,686	6,406	c 166,983
NET VALUE PER HEAD OF POPULATION. (£ s. d.)							
Average, 1934-35 to 1938-39	4 8 3	6 12 2	7 4 7	3 5 11	2 3 0	4 0 10	5 2 11
1950-51	11 19 11	17 13 7	17 10 4	11 15 10	6 16 3	9 14 4	13 17 10
1951-52	13 8 10	22 9 9	15 13 3	14 16 8	8 18 6	13 9 7	16 0 8
1952-53	18 0 3	24 7 6	24 13 8	15 5 6	8 18 8	16 8 7	19 15 10
1953-54	17 6 5	25 0 3	22 17 8	15 18 8	8 15 8	18 12 5	19 11 1
1954-55	16 17 1	23 10 10	19 15 11	15 9 6	7 4 5	20 9 4	c 18 7 4

(a) No deduction has been made for depreciation and maintenance or for costs of materials used in the process of production in the Poultry (for States other than Queensland) and Bee-farming Industries.
 (b) No deduction has been made for costs of power, power kerosene, petrol and other oils.
 (c) Includes Northern Territory and Australian Capital Territory.

4. Indexes of Quantum and Price of Farmyard, Dairy and Bee Production, 1950-51 to 1954-55.—For details of the methods of calculating these indexes and of the weights used see Chapter XXX.—Miscellaneous.

INDEXES OF QUANTUM (a) AND PRICE OF FARMYARD, DAIRY AND BEE PRODUCTION: AUSTRALIA.

(Base: Average 3 years ended June, 1939 = 100.)

Particulars.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Quantum(a) of Production—</i>					
Milk	105	92	107	104	116
Other Products	109	108	110	113	117
<i>Total Farmyard and Dairy ..</i>	<i>106</i>	<i>97</i>	<i>108</i>	<i>107</i>	<i>117</i>
Total per Head of Population	88	78	85	83	88
<i>Price—</i>					
Milk	244	319	373	379	370
Other Products	295	363	423	435	375
<i>Total Farmyard and Dairy ..</i>	<i>258</i>	<i>332</i>	<i>387</i>	<i>395</i>	<i>371</i>

(a) Indexes of value at constant prices, i.e. quantities revalued at average unit values of base years (1936-37 to 1938-39).

§ 3. Dairy Cattle and Dairy Products.

1. Dairy Herds.—Lack of uniformity in the schedules used by the various States in the collection of livestock statistics makes it impossible to measure with complete accuracy the growth of dairy herds prior to 1943. Statistics of dairy cows—which form the largest part of herds—are, however, available on a comparable basis for a series of years. These statistics show that in 1918-19 there were 1,902,036 dairy cows (in milk and dry), compared with 2,345,070 in 1928-29 and 3,209,519 in 1938-39. The numbers remained at this level until March, 1944, but declined in succeeding years and did not regain the level of 1944 until 31st March, 1954, when the number recorded was 3,210,998. Numbers at 31st March, 1955 and 1956 were 3,236,607 and 3,323,387 respectively. In New South Wales, Victoria, South Australia, and Tasmania, the proportion of dairy to all cattle is high. In Queensland, the Northern Territory, and Western Australia, there is a great preponderance of other cattle, the main object in these areas being the production of beef. Since 1939, there has been a substantial decrease in the number of dairy cows in New South Wales. The numbers of dairy cows for 1952 to 1956 shown in the following table refer to those recorded by farmers as being in milk and dry as at 31st March. The figures shown for the years 1935 to 1939 cover the same categories, but the period differs in some States (see footnote (a)). To this extent the figures lack comparability.

NUMBER OF CATTLE AND DAIRY COWS (IN MILK AND DRY) AT 31st MARCH.

State.		Average, 1935-39. (a)	1952.	1953.	1954.	1955.	1956.
N.S.Wales	All Cattle ..	3,054,164	3,620,953	3,648,733	3,554,016	3,460,692	3,678,634
	Dairy Cows..	1,024,761	820,518	847,932	874,190	861,193	895,924
Victoria	All Cattle ..	1,892,465	2,214,530	2,297,208	2,370,184	2,456,303	2,616,587
	Dairy Cows..	912,621	914,809	947,061	987,345	1,025,233	1,071,437
Queensland	All Cattle ..	6,047,726	6,434,374	6,751,395	7,086,207	7,238,062	7,330,021
	Dairy Cows..	924,875	859,434	903,621	946,230	931,568	943,323
South Australia	All Cattle ..	331,488	437,468	482,578	490,945	523,817	566,055
	Dairy Cows..	154,870	152,192	155,956	164,230	169,822	165,865
W. Australia	All Cattle ..	796,473	851,534	846,261	829,694	860,574	896,897
	Dairy Cows..	121,127	130,625	133,923	134,129	134,696	134,517
Tasmania	All Cattle ..	260,267	266,263	275,131	295,178	319,417	331,589
	Dairy Cows..	93,708	92,833	96,040	102,523	111,781	110,028
Nor. Territory	All Cattle ..	893,925	1,057,906	935,602	966,033	968,775	1,027,819
	Dairy Cows(b)						
Aust. Cap. Ter.	All Cattle ..	8,261	10,293	9,700	9,394	8,590	9,489
	Dairy Cows..	1,019	2,341	2,010	2,351	2,314	2,293
Australia	All Cattle ..	13,284,769	14,893,321	15,246,608	15,601,651	15,836,230	16,457,091
	Dairy Cows..	3,232,981	2,972,752	3,086,543	3,210,998	3,236,607	3,323,387

(a) As at 31st March for New South Wales and Australian Capital Territory; 1st January for Queensland, South Australia, Western Australia and Tasmania. (b) No information available; assumed to be "nil".

In the next table, the dairy cattle in each State are shown in various categories as at 31st March, 1954, 1955 and 1956. Information in this detail was not collected uniformly in all States prior to 1943.

NUMBER OF DAIRY CATTLE.

State.	At 31st March	Dairy Cows.		Dairy Heifers 1 year and over.	Dairy Calves under 1 year.	Dairy Bulls.	Total Dairy Cattle.
		In Milk.	Dry.				
New South Wales	1954	663,945	210,245	200,540	139,233	24,557	1,238,520
	1955	668,610	192,583	203,583	130,437	23,840	1,219,053
	1956	693,112	202,812	194,397	143,385	23,944	1,257,650
Victoria	1954	685,084	302,261	286,632	225,802	40,951	1,540,730
	1955	757,080	268,153	299,627	233,804	41,057	1,599,721
	1956	780,132	291,305	308,874	239,192	43,045	1,662,548
Queensland	1954	661,256	284,974	214,325	194,510	28,143	1,383,208
	1955	655,307	276,261	226,437	191,269	27,940	1,377,214
	1956	664,443	278,880	225,627	186,900	27,889	1,383,739
South Australia	1954	109,210	55,020	48,576	39,452	8,772	261,030
	1955	109,379	60,443	47,060	43,259	8,780	268,921
	1956	102,507	63,358	47,217	42,416	8,805	264,303
Western Australia	1954	58,621	75,508	41,836	47,495	6,056	259,516
	1955	60,432	74,264	39,708	47,991	5,850	228,245
	1956	59,176	75,341	38,894	44,704	5,469	223,584
Tasmania	1954	83,280	19,243	28,426	38,274	4,372	173,595
	1955	86,496	25,285	30,766	42,652	4,512	189,711
	1956	93,163	16,865	30,884	37,817	4,873	183,602
Australian Capital Territory	1954	1,387	964	303	712	55	3,421
	1955	1,354	960	339	610	49	3,312
	1956	1,337	956	311	599	44	3,247
Australia	1954	2,262,783	948,215	820,638	685,478	112,906	4,830,020
	1955	2,338,658	897,949	847,520	690,022	112,028	4,886,177
	1956	2,393,870	929,517	846,204	695,013	114,069	4,978,673

A map showing the distribution of dairy cattle in Australia at 31st March, 1955, appears on p. 910. A similar map showing the distribution at 31st March, 1948, appeared on p. 906 of Official Year Book No. 39.

2. **Size of Dairy Herds.**—A series of special tabulations relating to rural holdings, undertaken for all States for the year 1949-50, covered, *inter alia*, a classification of holdings with dairy cattle according to size of herd. Details of these tabulations are published in *Primary Industries 1949-50*, Bulletin No. 44.

3. **Factory System.**—(i) *General.* Cream separation and butter-making are often carried on together under the co-operative system. The creation of large central butter factories has resulted in a considerable reduction in the cost of manufacture, since improved appliances such as refrigerators, etc., may be profitably worked at the larger establishments. The product is also of a more uniform quality and, whereas formerly the average quantity of milk used per pound of hand-made butter was about 3 gallons, factory butter requires less than $2\frac{1}{2}$ gallons.

(ii) *Number of Factories.* In 1954-55, the factories in Australia for the manufacture of butter, cheese and condensed milk numbered 379 and were distributed among the States as follows:—New South Wales, 77; Victoria, 134; Queensland, 89; South Australia, 41; Western Australia, 17; and Tasmania, 21. More details regarding numbers of factories, output, etc., are given in Chapter VII.—Manufacturing Industry.

4. **Butter and Cheese—Stabilization Schemes.**—(i) *Voluntary Plan.* During the period from January, 1926 to April, 1934, a voluntary scheme known as the "Paterson Plan" was in operation which had the effect of stabilizing the price of butter in Australia. Details of this scheme may be found on p. 1028 of Official Year Book No. 38 and in earlier issues.

(ii) *Compulsory Plan.* On 1st May, 1934, the "Paterson Plan" was superseded by a compulsory price equalization plan, details of which were shown on p. 1029 of Official Year Book No. 38 and earlier issues. This compulsory plan was invalidated by the decision in 1936 of the Privy Council which declared in the James (Dried Fruits) Case that the Commonwealth had no power under the Constitution to regulate trade between the States.

(iii) *Equalization Scheme.* Since the Privy Council decision, the butter price equalization scheme has continued to operate by voluntary action based on the agreements between the manufacturers and the Commonwealth Dairy Produce Equalization Committee Limited. The Committee, which comprises members of the State Dairy Products Boards and other persons representing the industry, enters into agreements with manufacturers to secure to them equal rates from sales of butter and cheese, and for this purpose may fix basic prices at which these products sold in Australia or abroad are to be taken into account. The effect is that local and export trade are distributed in equitable proportions among the manufacturers by means of quotas. The Committee fixes basic prices and equalizes returns to factories through an Equalization Fund. The States originally participating in the scheme were New South Wales, Victoria, Queensland and Tasmania in respect of both butter and cheese, and South Australia in respect of cheese. South Australia and Western Australia entered the scheme in respect of butter on 1st April, 1946 and Western Australia extended its participation to include cheese in January, 1947.

The home consumption prices of butter and cheese were fixed by the Commonwealth Prices Commissioner up to 19th September, 1948, from which date they have been a matter for State Prices Authorities. At present, however, the power to fix prices is being exercised in only two States, Queensland and South Australia, the prices in all other States being determined by the Commonwealth Dairy Produce Equalization Committee.

5. **Commonwealth Subsidies.**—(i) *Butter, Cheese and Processed Milk Products.* Under the provisions of the various Dairy Industry Assistance Acts, the first of which was passed in 1942, the Commonwealth Government has provided subsidies on milk supplied for the manufacture of butter, cheese and processed milk products. Subsidies were paid on a seasonal basis prior to 1st April, 1946, but from that date have been on a flat rate basis. Subsidies are distributed by the Commonwealth Dairy Produce Equalization Committee Limited through factories to milk producers by payments on butter, cheese and processed milk products manufactured. Subsidy on milk supplied for the manufacture of processed milk products was discontinued from 1st July, 1948 to 30th June, 1949 and again from 1st July, 1952.

The following table shows in respect of butter and cheese, particulars of the rates realized on local, interstate and oversea sales and the average equalization and subsidy rates in operation for the years ended June, 1939 and 1952 to 1956.

BUTTER AND CHEESE: RATES REALIZED ON SALES, AVERAGE EQUALIZATION RATES AND RATES OF COMMONWEALTH SUBSIDY UNDER DAIRY INDUSTRY ASSISTANCE ACTS.

(Rates s. d. per cwt.)

Year ended 30th June.	Rates Realized on Sales.			Average Equalization Rate.	Rate of Subsidy.	Rate of Overall Return to Manu- facturers.
	Local.	Interstate.	Overseas.			
BUTTER.						
1939	154 5.5	146 5.5	121 7.5	136 3.5	..	136 3.5
1952	291 9.6	291 7.6	429 1.1	307 8.9	121 4.2	429 1.1
1953	404 6.0	381 4.0	389 0.0	398 0.4	85 0.0	483 0.4
1954	404 7.3	380 4.0	401 4.6	400 5.1	89 10.3	490 3.4
1955	403 4.2	384 1.1	386 3.9	395 10.3	79 0.0	474 10.3
1956(a)	(b)	(b)	(b)	394 0.0	65 1.0	459 1.0
CHEESE.						
1939	(c) 94 8.6		59 3.2	71 7.6	..	71 7.6
1952	184 1.1		240 4.2	208 11.6	31 4.6	240 4.2
1953	244 3.3		203 4.1	232 4.8	32 0.0	264 4.8
1954	244 8.6		209 11.1	232 4.7	32 0.0	264 4.7
1955	246 3.1		191 11.1	220 2.2	29 11.0	250 1.2
1956(a)	(b)		(b)	248 4.0	31 5.6	279 9.6

(a) Rates are of an interim nature only. (b) Not yet available. (c) A lower rate was determined for cheese sold for processing for local consumption.

(Source: Commonwealth Dairy Produce Equalization Committee Limited.)

Following representations by industry organizations, the Commonwealth Government established the Joint Dairy Industry Advisory Committee in November, 1946, comprising a chairman nominated by the Government, four representatives of Commonwealth Government Departments and four industry representatives from the several States. The Committee's functions, broadly, were to advise and assist in conducting cost and other surveys of dairy farm production and to act as an advisory body to the Government in these matters. From 1st April, 1947, to 30th June, 1952, the rates of overall return to milk producers determined by the Commonwealth Government for the purpose of subsidy payments were based on recommendations made by the Committee following surveys of production costs in the dairy industry.

Under the Five-year Stabilization Plan, which came into operation on 1st July, 1952, the Commonwealth Government, with the approval of the States, determines each season the ex-factory prices of butter and cheese, guarantees to dairy farmers a return, based upon costs of efficient production, in respect of quantities of butter and cheese sold within the Commonwealth, plus an additional 20 per cent. (if produced), and hence determines the amount of subsidy it will make available to lift the return on that part of output covered by the guarantee to the guaranteed level.

Early in 1953, the Dairy Industry Investigation Committee, an independent body consisting of three members, was appointed to advise the Commonwealth Government on the guaranteed return to producers during 1953-54. The Committee was re-established in March, 1954, to advise the Government on the guaranteed return for each year of the remaining three year period of the Stabilization Plan.

Amounts realized on exports of butter and cheese in excess of the f.o.b. equivalent of the guaranteed return have been credited to the Dairying Industry Stabilization Fund, which was established in July, 1948 for the purpose of stabilizing returns from exports. During 1951-52, the Stabilization Fund met the deficiency in respect of all exports which did not return sufficient to meet the basic return to the factory. Since 1st July, 1952, it has been available to the industry to be used, in whatever manner considered desirable by it, to make good any deficiency in respect of all exports other than the 20 per cent. provided for under the Commonwealth Government's Five-year Stabilization Plan. After allowing for outstanding debits, the amount standing to the credit of the Dairying Industry Stabilization Fund at 30th June, 1956, totalled approximately £1,400,000.

(ii) *Whole Milk.* In addition to the subsidies referred to above, the Commonwealth Government subsidized the production of whole milk consumed directly from 1943-44

to 1948-49. Details of the amounts distributed during each year will be found in Official Year Book No. 38, p. 1031.

6. Total Dairy Production.—The dairy production for each State in 1954-55 and 1955-56 is shown below:—

DAIRY PRODUCTION.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
1954-55.								
MILK ('000 GALLONS).								
Used for—								
Butter ..	(a)192,284	(b)371,456	(c)213,022	36,639	33,388	39,836	27	886,652
Cheese ..	5,762	44,230	17,451	28,163	2,415	548	..	98,569
Condensing and concentrating	11,574	48,047	} 45,132	25,897	18,391	11,638	{ .. 698	64,365
Other purposes	106,099	73,102							276,213
Total ..	315,719	536,835	275,605	90,699	54,194	52,022	725	1,325,799
BUTTER (TONS).								
In Factories ..	(d) 38,688	(e) 79,418	(e) 45,915	8,510	7,145	8,334	..	188,010
On Dairy and other Farms ..	1,440	764	308	194	121	237	4	3,068
Total ..	40,128	80,182	46,223	8,704	7,266	8,571	4	191,078
CHEESE (TONS).								
In Factories ..	2,508	20,290	(f) 7,921	13,101	1,083	275	..	45,178
On Dairy and other Farms ..	..	12	..	..	3	..	..	15
Total ..	2,508	20,302	7,921	13,101	1,086	275	..	45,193
1955-56. (g)								
MILK ('000 GALLONS).								
Used for—								
Butter ..	(a)201,670	(b)426,113	(c) 219,592	37,429	34,512	47,385	36	966,737
Cheese ..	7,594	29,509	16,961	27,172	1,926	612	..	83,774
Condensing and concentrating	17,020	47,622	} 46,338	26,508	19,140	12,962	{ .. 877	72,631
Other purposes	108,950	75,249							282,035
Total ..	335,234	578,493	282,891	91,109	55,578	60,959	913	1,405,177
BUTTER (TONS).								
In Factories ..	(d) 41,065	(e) 90,676	(e) 48,186	8,517	7,427	9,969	..	205,840
On Dairy and other Farms ..	1,260	745	273	139	115	214	4	2,750
Total ..	42,325	91,421	48,459	8,656	7,542	10,183	4	208,590
CHEESE (TONS).								
In Factories ..	3,390	13,945	(f) 7,572	12,636	844	292	..	38,679
On Dairy and other Farms ..	1	10	..	..	3	..	..	14
Total ..	3,391	13,955	7,572	12,636	847	292	..	38,693

(a) Includes milk, the produce of New South Wales, sent as cream to factories in Victoria and Queensland. (b) Includes milk, the produce of Victoria, sent as cream to New South Wales. (c) Includes milk, the produce of Queensland, sent as cream to New South Wales. (d) Includes butter made from cream, the produce of Victoria and Queensland. (e) Includes butter made from cream, the produce of New South Wales. (f) Includes cheese made in establishments not classified as factories. (g) Subject to revision.

7. **Whole Milk.**—(i) *Production and Utilization.* During the five years ended 1938–39 approximately 80 per cent. of Australia's milk supply was used for making butter, 4 per cent. for cheese manufacture, 2 per cent. for condensery products and 14 per cent. for fluid consumption and other purposes. There has since been a considerable decline in the proportion of milk used for butter-making, with corresponding increases in the quantities used for other purposes. In 1955–56, 68 per cent. of the total milk supply was used for butter, 8 per cent. for cheese, 6 per cent. for condensery products and 18 per cent. for other purposes.

Details of the production of whole milk for various purposes are shown in the following table for each year 1951–52 to 1955–56 in comparison with the average for the years 1934–35 to 1938–39:—

PRODUCTION AND UTILIZATION OF WHOLE MILK: AUSTRALIA.

(’000 Gallons.)

Year.	Total Production.	Quantity used for—			
		Butter (Factory and Farm).	Cheese (Factory and Farm).	Condensery Products.	Other purposes.
Average, 1934–35 to 1938–39	1,149,697	913,754	48,595	28,116	159,232
1951–52	1,047,376	626,560	87,360	76,496	256,960
1952–53	1,215,241	771,522	100,224	83,655	259,840
1953–54	1,189,652	737,474	105,870	75,995	270,313
1954–55	1,325,799	886,652	98,569	64,365	276,213
1955–56(a)	1,405,177	966,737	83,774	72,631	282,035

(a) Subject to revision.

In the following table, particulars of production of whole milk in the several States are shown for the years 1951–52 to 1955–56, compared with the average for the five years ended 1938–39. Victoria is the principal milk-producing State and in 1955–56 the output from that State, 578.5 million gallons, represented 41 per cent. of total production. Output from New South Wales was 335.2 million gallons or 24 per cent. of the total and that of Queensland 282.9 million gallons (20 per cent.). Production in the remaining States accounted for 15 per cent. of the total Australian output.

TOTAL PRODUCTION OF WHOLE MILK.

(’000 Gallons.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
Average, 1934–35 to 1938–39	331,963	402,447	278,226	63,538	40,394	32,797	332	1,149,697
1951–52	241,209	446,818	181,148	86,482	48,937	42,189	593	1,047,376
1952–53	317,385	436,417	285,533	84,249	49,830	41,139	688	1,215,241
1953–54	282,187	474,358	249,712	85,014	49,996	47,642	743	1,189,652
1954–55	315,719	536,835	275,605	90,699	54,194	52,022	725	1,325,799
1955–56(a)	335,234	578,493	282,891	91,109	55,578	60,959	913	1,405,177

(a) Subject to revision.

(ii) *Production per Cow.* The quantity of milk produced by a dairy cow reaches as high as 1,000 gallons per year, varying greatly with breed, locality and season. For the whole of Australia for all dairy cows and for all seasons prior to 1916 production has averaged considerably less than 300 gallons per annum. In recent years, not only has there been an

improvement in the quality of the cattle, but the application of scientific methods has been continually extended, and the 300-gallon average has been exceeded in each year since 1924. In 1955-56, the average yield of 428 gallons constituted a record. The annual average yields per cow shown in the following table are based on the approximate number of dairy cows which were in milk during any part of the year. The average shown is, therefore, less than that for cows which were yielding during the greater part of the year. It should be noted that there are many difficulties attending the collection of particulars of the total quantity of milk obtained during any year. In addition, there is the further difficulty of ascertaining with reasonable accuracy the average number of cows in milk during the same period. The average yield per cow shown hereunder may be accepted as sufficiently reliable to show the general trend :—

AVERAGE MILK PRODUCTION PER DAIRY COW.
(Gallons.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
Average, 1934-35 to								
1938-39	322	440	306	412	334	350	347	357
1951-52	288	481	198	554	379	457	262	342
1952-53	380	469	324	547	377	436	316	401
1953-54	328	490	270	531	373	480	341	378
1954-55	364	533	294	543	403	485	311	411
1955-56(a)	382	552	302	543	413	550	396	428

(a) Subject to revision.

8. **Butter Production.**—There was a steady increase in the annual output of butter for many years prior to the 1939-45 War. The average annual production rose from 126,000 tons for the five years ended 1928-29 to 195,000 tons for the five years ended 1938-39.

Following the record output of 211,988 tons in 1939-40, the general trend of butter production declined until 1946-47, when 143,308 tons were produced. Output increased again to 173,599 tons in 1949-50, but was at a lower level in subsequent years. A substantial increase was recorded to 191,078 tons in 1954-55 and to 208,590 tons in 1955-56 due to a recovery in New South Wales and Queensland and a considerable increase in production in Victoria. The foregoing figures include butter produced on farms which has shown a decline from 8,714 tons in 1938-39 to 2,750 tons in 1955-56.

The following table shows production of butter in factories in each State for the years 1951-52 to 1955-56, compared with the average for the five years ended 1938-39.

BUTTER PRODUCTION IN FACTORIES.
(Tons.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
Average, 1934-35 to							
1938-39	52,949	62,489	53,255	7,570	5,459	3,811	185,533
1951-52	23,438	59,236	27,850	7,767	6,705	6,170	131,166
1952-53	37,087	57,323	49,008	7,630	6,480	6,059	163,587
1953-54	29,713	63,616	41,797	7,586	6,142	7,263	156,117
1954-55	38,688	79,418	45,915	8,510	7,145	8,334	188,010
1955-56(b)	41,065	90,676	48,186	8,517	7,427	9,969	205,840

(a) Northern Territory and Australian Capital Territory; nil.

(b) Subject to revision.

The table below shows the monthly production of factory butter in Australia in each of the years 1938-39 and 1951-52 to 1955-56. The annual output of farm butter is also shown.

PRODUCTION OF BUTTER IN FACTORIES AND ON FARMS: AUSTRALIA.
(Tons.)

Particulars.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56. (a)
<i>Factories—</i>						
July	9,415	7,013	7,862	6,941	6,917	8,479
August	11,645	9,119	10,325	8,906	10,903	13,280
September	15,531	11,511	15,139	12,781	16,288	18,203
October	20,485	16,748	19,329	17,481	21,819	24,318
November	22,561	16,051	19,468	19,640	25,011	26,173
December	20,710	13,889	19,537	18,585	24,715	25,284
January	15,872	12,337	16,905	17,038	19,681	23,925
February	15,816	9,501	15,052	15,410	16,598	20,041
March	17,729	10,197	14,063	15,465	16,658	15,890
April	16,583	9,132	10,440	9,933	12,358	12,332
May	15,568	8,219	8,286	7,646	9,435	9,846
June	12,871	7,449	7,181	6,291	7,627	8,069
<i>Factory Total (b)</i> ..	<i>194,786</i>	<i>131,166</i>	<i>163,587</i>	<i>156,117</i>	<i>188,010</i>	<i>205,840</i>
<i>Made on Farms(c)</i> ..	<i>8,714</i>	<i>4,153</i>	<i>3,893</i>	<i>3,468</i>	<i>3,068</i>	<i>2,750</i>
Grand Total ..	203,500	135,319	167,480	159,585	191,078	208,590

(a) Subject to revision.

(b) Year ended June.

(c) Year ended March.

9. Cheese Production.—Until 1916, the annual production of cheese had not reached 10,000 tons. From 1916 to 1932-33, it ranged between about 10,000 and 16,000 tons, rising in subsequent years with some reversals of trend to an output of 44,796 tons in 1949-50. Production decreased in 1950-51 and 1951-52 but by 1953-54 had risen to a record output of 49,057 tons. Production in 1954-55 declined to 45,193 tons and in 1955-56 to 38,693 tons due to a decline in Victorian output. The States contributing chiefly towards the general increase over the years are Victoria and South Australia.

The following table shows production of cheese in factories in each State in the years 1951-52 to 1955-56 in comparison with average output during the years 1934-35 to 1938-39:—

CHEESE PRODUCTION IN FACTORIES.

(Tons.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
Average, 1934-35 to 1938-39	3,332	6,177	5,071	5,437	390	1,210	21,617
1951-52	1,995	22,240	4,700	10,615	624	408	40,582
1952-53	3,162	22,377	9,439	10,454	895	265	46,592
1953-54	3,210	25,977	6,746	11,612	1,205	293	49,043
1954-55	2,508	20,290	7,921	13,101	1,083	275	45,178
1955-56(b)	3,390	13,945	7,572	12,636	844	292	38,679

(a) Northern Territory and Australian Capital Territory: nil.

(b) Subject to revision.

The monthly production of cheese in factories in Australia, together with the annual output from farms, is shown in the table below for 1938-39 and each of the years 1951-52 to 1955-56.

PRODUCTION OF CHEESE IN FACTORIES AND ON FARMS: AUSTRALIA.
(Tons.)

Month.	1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56. (a)
<i>Factories—</i>						
July	1,517	2,135	2,218	1,979	2,429	2,174
August	1,950	3,050	3,607	3,315	3,754	3,166
September	2,820	4,666	5,246	5,376	5,422	4,380
October	4,028	6,290	6,837	7,345	6,657	5,363
November	3,990	6,112	6,923	7,366	6,660	5,253
December	3,462	5,158	6,297	6,619	5,910	4,575
January	2,212	3,715	4,869	5,075	4,096	3,690
February	1,715	2,442	3,287	3,603	2,729	2,515
March	1,826	2,165	2,616	3,084	2,454	2,317
April	1,656	1,682	1,739	1,901	1,816	1,859
May	1,898	1,565	1,474	1,661	1,589	1,668
June	1,900	1,602	1,479	1,719	1,662	1,719
<i>Factory Total(b)</i>	<i>28,974</i>	<i>40,582</i>	<i>46,592</i>	<i>49,043</i>	<i>45,178</i>	<i>38,679</i>
<i>Made on Farms(c)</i>	<i>330</i>	<i>16</i>	<i>14</i>	<i>14</i>	<i>15</i>	<i>14</i>
Grand Total	29,304	40,598	46,606	49,057	45,193	38,693

(a) Subject to revision.

(b) Year ended June.

(c) Year ended March.

10. **Condensed, Concentrated and Powdered, etc., Milk Production.**—The manufacture of these products has expanded greatly since 1938-39 to meet the needs of the Services during the 1939-45 War and for export purposes since the war. The output of condensed milk (sweetened and unsweetened) in 1955-56 was more than double that in the three years ended 1938-39 while that of powdered milk (full cream and skim) was more than five times as high. Over the same period, the quantity of whole milk used in the manufacture of the products shown below increased from 33.2 million gallons to 72.6 million gallons or by 119 per cent. These products are manufactured mainly in Victoria, which produced 66 per cent. of the total (in terms of whole milk equivalent) in 1955-56. New South Wales accounted for 23 per cent. and the remaining States for 11 per cent.

The following table shows details of the output of condensed, concentrated, powdered, etc., milk during the years 1951-52 to 1955-56, compared with the available details for the years 1936-37 to 1938-39.

PRODUCTION OF CONDENSED, CONCENTRATED AND POWDERED, ETC., MILK: AUSTRALIA.

Year.	Full Cream Milk Products.				Total Whole Milk Equivalent of Full Cream Milk Products. '000 gals.	Milk By-products.	
	Condensed Milk (Sweetened and Unsweetened).	Concentrated Whole Milk.(a)	Powdered Full Cream Milk.	Infants' and Invalids' Foods (including Malted Milk and Milk Sugar).		Powdered Skim Milk.	Powdered Butter-milk and Whey.
	Tons.	Tons.	Tons.	Tons.		Tons.	Tons.
Average, 1936-37 to 1938-39	17,347	(b) 1,355	9,464	(c) 1,131	33,226	(d)	(e) 701
1951-52	52,467	16,743	15,121	12,066	76,496	10,887	2,938
1952-53	55,385	14,493	22,393	10,042	83,655	16,103	4,073
1953-54	42,386	19,464	18,905	11,740	75,995	19,804	5,358
1954-55	38,493	10,476	15,730	11,294	64,365	24,633	5,086
1955-56(f)	45,399	14,870	17,423	13,125	72,631	30,634	4,586

(a) Mainly for ice-cream manufacture. (b) Incomplete. (c) Malted milk and milk sugar only. (d) Not available separately; included with powdered full cream milk. (e) Excludes powdered whey. (f) Subject to revision.

11. **Local Consumption of Butter and Cheese.**—The production of butter and cheese less net exports and adjusted to account for movements in stocks, represents the quantity available for consumption in Australia.

A system of butter rationing introduced as a war-time measure and retained until 16th June, 1950, had the effect of considerably reducing civilian consumption. In the last year of rationing, 1949–50, consumption was 25.3 lb. per head per annum compared with an average of 32.9 lb. during the years 1936–37 to 1938–39. Following the cessation of rationing, consumption rose sharply to 30.9 lb. per head in 1950–51 and to 31.2 lb. in 1951–52, and has since fluctuated between 29 lb. and 31 lb. per head per annum. In 1955–56, consumption amounted to 29.3 lb. per head.

Cheese consumption rose considerably during the period of butter rationing, from 4.4 lb. per head pre-war to 6.3 lb. per head in 1949–50. There was a further increase in certain years after the cessation of butter rationing, the maximum rate being achieved in 1953–54 when 6.6 lb. per head were consumed. This was followed by a decline in the next two years, the level in 1955–56 being only 5.5 lb. per head.

The following table shows details of the production and disposal of butter and cheese for each of the years 1951–52 to 1955–56 compared with the average for the years 1936–37 to 1938–39.

PRODUCTION AND DISPOSAL OF BUTTER AND CHEESE: AUSTRALIA.

Year.	Changes in Stock.	Production.	Exports. (a)	Consumption in Australia	
				Total.	Per Head per annum.
	'000 tons.	'000 tons.	'000 tons.	'000 tons.	lb.
BUTTER.					
Average, 1936–37 to 1938–39	(b)	191.0	(c) 90.0	101.0	32.9
1951–52	(d) +3.5	135.3	12.9	118.9	31.2
1952–53	(d) +2.5	167.5	50.5	114.5	29.4
1953–54	(d) –3.0	159.6	40.9	121.7	30.6
1954–55	(d) +4.9	191.1	63.7	122.5	30.2
1955–56(e)	(d) +3.1	208.6	83.8	121.7	29.3
CHEESE.					
Average, 1936–37 to 1938–39	(b)	24.9	11.5	13.4	4.4
1951–52	– 0.1	40.6	17.9	22.8	6.0
1952–53	– 0.1	46.6	23.7	23.0	5.9
1953–54	+ 0.4	49.0	22.4	26.2	6.6
1954–55 .. .. .	..	45.2	21.4	23.8	5.9
1955–56(e)	– 0.9	38.7	16.6	23.0	5.5

(a) Figures for butter include ghee expressed as butter as well as butter shipped as ships' stores. Figures for cheese include ships' stores after allowance for a small quantity of cheese imported. (b) Not available. (c) Excludes ghee. (d) Includes allowance for movements in stocks other than those held in main cold stores. (e) Subject to revision.

12. **Marketing of Dairy Products.**—(i) *The Dairy Produce Export Control Act 1924–1954.* Introduced at the request of the dairying industry, this Act was passed by the Commonwealth Parliament with the object of organizing the overseas marketing of Australian dairy produce. A Dairy Produce Control Board was appointed and was in existence from 1924 to 1935. In the course of its functions, the Board regulated shipments to ensure regularity of supply in the London market, controlled forward selling, obtained reductions in overseas freights and insurance rates and participated in an advertising campaign in the United Kingdom.

Prior to the appointment of the Dairy Produce Control Board, a voluntary body—the Australian Dairy Council—was established to advise and make recommendations to the Governments on problems connected with the production, manufacture and quality of dairy produce, pasture improvements and diseases of dairy cattle.

Following a recommendation by the Australian Agricultural Council, the functions of these bodies were combined by an amending Act of 1935 under the Australian Dairy Produce Board and provision was made for the allocation of money from the Board's

funds for research and investigation into pastures, diseases of dairy cattle and the quality of butter. The functions of the Board were later extended to enable it to advise the Government in connexion with the transport of dairy produce, the securing of new markets, the expansion of existing markets and other matters.

The Australian Dairy Produce Board was re-constituted in 1947 by an amendment to the Dairy Produce Export Control Act, its membership being reduced from seventeen to twelve. The functions of the Board were extended to enable it to purchase and sell, on behalf of the Commonwealth, dairy produce intended for export, and to control all matters concerning the handling, storage, protection, treatment, transfer and shipment of the produce so purchased or sold. In 1953, the direct farmer representation on the Board was increased from two to three members, thus raising the total membership from twelve to thirteen.

In April, 1954, the Act was further amended to prepare for the implementation of an export marketing plan to follow the expiration of the United Kingdom-Australia Butter and Cheese Contract. The amendment enabled the Board to purchase dairy produce intended for export to the United Kingdom and to sell such produce on behalf of the dairying industry in lieu of its present function of selling on behalf of the Commonwealth Government. In the interests of the stability of the industry, the Act provides that the Board may be the sole Australian exporter of butter and cheese to the United Kingdom.

(ii) *The Dairy Produce Export Charges Act 1924-1937.* This Act provides for the imposition of a levy on all butter and cheese exported from Australia to cover the administrative expenses of the Board and for advertising and other purposes. The rate of the levy is fixed by regulation.

(iii) *Butter and Cheese Contracts.* Details of the war-time contracts arranged between the United Kingdom and Australian Governments, whereby the former undertook to purchase Australia's surplus butter and cheese, were shown on pp. 985 and 986 of Official Year Book No. 37. The purchase of butter and cheese from 1944-45 to 1954-55 was covered by the Long-Term Purchase Agreement. Details of this Agreement and of the prices paid for various grades of butter and cheese each year under the Agreement were given in pp. 943 and 944 of Official Year Book No. 42 and in earlier issues of the Official Year Book.

13. *Oversea Trade in Butter, Cheese and Milk.*—(i) *General.* The production of butter and cheese in Australia is considerably in excess of local requirements and consequently a substantial surplus is available for export overseas. In normal circumstances, the extent of this surplus is chiefly dependent upon the seasonal conditions. Exports of butter, which averaged 90,000 tons in the three years prior to the 1939-45 War, were maintained to a certain extent during the war and post-war years by the restriction of supplies for local consumption, but because of lower production they nevertheless fell as low as 41,800 tons in 1944-45. In the last year of rationing, 1949-50, exports were 79,200 tons, but they fell to 11,300 tons by 1951-52. There was a substantial increase in exports in each subsequent year and in 1955-56, 82,600 tons were shipped. In addition, small quantities of ghee have been exported during the post-war period. Exports of cheese, which averaged 11,500 tons pre-war, rose to a maximum of 26,000 tons in 1948-49, but they subsequently fell and in 1955-56 amounted to 17,200 tons.

During 1938-39, 96,900 tons of butter (95 per cent. of all butter exported) were shipped to the United Kingdom. With the decline in total exports, there was also a substantial reduction in the proportion shipped to the United Kingdom. This has now increased again and in 1955-56 amounted to 72,400 tons (88 per cent. of the total butter exports).

In 1938-39, exports of cheese totalled 16,000 tons of which 15,500 tons or 97 per cent. were exported to the United Kingdom. Of the total of 17,200 tons exported in 1955-56, 13,600 tons or 79 per cent. were shipped to the United Kingdom.

Total quantities and values of exports of Australian origin of butter, cheese and condensed, concentrated, etc., milk and cream are shown on p. 941.

(ii) *Butter and Cheese Exports graded according to Quality.* All butter and cheese exported comes under the provisions of the Exports (Dairy Produce) Regulations and is subject to the supervision, inspection and examination of officers appointed for that purpose. These commodities are graded according to quality which has been fixed by regulation as

follows:—Flavour and aroma, 50 points, texture, 30 points, and condition, 20 points. Butter and cheese graded at 93 to 100 points is of choicest quality, at 90 to 92 points, first quality, at 86 to 89 points, second quality, and at 80 to 85 points, pastry or cooking quality or, in the case of cheese, third quality.

In the following table, particulars are given of the relative proportions of butter and cheese graded for export according to quality. Further details, which include actual quantities by States, are to be found in *Primary Industries, Part I.—Rural Industries, 1954–55, Bulletin No. 49.*

BULK BUTTER AND CHEESE GRADED FOR EXPORT: AUSTRALIA.

(Per Cent.)

Grade.	Butter.			Cheese.		
	1953–54.	1954–55.	1955–56.	1953–54.	1954–55.	1955–56.
Choicest	46.3	52.0	55.0	1.7	1.1	12.7
First Quality	42.7	36.8	34.3	82.9	81.6	74.1
Second Quality	8.6	8.3	7.9	15.4	17.3	13.2
Third Quality(a)	2.4	2.9	2.8	(b)	(b)	(b)
Total	100.0	100.0	100.0	100.0	100.0	100.0

(a) Includes rejected.

(b) Included with Second Quality.

§ 4. Pigs and Pig Products.

1. **Pigs.**—The number of pigs in Australia first reached a million in 1905. It fluctuated about this level up to 1940, when it reached 1,455,341 while in 1941 the record number of 1,797,340 was recorded. There was a decline in the following two years but the numbers rose again to 1,746,721 in 1944; thereafter there was an almost continuous decline until 1953 when the number of pigs was only 992,532. Numbers increased in succeeding years to 1,296,502 in 1955 but decreased again in 1956 to 1,165,830. Details of the number of pigs in each State and Territory for each of the five years 1952 to 1956, together with the average for the five years 1935 to 1939, are given in the following table :—

NUMBER OF PIGS.

As at 31st March.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	N.T.(a)	A.C.T.	Total.
Average, 1935 to 1939(b)	391,874	287,140	294,777	80,548	83,999	42,772	479	544	1,182,133
1952	292,829	213,670	316,529	64,903	86,224	46,926	794	249	1,022,124
1953	298,690	182,824	335,809	58,657	76,195	39,378	799	180	992,532
1954	371,608	232,384	384,453	60,619	100,912	46,256	1,132	276	1,197,640
1955	375,019	263,666	406,879	84,502	107,039	58,382	911	104	1,296,502
1956	343,030	227,223	372,871	72,920	99,097	49,498	1,076	115	1,165,830

(a) As at 1st January. (b) As at 31st March for New South Wales and Australian Capital Territory; 1st March for Victoria; 1st January for Queensland, South Australia, Western Australia and Tasmania.

Further details relating to pig numbers are given in Chapter XXIII.—Pastoral Production. A map showing the distribution of pigs in Australia at 31st March, 1955 appears on p. 912. A similar map showing the distribution at 31st March, 1948, appeared on p. 908 of Official Year Book No. 39.

2. **Size of Pig Herds.**—A series of special tabulations relating to rural holdings undertaken for all States for the year 1949–50 covered, *inter alia*, a classification of holdings carrying pigs according to size of herd. Full details of these tabulations were published in *Primary Industries 1949–50, Bulletin No. 44.*

3. **Pigs Slaughtered.**—The number of pigs slaughtered during each of the years 1951–52 to 1955–56 and the average for the years 1934–35 to 1938–39 are shown in the following table:—

PIGS SLAUGHTERED.
(’000.)

Year.	Slaughterings Passed for Human Consumption.							Total Slaughterings (including Boiled Down).
	N.S.W.	Vic.	Q land.	S. Aust.	W. Aust.	Tas.	Total.(a)	
Average, 1934–35 to 1938–39 ..	555	484	525	154	119	61	1,899	1,912
1951–52 ..	468	339	370	108	132	66	1,488	1,500
1952–53 ..	458	297	400	115	122	66	1,463	1,474
1953–54 ..	492	298	461	104	115	59	1,534	1,545
1954–55 ..	615	422	499	136	182	79	1,939	1,951
1955–56(b) ..	576	395	459	132	160	88	1,817	1,828

(a) Including Australian Capital Territory and Northern Territory.

(b) Subject to revision.

4. **Pork.**—(i) *Production.* In the following table, details of the production of pork in each State are shown for the years 1951–52 to 1955–56 compared with average production during the years 1934–35 to 1938–39.

PRODUCTION OF PORK (BONE-IN WEIGHT).
(Tons.)

Year.	N.S.W.	Vic.	Q land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Total.
Average, 1934–35 to 1938–39 ..	9,938	12,236	9,867	3,215	1,741	1,240	7	38	38,282
1951–52 ..	10,382	8,716	8,604	2,551	2,550	1,981	70	170	35,024
1952–53 ..	9,611	6,925	6,548	2,836	2,436	1,920	60	132	30,468
1953–54 ..	12,949	7,332	7,216	2,253	2,032	1,399	69	146	33,396
1954–55 ..	17,026	11,078	8,948	3,521	4,362	2,027	65	192	47,219
1955–56(a) ..	14,629	11,047	7,708	3,452	3,481	2,193	68	192	42,770

(a) Subject to revision.

(ii) *Consumption.* As in the case of other meats, pork was subject to rationing during the 1939–45 War and immediate post-war years and consumption was at a much lower level than pre-war. By 1948–49, it had returned to about 7 lb. per head, remaining at this level until 1951–52. In 1952–53, consumption fell to 5.8 lb., but rose again in 1953–54 to 7.7 lb. per head, and in 1954–55 to 10.2 lb., only slightly below the immediate pre-war average. In 1955–56, it fell again to 9.6 lb. per head. In the following table details of the production and disposal of pork are shown for the years 1951–52 to 1955–56 compared with averages for the three years 1936–37 to 1938–39.

PRODUCTION AND DISPOSAL OF PORK (BONE-IN WEIGHT) : AUSTRALIA.

Year.	Changes in Stock.	Production. (a)	Exports.	Canning.	Consumption in Australia.	
					Total.	Per Head per annum.
	’000 tons.	’000 tons.	’000 tons.	’000 tons.	’000 tons.	lb.
Average, 1936–37 to 1938–39 ..	..	45.5	13.7	..	31.8	10.4
1951–52 ..	+0.4	35.0	1.7	5.3	27.6	7.3
1952–53 ..	+0.8	30.5	1.5	5.5	22.7	5.8
1953–54 ..	-1.1	33.4	1.2	2.8	30.5	7.7
1954–55 ..	-0.5	47.2	2.9	3.4	41.4	10.2
1955–56(b) ..	-0.7	42.8	1.1	2.3	40.1	9.6

(a) Includes an estimate of trimmings from baconer carcasses.

(b) Subject to revision.

5. **Bacon and Ham.**—(i) *Production.* As in the case of pork, the increased demand for bacon and ham during the 1939–45 War stimulated production to a level not previously attained. Production reached its peak in 1944–45 when 56,246 tons of bacon and ham were cured. This was followed by a continuous decline in output in each succeeding year to 36,628 tons in 1951–52. Production has been maintained at about this level in subsequent years, amounting to 37,279 tons in 1955–56. Details of production are shown by States in the following table for each year 1951–52 to 1955–56 compared with the average production for the five pre-war years ended 1938–39.

PRODUCTION OF BACON AND HAM (CURED WEIGHT)(a)
(Tons.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
Average, 1934–35 to 1938–39	9,963	7,614	9,269	2,950	2,013	970	1	32,780
1951–52	12,514	8,964	7,669	2,969	3,683	829	..	36,628
1952–53	13,228	8,165	9,510	3,063	3,693	886	..	38,545
1953–54	11,875	7,044	10,655	3,024	3,443	949	..	36,990
1954–55	11,769	8,074	10,807	3,378	3,316	1,027	..	38,371
1955–56(b)	11,426	7,774	10,217	3,586	3,236	1,033	..	37,272

(a) Pressed and canned bacon and ham have been converted to bone-in weight, except in pre-war years.

(b) Subject to revision.

(ii) *Consumption.* Consumption per head declined in the early stages of the 1939–45 War from the pre-war average of 10.2 lb. per annum, but subsequently increased to 12.7 lb. in 1946–47. Since that year, there has been a decline to a relatively steady level of from 7 lb. to 8 lb. per head per annum. In 1955–56, consumption amounted to 7.5 lb. per head. Details of production and disposal of bacon and ham for the years 1951–52 to 1955–56 compared with average production and disposal for the period 1936–37 to 1938–39 are shown in the following table:—

PRODUCTION AND DISPOSAL OF BACON AND HAM (CURED WEIGHT)(a): AUSTRALIA.

Year.	Changes in Stock.	Production.	Exports.	Canning.	Consumption in Australia.	
					Total.	Per Head per annum.
	'000 tons.	'000 tons.	'000 tons.	'000 tons.	'000 tons.	lb.
Average, 1936–37 to 1938–39	(b)	32.5	1.0	..	31.5	10.2
1951–52	+0.2	36.6	2.8	6.1	27.5	7.2
1952–53	-0.7	38.5	2.0	8.9	28.3	7.3
1953–54	+0.4	37.0	1.6	6.5	28.5	7.2
1954–55	-0.2	38.4	1.0	5.4	32.2	7.9
1955–56(c)	+0.4	37.2	0.7	5.1	31.0	7.5

(a) Pressed and canned bacon and ham have been converted to bone-in weight, except in pre-war years.

(b) Not available.

(c) Subject to revision.

6. **United Kingdom Contracts.**—Details relating to the several war-time contracts and the more recent Long-term Purchase Agreement between the Governments of the Commonwealth and the United Kingdom for the sale of Australia's surplus production of meats (including pigmeats) are included in Chapter XXIII.—Pastoral Production.

7. **Oversea Trade in Pigs and Pig Products.**—Total quantities and values of exports of Australian origin of pigs and pig products (bacon and ham, lard and frozen pork) for the years 1953–54 to 1955–56 are shown on p. 941.

§ 5. Poultry-farming.

1. **General.**—Poultry-farming has been carried on in Australia for many years and the State Departments of Agriculture have encouraged its development by appointing experts to advise on the care and management of poultry and by conducting egg-laying competitions. Originally the industry was conducted in conjunction with other branches of rural activity, mainly dairying, but it is now a specialized and distinct industry and it is from this source that the bulk of the commercial production is obtained. Practically all farms keep poultry for the purpose of supplying their own domestic requirements and in many cases some supplies from this source are also marketed. In addition, many private homes keep small numbers of fowls in backyard runs and this helps to maintain domestic needs particularly when eggs are in short supply.

2. **Numbers of Poultry.**—In pre-war years, the numbers of the principal kinds of poultry were a normal feature of the annual census of livestock in all States except Victoria and Tasmania. These data were collected on a restricted scale by all States in 1942–43, the details obtained being confined to farms of one acre or more producing eggs or poultry for sale. The collection has since been discontinued in some States. Because of their incompleteness, details of poultry numbers are not published.

3. **Recorded Production and Disposal of Eggs.**—(i) *Shell Eggs.* Available statistics of the production and disposal of eggs in Australia are restricted to those recorded by the Egg Boards of the several States. As Boards were not set up in all States until 1943, comparable statistics of recorded production of eggs for Australia as a whole are not available prior to 1943–44. Details of production in the respective States as recorded by these authorities for the years 1951–52 to 1955–56 are shown in the following table:—

SHELL EGGS : PRODUCTION(a) RECORDED BY EGG BOARDS.

(’000 Dozen.)

State.	1951–52.	1952–53.	1953–54.	1954–55.	1955–56.
New South Wales	50,271	50,884	51,884	55,057	51,635
Victoria	23,492	24,701	25,306	26,377	24,985
Queensland	8,426	7,860	8,555	8,312	7,848
South Australia	10,741	11,359	12,040	12,359	11,820
Western Australia	8,077	8,783	9,283	8,909	7,687
Tasmania	1,027	1,107	934	889	943
Total	102,034	104,694	108,002	111,903	104,918

(a) Receipts from consignors and sales by producer agents.

(ii) *Egg Pulp.* Prior to the 1939–45 War, production of egg pulp was about 7 million lb. per annum. This was used almost entirely for the manufacture of cakes, pastry and biscuits, only negligible quantities being exported. Production was expanded greatly during the war years to meet the requirements of the Armed Services and has since been maintained at a high level for export purposes and to meet increased local requirements.

Particulars of the production of whole egg pulp as recorded by the Egg Boards in the several States are shown in the following table.

LIQUID WHOLE EGG : PRODUCTION RECORDED BY EGG BOARDS.

(’000 lb.)

State.	1951–52.	1952–53.	1953–54.	1954–55.	1955–56.
New South Wales	12,357	16,991	20,942	17,057	14,649
Victoria	6,559	6,467	8,295	6,564	6,879
Queensland	2,278	2,315	3,703	2,419	2,901
South Australia	5,629	6,284	8,178	6,516	5,991
Western Australia	2,878	3,490	3,894	1,924	1,532
Tasmania	249	359	239	246	236
Total	29,950	35,906	45,251	34,726	32,188

In addition to liquid whole egg, production was also recorded of liquid egg whites and liquid egg yolks. Output in 1955-56 amounted to 540,643 lb. and 337,844 lb. respectively compared with 1,568,999 lb. and 1,043,545 lb. respectively in the previous year.

(iii) *Egg Powder.* The production of dried egg powder was established in Australia in 1942, to treat Australia's surplus eggs so as to maintain exports under war-time conditions to the United Kingdom. Production was continued after the end of the war for export purposes, but since 1946-47 has declined to negligible proportions.

4. **Production and Consumption of Eggs.**—Statistics of total egg production must necessarily be accepted with some reserve. The production shown in the following table together with details of exports and consumption is based upon the records of Egg Boards of production from areas under their control plus estimates of production from uncontrolled areas and from "back-yard" poultry-keepers.

**ESTIMATED PRODUCTION AND DISPOSAL OF EGGS IN SHELL(a) :
AUSTRALIA.**

Year.	Changes in Stock.	Estimated Total Production.	Exports.	For Drying and Pulping.(b)	Consumption in Australia as Human Food.	
					Total.	Per Head per Annum.
	'000 tons.	'000 tons.	'000 tons.	'000 tons.	'000 tons.	lb.
Average, 1936-37 to 1938-39	(c)	89.5	7.6	3.2	78.7	25.7
1951-52	+1.1	106.9	8.5	14.9	82.4	21.6
1952-53	-1.2	108.6	12.6	16.8	80.4	20.6
1953-54	+0.2	111.8	7.9	21.0	82.7	20.8
1954-55	-0.2	115.4	12.2	17.5	85.9	21.2
1955-56 .. .. .	..	113.2	9.9	16.3	87.0	20.9

(a) The average weight of an egg in Australia is taken as 1.75 oz. (b) Includes wastage.
(c) Not available.

Details of the consumption of shell eggs, liquid whole egg and total shell egg equivalent (expressed in lb. and in number of eggs) per head of population per annum are shown in the following table:—

**SUPPLIES OF EGGS AND EGG PRODUCTS(a) MOVING INTO CONSUMPTION :
AUSTRALIA.**

(Per Head per Annum.)

Commodity.	Average, 1936-37 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.	
Shell Eggs lb.	25.7	21.6	20.6	20.8	21.2	20.9	
Liquid Whole Egg and Egg Powder(a) lb.	0.9	2.3	1.7	1.5	1.6	1.3	
Total .. {	lb.	26.6	23.9	22.3	22.3	22.8	22.2
	Number(b)	243	219	204	204	209	203

(a) In terms of weight of shell eggs.
1.75 oz.

(b) The average weight of an egg in Australia is taken as

5. **Marketing of Eggs.**—(i) *United Kingdom Market.* Details of the annual contracts entered into between the United Kingdom and Australian Governments up to 1952-53 will be found in Official Year Book No. 38, pp. 1048-9 and No. 40, p. 930. The results for 1953-54 and 1954-55, the first two years after the return to free market conditions, will be found in Official Year Book No. 42, pp. 949-50.

The 1955-56 export season for shell eggs was a successful one. Prices in the United Kingdom market were well above the level of the previous year although there was some falling off in the quantity of exports to this market. Under a bulk sales and purchase arrangement with the United Kingdom Ministry of Food, 8,500 tons of egg pulp were shipped to the United Kingdom during the year 1955-56 at the contract price of £213 15s. sterling per ton f.o.b.

(ii) *Egg Export Control Act 1947.* Following the termination of Commonwealth control over the production and marketing of eggs on 31st December, 1947, functions relating to the local marketing of eggs reverted to State Egg Boards which became responsible

for stabilizing prices and marketing of eggs produced in the respective States. In order to assist in marketing Australia's surplus production of eggs under the Long-term Purchase Agreement with the United Kingdom, the Commonwealth established the Australian Egg Board under the Egg Export Control Act 1947. The Board, which commenced to operate on 1st January, 1948, was empowered to buy and sell, on behalf of the Commonwealth Government, eggs and egg products intended for export which comply with the provisions of the Export (Dairy Produce) Regulations. In addition, the Board was authorized to deal with all matters relating to the export of eggs and egg products from Australia, to make such experiments as are likely to lead to the improvement of the quality of Australian eggs and to promote their sale overseas. The Board consisted of ten members, including six representatives of egg producers and one representative of the Commonwealth Government.

Due to the discontinuance of inter-Governmental trading in eggs and egg products, the Egg Export Control Act was amended in April, 1954, to provide for the reconstruction of the Australian Egg Board and the implementation of an egg export marketing scheme. The new Board, established on 17th June, 1954, comprises nine members including a representative of the Commonwealth Government and representatives from each State Egg Marketing Board (except Tasmania). The Board is empowered to act as a trading authority selling eggs and egg pulp as agent for State Egg Boards. However, any State Board desiring to export on its own account may do so subject to general terms and conditions to be laid down by the Australian Egg Board.

6. Oversea Trade in Poultry Products.—The Australian oversea export of poultry products has been confined in the past chiefly to eggs in shell and egg contents, which are consigned mainly to the United Kingdom. In 1949–50, exports of eggs in shell reached the record level of 23.0 million dozen. Shipments were at a lower level in subsequent years and, in 1955–56, 16.1 million dozen were exported.

Prior to the 1939–45 War, exports of egg contents were small and in 1939–40 there was an excess of imports. During the war years, exports expanded greatly, mainly to meet Service requirements, and since the close of the war there has been a further expansion to 37.9 million lb. of egg contents in 1953–54. There was a decline in 1954–55 and 1955–56, when 22.5 and 21.2 million lb. respectively were exported.

Since the close of the war, there has also been a considerable increase in the exports of frozen poultry. Exports, which amounted to 1.5 million lb. in 1955–56, were however much lower than in preceding years.

Total quantities and values of exports of Australian origin of poultry products (live poultry, frozen poultry, eggs in shell, egg pulp and powder and undressed feathers) for the years 1953–54 to 1955–56, are shown on p. 941.

§ 6. Bee-farming.

1. Production of Honey and Bees-wax.—Although practised as a separate industry, bee-farming is also carried on in conjunction with other branches of farming, but its place in Australia's rural economy is not very significant. The returns of honey from productive hives during 1955–56 showed an average of 102 lb. per hive and the average quantity of wax was 1.3 lb. per productive hive.

The number of hives and the production of honey and bees-wax during the year 1955–56 are shown in the following table.

BEEHIVES, HONEY AND BEES-WAX, 1955–56.

State.	Beehives.			Honey Produced.		Bees-wax Produced.	
	Pro- ductive.	Unpro- ductive.	Total.	Quantity.	Gross Value.	Quantity.	Gross Value.
	'000.	'000.	'000.	'000 lb.	£'000.	'000 lb.	£'000.
New South Wales ..	140	37	177	15,207	789	184	60
Victoria ..	78	26	104	7,011	497	78	26
Queensland ..	24	11	35	2,329	107	34	9
South Australia ..	62	15	77	5,115	247	70	20
Western Australia ..	28	6	34	4,482	203	57	14
Tasmania ..	3	1	4	302	17	4	2
Aust. Cap. Territory ..	1	1	2	18	1	..	..
Australia ..	336	97	433	34,464	1,861	427	131

The production of honey and bees-wax fluctuates considerably and is determined mainly by the flow of nectar from flora of the eucalypts, which varies greatly from year to year. In recent years, there has been a pronounced upward trend in the output of honey, the 1948-49 figure, 53,200,000 lb., being an all-time record. Production in 1954-55 at 33,633,000 lb. and in 1955-56 at 34,464,000 lb., although much lower than in 1948-49, was still higher than pre-war.

The table hereunder shows the production of honey and bees-wax for the five years ended 1955-56 in comparison with the averages for the years 1934-35 to 1938-39.

HONEY AND BEES-WAX PRODUCTION.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
HONEY ('000 lb.).							
Average, 1934-35 to 1938-39 ..	3,827	3,600	689	3,388	1,125	181	(a) 12,810
1951-52 ..	6,814	5,208	706	4,191	3,480	254	(a) 20,653
1952-53 ..	8,046	6,235	2,166	7,656	3,393	309	(b) 27,810
1953-54 ..	10,381	9,382	2,888	6,378	6,325	365	(b) 35,737
1954-55 ..	16,411	8,834	1,732	3,671	2,721	243	(b) 33,633
1955-56 ..	15,207	7,010	2,329	5,115	4,482	302	(b) 34,464

BEES-WAX ('000 lb.).							
Average, 1934-35 to 1938-39 ..	56	42	10	41	19	2	(a) 170
1951-52 ..	86	56	15	58	45	3	(a) 263
1952-53 ..	94	72	30	103	40	3	(b) 342
1953-54 ..	123	101	43	78	73	4	(b) 422
1954-55 ..	194	94	37	60	52	4	(b) 441
1955-56 ..	184	78	34	70	57	4	(b) 427

(a) Excludes Australian Capital Territory and Northern Territory. (b) Excludes Northern Territory.

2. Oversea Trade in Bee Products.—Prior to the 1939-45 War, the production of honey exceeded Australian requirements and a small quantity was available for export. In 1948-49, the record quantity of 32.1 million lb., was exported. Exports amounted to 23.5 million lb. in 1954-55 and to 27.2 million lb. in 1955-56.

The wider use of frame hives has reduced the production of wax, and as a result the quantity of bees-wax imported generally exceeded that exported up to 1945-46. During each year since 1946-47, however, with the exception of 1951-52, production has been high on account of exceptionally good seasons, and exports have exceeded imports by substantial margins. In 1955-56, exports exceeded imports by an amount of 166,000 lb.

Total quantities and values of exports of Australian origin of honey and bees-wax for the years 1953-54 to 1955-56 are shown in § 7 below.

§ 7. Exports of Australian Farmyard, Dairy and Bee Products.

The quantities and values of Australian farmyard, dairy and bee products exported during the years 1953-54 to 1955-56 are shown below.

AUSTRALIAN FARMYARD, DAIRY AND BEE PRODUCTS: EXPORTS OF AUSTRALIAN ORIGIN.

Particulars.	Unit of Quantity.	Quantity.			Value (£A'000 f.o.b. Port of Shipment).		
		1953-54.	1954-55.	1955-56.	1953-54.	1954-55.	1955-56.
Bees-wax	lb.	178,707	260,275	178,489	39	63	48
Butter	'000 lb.	88,030	140,017	185,103	16,052	24,589	28,966
Cheese	"	50,959	49,543	38,485	5,329	5,057	3,537
Eggs in shell	'000 doz.	12,902	20,266	16,063	2,751	3,521	2,846
Eggs not in shell— in liquid form	'000 lb.	37,147	21,496	21,182	5,775	2,315	2,440
Dry	"	728	972	61	124	160	15
Honey	"	14,362	23,471	27,162	634	1,039	1,567
Lard	"	501	208	137	24	20	15
Meats—							
Bacon and Ham (including canned)	cwt.	90,640	57,265	28,032	2,875	1,808	683
Frozen Poultry	'000 lb.	3,560	3,300	1,486	676	546	349
Frozen Pork	cwt.	24,687	58,167	22,075	463	781	364
Milk—							
Condensed, Preserved, etc.—							
Sweetened Full Cream	'000 lb.	57,277	42,753	52,353	4,912	3,714	3,700
Unsweetened	"	3,451	1,795	3,590	265	131	222
Dried or Powdered—							
Full Cream	"	17,917	14,664	15,024	2,349	2,101	2,137
Skim	"	34,885	40,793	50,804	1,599	1,573	2,041
Malted	"	3,613	5,280	5,508	551	788	815
Infants' and Invalids' Foods—							
Essentially of Milk	"	5,107	2,686	3,591	929	436	555
Other	"	4,365	5,271	6,372	808	980	1,067
Pigs, live	Number	611	1,009	1,066	15	19	29
Poultry, live	"	66,469	67,170	37,764	8	10	6

§ 8. Imports of Dairy and Farmyard Products into United Kingdom.

NOTE.—Values of imports in this section are expressed in £ sterling at the landed c.i.f. point.

1. Summary, Principal Products.—The following table shows the quantities and values of the principal dairy products imported into the United Kingdom during the years 1939, 1954 and 1955.

DAIRY PRODUCTS: IMPORTS INTO UNITED KINGDOM.

Product.	Unit of Quantity.	1939.		1954.		1955.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Butter	'000 cwt.	8,737	£'000. 48,424	5,624	£'000. 97,675	6,192	106,663
Cheese	"	2,845	8,869	2,640	27,361	2,580	25,949
Milk, powdered and preserved	"	..	2,818	..	5,951	..	3,653
Bacon and ham	'000 cwt.	7,953	37,105	6,286	77,369	6,411	75,902
Pork(a)	"	989	3,036	652	7,980	749	8,967
Eggs in shell	'000 doz.	283,315	12,835	119,733	19,578	83,909	13,628
Eggs not in shell, liquid or frozen	'000 cwt.	800	2,292	579	7,977	277	3,020

(a) Excluding pork in airtight containers.

2. **Butter.**—Until 1950, Australia had regularly supplied between 20 and 30 per cent. of the butter imported into the United Kingdom. After 1950, when butter rationing was abolished in Australia, the quantity shipped was considerably lower until 1955 when it amounted to 1,464,000 cwt. or 23.6 per cent. of the total United Kingdom imports. New Zealand supplied 40.0 per cent. of the total quantity imported during 1955 and Denmark 27.4 per cent.

In the following table, particulars of the quantity and value of butter imported into the United Kingdom are shown for the years 1938, 1954 and 1955, according to country of origin.

BUTTER: IMPORTS INTO UNITED KINGDOM.

Country from which Imported,	1938.		1954.		1955.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 cwt.	£'000.	'000 cwt.	£'000.	'000 cwt.	£'000.
New Zealand	2,592	14,524	2,433	41,661	2,478	41,911
Australia	1,798	9,630	583	9,964	1,464	25,041
Other Commonwealth Countries and Republic of Ireland	423	2,455	106	1,986	41	762
Denmark	2,365	12,960	2,025	35,428	1,697	30,067
Netherlands	712	3,466	285	5,305	211	4,018
Other Foreign Countries	1,628	7,838	192	3,331	301	4,864
Total	9,518	50,873	5,624	97,675	6,192	106,663

3. **Cheese.**—The value of cheese imported into the United Kingdom in 1955 was £25,949,000. Of this £14,920,000 was imported from New Zealand, £3,927,000 from Australia, £2,644,000 from Denmark and £1,574,000 from the Netherlands.

4. **Bacon.**—Of a total import in 1955 of bacon (excluding bacon in airtight containers) valued at £70,517,000, the value of that supplied by Denmark was £53,685,000, Poland, £8,325,000 and the Netherlands, £7,571,000.

5. **Pork.**—The value of the United Kingdom imports of pork (excluding pork in airtight containers) was £8,967,000 in 1955. Imports from Republic of Ireland, valued at £2,844,000, New Zealand, £1,123,000, and Denmark, £2,601,000, comprised 73 per cent. of the imports into the United Kingdom.

6. **Eggs.**—In 1955, the value of eggs imported into the United Kingdom was £16,648,000, comprising eggs in shell, £13,628,000, and liquid or frozen eggs, £3,020,000. The Australian share in this trade amounted to £4,521,000. Eggs in shell were supplied principally by Denmark, £8,237,000, and Australia, £2,083,000.

7. **Milk Products.**—In 1955, the value of preserved milk imported into the United Kingdom was £3,141,000. Of this total, imports from Australia amounted to £528,000.

8. **Other Products.**—The imports into the United Kingdom from Australia of poultry (excluding poultry meat in airtight containers) amounted to £154,000, while those of bees-wax, lard and honey in 1955 were unimportant.

CHAPTER XXV.

FORESTRY.*

§ 1. General.

NOTE.—Values of Australian oversea trade shown throughout this Chapter are expressed in £A. f.o.b., Port of Shipment, except where otherwise indicated.

1. **Objects of Forestry.**—The main object of forestry is to manage the forests of a country in the way that will provide the maximum benefits, both direct and indirect. Direct benefits include the provision of essential commercial commodities such as structural timber, pulpwood, plywood, veneers, firewood, bark products, tars, oils and resins. Indirect benefits include protection of soil and stock from wind and exposure, regulation of stream flow, and aesthetic effects.

Forestry aims to improve existing forests and woodlands by properly controlled exploitation, by protection from destructive agencies such as fire, and by inducing natural regeneration where it is desirable. Forestry also aims to provide a partial tree cover on denuded lands when such cover is necessary for protective purposes, and a complete cover when the land is better under forest than under any other crop.

2. **General Account of Forests and Timbers.**—The area of land in Australia suitable for the production of commercial timber as the primary crop is very small in comparison with the size of the continent. It is concentrated mainly around the wetter coastal belts and the eastern highlands and it includes the bulk of the land suitable for intensive development by agricultural or pastoral undertakings.

The allocation of land for agricultural and pastoral purposes led to the clearing of much of the original forest of Australia, particularly of the more readily accessible parts. In the early period of agricultural and pastoral expansion, only the best timbers found their way into commerce, and species now prized as providing high quality woods were often put to inferior uses. During this period, the forest resources of the country were considered by the majority of the people to be inexhaustible, and relatively little care was taken to prevent the degradation of the remaining forests by fire and uncontrolled grazing. This state of affairs is rapidly changing; it is now recognized that the remaining forest land must be protected and properly managed in the interests of the community.

The trees which make up the forests of Australia are mainly evergreen hardwoods. The characteristic genus is *Eucalyptus*. There are over six hundred different kinds of eucalypts and with few exceptions the natural occurrence of all of them is restricted to Australia. The genus includes such species as the mountain ash (*Eucalyptus regnans*) of Victoria and Tasmania, and karri (*E. diversicolor*) of Western Australia, which are the tallest-growing hardwoods in the world. At the other end of the scale there are many eucalypts which do not grow to tall trees, including the species collectively known as the "mallees". The mallees develop a number of small stems from an underground structure called the "mallee root".

* A specially contributed article dealing with Forestry in Australia appeared as part of Chapter XIX. in Official Year Book No. 19 (see pp. 701–12 therein). See also "The Commercial Timbers of Australia Their Properties and Uses" by I. H. Boas, published by the Council for Scientific and Industrial Research in 1947, "Timbers and Forest Products of Queensland" by E. H. S. Swain, published in 1928 and "Australian Standard Nomenclature of Australian Timbers" published by the Standards Association of Australia.

Less than 100 eucalypts are used for sawmilling and not more than 30 to 40 are exploited extensively. The main commercial eucalypts were listed in Official Year Book No. 39 and earlier issues.

The eucalypts satisfy the Australian requirement for timbers having great strength and durability. They also provide a large proportion of the building timber and some of the wood required for packaging. In recent years, some eucalypts have been used extensively for papermaking and for the manufacture of hardboard and fibreboard. The species most commonly used for pulping are mountain ash (*E. regnans*), alpine ash (*E. gigantea*), and messmate, stringybark or Tasmanian oak (*E. obliqua*).

A large number of other genera represented in the Australian forest flora also produce commercial hardwoods. Among the outstanding furniture cabinet and veneer timbers are red cedar (*Cedrela toona* var. *australis*), Queensland maple (*Flindersia brayleyana*), Southern and Northern silky oak (*Grevillea robusta* and *Cardwellia sublimis*, respectively), Queensland walnut (*Endiandra palmerstoni*), blackwood (*Acacia melanoxylon*), rose mahogany (*Dysoxylum fraserianum*), etc. Turpentine (*Syncarpia laurifolia*) ranks with the world's best as a harbour piling timber. Coachwood (*Ceratopetalum apetalum*) came into prominence for rifle furniture and for aircraft plywood during the 1939-45 War.

The foregoing are but a few examples indicating the range of use of the timbers of the Australian hardwood forests.

The most important indigenous softwood resources of Australia were in the forests of hoop pine (*Araucaria cunninghamii*) of Queensland and New South Wales. These forests occurred on rich land suitable for intensive agriculture. The greater part of the original hoop pine forest has gone but the wood removed made an important contribution to the Australian timber industry. Some areas of the hoop pine forest have been replanted with this species in Queensland and, to a lesser extent in New South Wales.

There are still considerable areas of the useful white-ant resisting cypress pine (*Callitris* spp.) in the inland areas of Queensland and New South Wales. They have been seriously overcut but are gradually being brought under management.

Other native softwoods which have played a useful but minor part in the Australian timber industry include bunya pine (*Araucaria bidwilli*) and kauri (*Agathis* spp.) of Queensland, and huon pine (*Dacrydium franklinii*), celerytop pine (*Phyllocladus rhomboidalis*) and King William pine (*Athrotaxis selaginoides*) of Tasmania.

The savannah woodlands of the interior of Australia yield commercial commodities such as sandalwood, tanbarks and essential oils. They also have an important function in providing fuel and rough timbers for the development of agricultural and pastoral holdings.

3. Extent of Forests.—According to data assembled for the Seventh British Commonwealth Forestry Conference to be held in Australia and New Zealand in 1957, the total area of forest in Australia is estimated at 186,791 square miles, or about 6.3 per cent. of the total land area of the continent. This is an increase of 27,040 square miles over the estimate made for the 1952 Conference, and has resulted from the inclusion of a large area of mallee in South Australia, together with 4,500 square miles of forests, mainly low grade woodlands, in the Northern Territory. The estimated forest area is distributed amongst the States as follows (the proportion of forest land to the total area of each State is shown in parenthesis):—New South Wales and the Australian Capital Territory, 37,942 square miles (12 per cent.); Victoria, 26,222 (30 per cent.); Queensland, 28,000 (4 per cent.); South Australia, 36,000 (including 25,000 square miles of mallee suitable for firewood only) (10 per cent.); Western Australia, 41,826 (4 per cent.); Tasmania, 12,301 (47 per cent.) and the Northern Territory, 4,500 (1 per cent.). The areas given are rough estimates only and are considerably in excess of those which are both suitable for reservation and likely to be maintained for timber production. Considerable areas of low grade forest which, in many cases, are suitable for little more than the production of firewood, are included. It is doubtful if the remaining prime native forest area of Australia exceeds 20,000 square miles. The proportion of Australia carrying commercial forests is therefore very low and apart from forests on the coastal fringe of the continent, the tree density is very low.

The table below shows a classification of the estimated total forest area referred to above:—

CLASSIFICATION OF FOREST AREA(a): AUSTRALIA.

Class of Forest.	Area (Square Miles).				Proportion of Total Forest Area.
	State Forest.	Communal Forest.	Private Forest.	Total.	
<i>Exploitable—</i>					%
Softwood	10,512	5	2,808	13,325	7.1
Mixed wood	754	..	..	754	0.4
Hardwood	41,691	75	13,129	54,895	29.4
<i>Total</i>	<i>52,957</i>	<i>80</i>	<i>15,937</i>	<i>68,974</i>	<i>36.9</i>
<i>Potentially Exploitable—</i>					
Softwood	58	..	100	158	0.1
Mixed wood	100	..	..	100	0.1
Hardwood	13,002	..	12,200	25,202	13.5
<i>Total</i>	<i>13,160</i>	<i>..</i>	<i>12,300</i>	<i>25,460</i>	<i>13.7</i>
<i>Other Lands Classed as Forest</i>	<i>81,023</i>	<i>450</i>	<i>10,884</i>	<i>92,357</i>	<i>49.4</i>
Grand Total ..	147,140	530	39,121	186,791	100.0

(a) Based on the 1955 classification of forests.

State forests accounted for 78.8 per cent. of the total forest area, private forests for 20.9 per cent. and communal forests for 0.3 per cent.

The bulk of the softwood area of approximately 13,325 square miles is in Queensland and New South Wales and consists principally of slow-growing cypress pine (*Callitris spp.*) in low rainfall areas. The total area has been increased in comparison with previous estimates by the inclusion of a large area of crown land carrying scattered cypress pine. The volume of this species per acre is comparatively low.

4. **Forest Reservations.**—The first attempt to determine the forest areas which should be reserved solely for purposes of timber production was made at an Interstate Forestry Conference held at Hobart in 1920. This Conference decided that an area of 24½ million acres of indigenous forest should be permanently reserved. According to statements furnished by State and Commonwealth authorities, reservations of forest areas in Australia at 30th June, 1955, totalled 32,322,042 acres of which 21,703,274 acres were Dedicated State Forests and 10,618,768 acres were Timber and Other Reserves. The area of Dedicated State Forests increased by 725,013 acres during the year 1954–55, although total area remained almost at the same level. The distribution of these areas is shown by States in § 4, para. 2 of this chapter.

In general, the Timber Reserves are temporary and are liable to be alienated after the timber on them has been exploited. Some of these areas contain land of high value for forestry purposes, but the greater part does not justify permanent reservation.

If the permanently reserved areas were all of good quality, accessible, and fully productive forests supplying the class of timber required, they could be regarded as adequate for a much larger population than exists in Australia at the present time. Actually, however, a considerable proportion is in inaccessible mountainous country and many of the forests contain a mixture of species only some of which are at present of commercial value; much

of it consists of inferior forest and a large proportion of the whole has been seriously degraded by recurrent fires. Also, the indigenous forest does not contain adequate supplies of softwoods producing commercial timbers and Australia's requirements of these have to be met largely by imports from other countries.

It is freely acknowledged by Australian forestry authorities that information on forest resources is very imperfect. It is not possible at present to give a reliable estimate of the forest areas needed to meet all future demands because of the number of unknown variables involved; in particular the yield capacity per acre, future consumption of different classes of timber per head, and the future population. It appears, however, that all available potentially good forest country, including adequate areas for plantations of conifers, will need to be reserved, protected and systematically managed, if Australia is to approach the goal of self sufficiency in timber supplies in the future. One of the most urgent requirements in this connexion is a comprehensive estimate of forest resources.

5. Plantations.—Reference has been made to the inadequacy of indigenous softwood supplies, but, as a result of the planned policy of the forest services of the States and the Commonwealth and, to a less extent, of several private commercial organizations, the area of softwood plantations, mainly of exotic species is steadily increasing. It was natural that this aspect of forestry received earliest attention in South Australia as it is the State most poorly endowed with natural forest. This State now has a larger area of planted softwoods than any other State in Australia, and for some years has been exploiting considerable quantities of timber from these plantations. The total production is now over 130,000,000 superficial feet per annum and is expected to be increased substantially during the next decade. Production is also increasing in the other States and first thinnings from their plantations are already supplying a significant portion of the requirements of the case-making industry.

The total net area of Commonwealth and State softwood plantations at 30th June, 1955, was 311,580 acres. In addition, the area of privately owned plantations was about 70,700 acres. Hardwood plantations (mainly *Eucalyptus spp.*) comprise a much smaller area and the total acreage is about 30,000 acres, nearly two-thirds of which is mallet (*Eucalyptus astringens*) which has been established in Western Australia for tan bark production.

6. Fire Protection.—Fire control measures in Australia are the responsibility of the individual State Governments, and the provision of adequate fire protection is one of the main problems facing forest authorities at the present day. The forest services are responsible for fire control measures over a total area of 23.6 million acres of dedicated and reserved forest areas throughout Australia.

The responsibility for the protection of private property outside urban areas rests with volunteer bush fire brigade organizations which are co-ordinated in each State by a committee or board carrying out functions of an advisory or educational nature and fostering the growth and organization of the bush fire brigade movement. Throughout the main agricultural and forest areas of Australia there are over 4,500 registered volunteer bush fire brigades with a membership approaching 200,000. Although both forest and rural fire organizations are entirely separate entities, a high degree of co-operation and liaison is maintained.

In addition to the forest service and rural organizations, various private and semi-Governmental bodies in each State maintain fire protection organizations, which are generally concerned with the protection of private forestry operations and hydro-electric and water catchment areas.

The annual cost of protecting from fire 23.6 million acres of dedicated and reserved forest over the three year period 1952 to 1954 was estimated at £1,150,000 or about 11.7d. per acre annually. The cost of rural fire control as a whole cannot be estimated with any degree of accuracy owing to the fact that by far the greatest contribution comes from the personal efforts of volunteer brigade members.

The Australian fire season is very variable, with an average of a particularly bad fire season every seven years or so. Such years as 1926, 1939, 1944 and 1952 account for a large proportion of the average annual burn which, for the period 1945 to 1955, amounted to 2.16 million acres or 1.8 per cent. of the total forested area of Australia. In disastrous fire seasons, such as 1938-39 and 1951-52, the acreage burnt on protected forest areas may rise to as high as 15 per cent., compared with an average burn of 1.2 per cent. when such seasons are excluded.

During the post-war decade, forest services greatly expanded their fire detection facilities and big advances were made in the use of power pumping equipment. Radio communication is now being used extensively by both forest services and rural organizations, and considerable progress has been made in the provision of legislative power for the rural bush fire movement, although the volunteer movement itself dates back to the turn of the century.

Recognizing that fire prevention is one of the most important aspects of the problem, intensive campaigns have been conducted to reduce the incidence of man-caused fires. A study of fire causes in recent years reveals that human agencies account for 95 per cent. of all fires, and of this figure at least 80 per cent. are preventable. Burning off, much of which is started illegally, accounts for 35 per cent. of all fires, smokers, hunters, fishermen and travellers cause 13 per cent. of all fires, whilst only 5 per cent. of fires in Australia are caused by lightning.

§ 2. Forestry Activities of the Commonwealth.

1. **Prior to 1925.**—When the Commonwealth of Australia was established on the 1st January, 1901, forestry was not included among the matters transferred from the States to the control of the Commonwealth, and Federal jurisdiction was therefore restricted to the then relatively unimportant forests of the Australian Territories. After the 1914–18 War, these Territories (including Papua-New Guinea and Norfolk Island) covered a large area, and in the aggregate contained substantial forest resources. In the early twenties of this century, a professional forester was appointed as forestry adviser to the Commonwealth Government, and he submitted preliminary reports on the forest resources of Papua-New Guinea, Norfolk Island and the Australian Capital Territory, with suggestions for future policy.

2. **Forestry and Timber Bureau.**—In 1925, the Commonwealth Forestry Bureau was instituted, and the Commonwealth Forestry Adviser became the Inspector-General of Forests. By an Act of 1930, the Bureau received statutory powers, and its functions included the advising of the various Territorial Administrations on forestry matters, the management of forests placed under its control, the establishment of experimental forest stations, the training of students in forestry, etc.

At the end of the 1939–45 War, the Commonwealth Government decided to continue certain advisory functions which during the War had been carried out by War-time Timber Control, and such functions were incorporated in the Forestry and Timber Bureau Act 1946, under which the title of the Bureau was altered to Forestry and Timber Bureau. The powers and functions of the Bureau were extended to embrace the collection of statistics and information, and advising the Governments of the Commonwealth and the States or other interested bodies on matters relating to the supply, production, oversea trade and distribution of timber in Australia. The Bureau was placed under the administration of a Director-General.

The activities of the Bureau under its statutory functions are summarized below:—

(a) *Forestry Education.* The Australian Forestry School was opened at Adelaide University in 1926 in continuation of the School of Forestry of that University established in 1911. In 1927, the School was transferred to Canberra. The purpose of the School is to train students as professional officers to manage the forests of Australia. It also accepts students from overseas.

Training at the School covers the third and fourth years of a four-year course. The first two years are spent at an Australian University in a study of prescribed science subjects. Courses at the School lead to Commonwealth Diplomas in Forestry and in Forest Technology, and in the case of the former, can lead further to a Degree in Forestry of an Australian University. Applicants possessing a University Degree granted for approved natural science subjects, or applicants with academic qualifications accepted by the Director-General as equivalent, may also be admitted to this School and proceed to the Diplomas. Graduates or Diploma holders approved by the Director-General may be admitted to the School to take selected subjects or to carry out research work.

The Board of Higher Forestry Education advises regarding pre-requisite University courses leading to the Diploma courses and in regard to the maintenance of the standard of the School Diploma course.

In addition to students nominated by State Governments and other Australian and oversea authorities and organizations, private students are accepted at the School, and the Commonwealth Government offers up to ten forestry scholarships each year. These scholarships provide a salary allowance for the four years of the full Diploma course.

During 1950, the number of students enrolled reached 80, owing to the intake of ex-servicemen taking University courses under the Commonwealth Reconstruction Training Scheme. The normal capacity of the School is 40.

(b) *Silvicultural Research.* Research head-quarters and a Central Experimental Station have been established at Canberra. Other Forest Experimental Stations have been established at Mount Burr in the south-east of South Australia, in Tasmania, and at Dwellingup in Western Australia, on a co-operative basis with the Forest Services of those States. It is proposed to establish similar co-operative Experimental Stations in other States and Territories.

With its present limited staff, the research work of the Bureau has been concentrated largely upon studies of forest and climatic conditions, the genetical relationships and silvicultural requirements of various species, forest nutrition and the improvement of forest yields. A considerable expansion in the research activities is planned for the next few years as suitable trained staff becomes available.

(c) *Forest Management Research.* In the national interest, it is essential that over-cutting of forests should be avoided and in consequence it is a matter of primary importance that reliable information be available as to the country's forest resources and potentialities. To this end, a national forest stocktaking is being carried out by the Bureau in co-operation with the Forest Services of the States and, to assist in the work of forest assessment, special consideration is being given to the development of the use of aerial surveys.

Consideration is also being given, in co-operation with the State Forest Services, to the establishment of increased areas of plantations of exotic pines with a view to providing additional supplies of softwood timber to meet requirements.

The general economics of forest management are also being studied.

(d) *Timber Supply.* The value of reliable statistical data covering availability of timber and timber requirements was so forcibly demonstrated during the 1939-45 War that it was considered essential to maintain at least a skeleton organization against times of future national emergency. Apart from this, it became clear that, for many years to come, shortages of timber on the one hand and heavy post-war reconstruction demands on the other, accentuated by a rapidly increasing population, would necessitate assessment of requirements and availability of supplies being kept constantly under review as a basis for short and long term policies of timber supply and distribution.

Advice is currently provided to Government Departments and the trade in matters pertaining to timber supply, including—(a) the availability of total quantities and quantities of particular grades and specifications required to meet Australia's needs; (b) the quantity of timber that should be imported; (c) the extent to which exports of timber and related products might be allowed without detriment to local needs; and (d) distribution of timber within Australia.

(e) *Management of Forests.* The Bureau manages the forests of the Australian Capital Territory and maintains a forestry officer in the Northern Territory. In addition, it is responsible for advising the administrations of the Northern Territory and the External Territories on the management of the forests under their charge.

3. **Commercial Forests.**—The forest areas under Commonwealth control include the following:—

- (a) *Australian Capital Territory.* The forests of the Australian Capital Territory are administered by a Division of the Forestry and Timber Bureau. Further information is contained in Chapter V.—The Territories of Australia.
- (b) *Northern Territory.* The forests of the Northern Territory are administered under ordinance by the Administrator of that Territory. The native forests of the Territory are very limited, consisting largely of open eucalypt forest in the North, with very restricted patches of rain forest along streams, river-fringing forests of paper bark tea-tree, patches of cypress pine, and elsewhere savannah woodland deteriorating to mallee and mulga in the interior. The Bureau maintains a forestry officer in the Territory for investigation and advisory purposes.
- (c) *Norfolk Island.* The forests of Norfolk Island are administered by the Administrator of that Territory. The area reserved for forest covers 1,037 acres, of which the main species is Norfolk Island pine.
- (d) *Papua and New Guinea.* The forests of the Territory of Papua and New Guinea are managed by a Forestry Department under the control of a Director, and are administered under an ordinance of the Territorial Administration. Forestry in the Territory commenced with the appointment of two officers in 1938. Further information is contained in Chapter V.—The Territories of Australia.

4. **Forest Products Research.**—Fundamental investigations connected with the properties and uses of timber and forest products generally are carried out by the Forest Products Division of the Commonwealth Scientific and Industrial Research Organization. These investigations cover a very wide field, e.g., pulp, paper, seasoning, structure and chemistry of wood, tans, etc.

Details can be obtained from the annual reports and publications of the Forest Products Division.

§ 3. Forest Conferences.

The first British Empire Forestry Conference was held in London in 1920. Subsequent conferences were held in Ottawa in 1923, Australia and New Zealand, 1928, South Africa, 1935 and again in the United Kingdom in 1947. In conformity with the development of the British Commonwealth of Nations, the name of these conferences was changed to British Commonwealth Forestry Conference. The sixth was held in Canada in 1952 and the seventh will be held in Australia and New Zealand during the latter half of 1957.

§ 4. State Forestry Departments.

1. **Functions.**—Except for Queensland, the powers and functions of State forest authorities are laid down under Forestry Acts and Regulations. In each State, there is a department or commission to control and manage the forests of the State. The functions of these administrations are as follows:—(a) The securing of an adequate reservation of forest lands; (b) the introduction of proper measures for scientific control and management of forest lands; (c) the protection of forests; (d) the conversion, marketing and economic utilization of forest produce; and (e) the establishment and maintenance of coniferous forests to remedy the existing deficiency in softwoods. Annual reports are issued by each State forest authority. In Queensland, forestry is a sub-department of the Department of Public Lands. Victoria maintains a forestry school at which recruits are trained for the forestry service of that State.

2. **Forest Reservations.**—As mentioned in § 1, para. 4 above, State forest authorities agreed that, in order to secure Australia's future requirements, an area of 24½ million acres should be permanently reserved. At June, 1955, the area of State forests reserved in perpetuity totalled 21,703,274 acres or 89 per cent. of the area recommended as the goal to be attained.

In addition to the work of permanently reserving areas in each State, foresters are endeavouring to survey all timbered lands with a view to the elimination of those unsuitable for forestry. Considerable areas have been revoked in certain States, while dedications of new areas have resulted in gains to the permanent forest estate. The Forestry Departments also usually control all timber on open Crown lands as well as over 10 million acres of Timber Reserves, National Parks, etc., but, while these areas contain some land of high value for forestry purposes, the greater part does not justify permanent reservation.

In the following table, details of forest areas as recorded by State Forest Authorities, distinguishing between Dedicated State Forests, Timber Reserves and Other Forest Reserves are shown for each State as at 30th June, 1955. In addition, details of forest reservations in Northern Territory and Australian Capital Territory are shown.

AREA OF FOREST RESERVATIONS, 30th JUNE, 1955.
(Acres.)

State or Territory.	State Forests.	Timber Reserves (Forest Act).	Other Reserves.	Total.
New South Wales	6,202,889	1,364,482	..	7,567,371
Victoria	4,772,204	716,633	(a) 175,155	5,663,992
Queensland	4,698,508	3,212,849	(b) 788,007	8,699,364
South Australia	261,627	..	..	261,627
Western Australia	3,834,207	1,831,870	(a) 952,449	6,618,526
Tasmania	1,926,939	137,028	957,295	3,021,262
Northern Territory	6,900	..	352,000	358,900
Australian Capital Territory .. .. .	..	..	131,000	131,000
Australia	21,703,274	7,262,862	3,355,906	32,322,042

(a) Timber reserves under the Land Act.

(b) National Parks.

3. **Employment.**—In the table below, details are shown of the number of persons employed by State Forestry Departments, and by the Forestry and Timber Bureau in respect of the Australian Capital Territory and the Northern Territory, at 30th June, 1955.

PERSONS EMPLOYED BY FORESTRY DEPARTMENTS, AT 30th JUNE, 1955.

Occupational Group.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Professional Staff ..	167	176	71	46	37	33	..	6	536
Non-professional Field Staff ..	210	259	88	4	100	87	..	..	748
Clerical Staff ..	336	212	153	71	52	54	..	4	882
Extraction of Timber ..	1,380	107	110	34	9	..	..	..	5,749
Milling of Timber ..		38	..	429	21	..	..	..
Labour (forest workers, etc.) ..		917	1,790	219	431	198	..	66	
Total ..	2,093	1,709	2,212	803	650	372	..	76	7,915

§ 5. Forestry Production.

1. **Timber.**—Particulars of logs treated and the production of rough sawn timber by sawmills and other woodworking establishments are shown in the following table by States for the year 1954–55.

OUTPUT OF NATIVE TIMBER : ALL MILLS, 1954-55.

('000 super. feet.)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
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LOGS TREATED, INCLUDING THOSE SAWN ON COMMISSION.(b)

Hardwood ..	460,065	554,011	312,337	8,560	501,128	265,205	2,101,306
Softwood ..	122,711	49,197	120,862	134,827	10,546	6,393	444,536
Total ..	582,776	603,208	433,199	143,387	511,674	271,598	2,545,842

SAWN TIMBER PRODUCED FROM LOGS ABOVE.(c)

Hardwood ..	298,431	335,088	188,363	5,426	220,443	137,241	1,184,992
Softwood ..	74,489	27,246	76,551	77,516	5,351	3,143	264,296
Total ..	372,920	362,334	264,914	82,942	225,794	140,384	1,449,288

(a) Excludes the Australian Capital Territory and the Northern Territory, details for which are not available. (b) Includes logs used for plywood and veneer production. (c) Includes the sawn equivalent of timber peeled or sliced for plywood and veneers.

The following table shows logs used, and the sawn timber produced in Australia for the years 1938–39 and 1950–51 to 1954–55.

OUTPUT OF NATIVE TIMBER : ALL MILLS, AUSTRALIA.(a)

Particulars.	Unit.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Logs used—							
Hardwood ..	'000 super. feet (hoppus measure)	1,015,136	1,797,226	2,000,032	1,970,126	2,047,906	2,101,306
Softwood ..	..	293,680	300,052	363,829	369,881	414,827	444,536
Total ..	..	1,308,816	2,097,278	2,363,861	2,340,007	2,462,733	2,545,842
Sawn Timber Produced—							
Sawn equivalent of Timber Peeled or Sliced for Plywood and Veneers ..	'000 super. feet	21,639	27,322	29,159	21,606	28,492	27,676
Used for other purposes ..	..	695,376	1,234,018	1,363,607	1,318,191	1,371,606	1,421,612
Total Sawn Timber—	..	717,015	1,261,340	1,392,766	1,339,797	1,400,098	1,449,288
Hardwood ..	..	526,229	1,068,096	1,166,114	1,115,423	1,157,124	1,184,992
Softwood ..	..	190,786	193,244	226,652	224,374	242,974	264,296
Total ..	..	717,015	1,261,340	1,392,766	1,339,797	1,400,098	1,449,288

(a) Excludes the Australian Capital Territory and the Northern Territory, details for which are not available.

The next table shows the sawn output of native timber in sawmills and other wood-working establishments in each State for the years 1938-39 and 1950-51 to 1954-55.

SAWN OUTPUT (a) OF NATIVE TIMBER : ALL MILLS.
(*000 super feet.)

State.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
New South Wales ..	179,350	338,347	380,633	350,792	370,279	372,920
Victoria ..	120,197	329,640	348,478	322,209	338,957	362,334
Queensland ..	193,250	252,378	291,681	285,074	288,380	264,914
South Australia ..	14,537	59,393	67,121	68,500	68,190	82,942
Western Australia ..	125,453	156,810	178,290	203,314	216,021	225,794
Tasmania ..	84,228	124,772	126,563	109,908	118,271	140,384
Australia (b) ..	717,015	1,261,340	1,392,766	1,339,797	1,400,098	1,449,288

(a) Includes the sawn equivalent of timber peeled or sliced for plywood and veneers. (b) Excludes the Australian Capital Territory and the Northern Territory, details for which are not available.

In addition to the sawn timber shown in the preceding table, a large amount of other timber, e.g., sleepers, piles, poles, fencing material, timber used in mining, and fuel, is obtained from forest and other lands. Complete information in regard to the volume of this output is, however, not available. The annual reports of the Forest Departments of the States contain particulars of the output of timber from areas under departmental control, but owing to lack of uniformity in classification and measurement, accurate determination of total production cannot be made. Moreover, there is a moderate quantity of other timber produced from privately owned land, but information regarding output is not available.

2. Wood Pulp and Paper.—(i) *Wood Pulp.* The manufacture of wood pulp from Australian-grown timber was established in Australia in 1939, after years of experimentation with eucalypt hardwoods, production in 1938-39 being 6,165 tons of wood pulp. At the end of 1956, four wood pulp mills were operating in three States and production during 1954-55 was 105,117 tons of chemical pulp and 68,360 tons of mechanical pulp, a total of 173,477 tons.

(a) *Victoria.* In Victoria, Australian Paper Manufacturers Ltd. produce wood pulp at Maryvale in Gippsland by a chemical process known as the kraft or sulphate process. The timber used at this mill consists mainly of eucalypt hardwoods at present unsuitable for other purposes and, in addition, a small quantity of plantation pine thinnings and mill waste and special softwood for production of cellulose. During 1955-56, the wood taken from Crown Lands for the production of pulpwood and cellulose amounted to 4,554,686 cubic feet of which 3,563,368 cubic feet were hardwood and 991,318 cubic feet were softwood. Pine plantations are being established in Gippsland by A.P.M. Forests Pty. Ltd. The initial aim is 20,000 acres to provide a perpetual yield of 20,000 tons of long-fibred pulp per annum. Planting commenced in 1951 and by the end of 1955 it was estimated that 14,000 acres had been planted.

(b) *South Australia.* In South Australia a pulp and paper board mill operates near Millicent. This mill generally uses the mechanical or groundwood method of producing wood pulp but during recent years has adopted a semi-chemical process for part of its production. During 1954-55 and 1955-56, 6,619,104 and 10,565,900 super. feet of pulp wood respectively were produced from forests in the south east of South Australia.

(c) *Tasmania.* In Tasmania two large mills are making pulpwood from indigenous hardwoods. At Burnie, on the north-west coast, Associated Pulp and Paper Mills Ltd. use a chemical method, the soda process, to produce wood pulp for fine writing and printing papers from eucalypt hardwoods. This plant is of the most modern design and pulp and paper manufacture are combined with sawmilling and hardboard production. Offcuts and rejects from the timber mill are used for pulping and the manufacture of hardboard. Utilization of the freehold and concession forest areas held by the company is being extended to logging areas held by other sawmilling firms, who supply logs unsuitable for milling to the pulp mills. A continuous digester has been installed at the Burnie mill, making it the only one in Australia using a continuous pulping process. The forests are managed on a permanent yield basis with regeneration of the eucalypts in all suitable areas. Pine plantations are being established to provide softwoods for pulping.

Australian Newsprint Mills Ltd. at Boyer, 20 miles from Hobart, is the only producer of newsprint in Australia. Wood pulp is produced by mechanical process from hardwoods drawn from State timber concession areas. Eucalypts provide about 80 per cent. of its requirements for wood pulp, the remainder being imported long fibre softwood pulp. To secure more complete bush utilization, the company has established three sawmills to convert understorey species such as myrtle, sassafras, blackwood and celery top pine to sawn timber. The forests are managed on a sustained yield basis. Forest utilization and management are designed to obtain eucalypt regeneration. Experimental work into the problems involved is being carried out by the company and the Tasmanian Forestry Commission.

(ii) *Paper and Paper Board.* Paper and paper board are manufactured in all States but the industry is centred mainly in New South Wales, Victoria and Tasmania. At the end of 1956, seventeen paper mills were operating, six in Victoria, five in New South Wales, three in Tasmania and one each in Queensland; South Australia and Western Australia. A new mill, Shoalhaven Paper Mills Pty. Ltd. commenced production in February, 1956, when the first of two mills to be installed began operating. The mill, situated near Nowra in New South Wales will be the first superfine paper mill to operate in Australia, and is expected to produce 8,000 tons of watermarked, rag-content and other fine writing, printing and industrial papers each year. A wide variety of papers and paper boards is produced in Australian mills, the quantity and value of paper produced in 1954-55 being as follows:—newsprint, 73,608 tons valued at £5,172,037; blotting, 721 tons, £109,588; duplicating, 2,931 tons, £456,763; printing and writing, 37,636 tons, £5,937,109; kraft wrapping, 40,629 tons, £5,376,947; other wrapping, 3,985 tons, £590,639; felt and carpet felt, 4,144 tons, £400,693; and other paper, 34,521 tons, £3,161,845. In addition, 141,444 tons of paper boards valued at £12,342,619 were produced in 1954-55.

3. *Other Forest Products.*—(i) *Veneers, Plywood, etc.* Cutting of timber for the manufacture of veneers, plywood, etc., has been carried out in most States for a number of years. Recently, however, this has been considerably extended, and much greater use has been made of locally-grown timbers, both hardwoods and softwoods. In recent years, special attention has been paid to the selection of logs suitable for peeling.

The following table shows the production of plywood for each of the years 1938-39 and 1950-51 to 1954-55:—

PLYWOOD PRODUCED.
(‘000 square feet $\frac{3}{16}$ in. basis.)

State.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
New South Wales	24,194	32,287	31,784	22,557	28,601	35,039
Queensland ..	66,100	104,799	110,028	81,400	114,545	130,330
Other States ..	14,511	16,412	17,341	11,771	18,435	21,235
Australia ..	104,805	153,498	159,153	115,728	161,581	186,604

Of the total plywood produced in 1954-55, 156,843,000 square feet $\frac{3}{16}$ in. basis was classed as “Commercial”, 24,810,000 as “Waterproof” and 4,951,000 as “Case.”

During 1954-55, 485.3 million square feet ($\frac{1}{16}$ in. basis) of veneers were produced by the rotary process for the manufacture of plywood, and 124.7 million square feet ($\frac{1}{16}$ in. basis) were sold or added to stock, the bulk of which would eventually be used in the production of plywood. In addition, 32.2 million square feet of sliced veneers were produced.

(ii) *Hardboard.* The production in Australia from pulped wood, of hardboard for building purposes has increased considerably in recent years. There were three factories producing hardboard in 1955 (two in New South Wales and one in Tasmania) and during the three years ended 30th June, 1955, the following quantities and values were produced:—1952-53, 12,150,000 square yards, £2,472,000; 1953-54, 16,992,000 square yards, £3,284,000; and 1954-55, 19,834,000 square yards, £3,810,000. Preliminary figures for 1955-56 show a recorded total production of 22,616,000 square yards (value not yet available).

Most of this hardboard enters into normal usage in the condition in which it leaves the producing factories but a number of other factories further treat and surface it, mainly to a glossy "tiled" finish, and in 1954-55 this production accounted for 715,000 square yards valued at £392,000.

(iii) *Eucalyptus Oil*. Oil may be distilled from the foliage of all varieties of *Eucalyptus*, and several of them furnish a product widely known for its commercial and medicinal uses. Complete information regarding Australian production and consumption of eucalyptus oil is not available, but considerable quantities are manufactured, particularly in New South Wales and Victoria. The value of oversea exports of eucalyptus oil distilled in Australia was £445,206 in 1951-52; £215,283 in 1952-53; £163,763 in 1953-54; and £155,291 in 1954-55. The quantities exported in the years 1951-52 to 1954-55 were, 1,254,618 lb., 721,330 lb., 504,628 lb. and 451,741 lb. respectively.

(iv) *Gums and Resins*. Gums and resins are produced in most States of Australia, the main product being grass tree, or yacca gum. This gum, which is used in the preparation of varnishes and lacquers, comes chiefly from South Australia while small quantities are also produced in New South Wales and Western Australia. The recorded production of gums and resins in 1954-55 was 520 cwt. in New South Wales, 10,380 cwt. in South Australia and 2,515 cwt. in Tasmania, giving a total production of 13,415 cwt. in Australia. Exports of yacca gum from Australia during the same period amounted to 11,457 cwt. valued at £23,202.

(v) *Tanning Barks*. The forests of Australia are capable of yielding a wealth of tanning materials; many species of eucalyptus and other genera contain varying proportions of tannin, chiefly in the bark, but also in the wood and twigs. Scattered distribution however, has resulted in only the richest tan-bearing species being used in Australia. These are:—Golden wattle (*Acacia pycnantha*), black or green wattle (*Acacia decurrens* or *mollissima*), and mallet (*Eucalyptus astringens*). Mallet (*E. astringens*), of Western Australia, is not extensively used in Australian tanneries, but is exported to Europe and other countries. Reference to oversea trade in tanning barks is made in § 6, para. 3.

The production of extract from the bark of karri (*E. diversicolor*), of which very large quantities are available at karri sawmills, has passed the experimental stage, and private enterprise has started production on a commercial scale. The experimental work in kino impregnated marri (*E. calophylla*) bark is not yet complete. The total factory production of tanning bark in Australia approximated 25,000 tons per annum in the years prior to 1939, but since then production has declined and in 1954-55 was only 4,248 tons. However, this decrease is offset by the increased use of vegetable tanning extracts and synthetic tanning agents.

4. Value of Production.—(i) *Gross and Local Values, 1954-55*. The values of forestry production on a gross and local basis are shown in the following table for the year 1954-55.

GROSS AND LOCAL VALUE OF FORESTRY PRODUCTION, 1954-55.
(£'000.)

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.
New South Wales	14,166	480	13,686
Victoria	10,721	734	9,987
Queensland	8,717	822	7,895
South Australia	4,603	176	4,427
Western Australia	4,058	208	3,850
Tasmania	4,573	536	4,037
Australia(a)	47,016	2,969	44,047

(a) Includes details for the Northern Territory and the Australian Capital Territory.

No information is available on the value of materials used in the process of production or of depreciation and maintenance charges for 1954-55 and hence it is not possible to calculate net value of forestry production.

(ii) *Local Values, 1934-35 to 1938-39 and 1950-51 to 1954-55.* In the following table, the local value of forestry production and the local value per head of population are shown by States for the years 1950-51 to 1954-55 in comparison with the average for the five years ended 1938-39. Local value is gross value less marketing costs and is the value at place of production.

LOCAL VALUE OF FORESTRY PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
LOCAL VALUE. (£'000.)							
Average, 1934-35 to 1938-39(b) ..	2,094	837	2,226	547	1,176	394	7,274
1950-51	8,966	6,437	5,029	2,656	2,908	2,432	28,428
1951-52	12,461	8,479	7,040	3,179	3,689	3,057	37,905
1952-53	13,692	8,904	7,102	3,790	3,328	3,248	40,064
1953-54	12,905	9,475	7,797	4,373	3,615	3,555	41,720
1954-55	13,686	9,987	7,895	4,427	3,850	4,037	44,047

LOCAL VALUE PER HEAD OF POPULATION. (£ s. d.)

Average, 1934-35 to 1938-39(b) ..	0 15 7	0 9 1	2 5 2	0 18 7	2 11 8	1 13 9	1 1 4
1950-51	2 15 5	2 17 5	4 3 4	3 13 7	5 2 0	8 11 7	3 8 10
1951-52	3 15 3	3 13 5	5 13 7	4 5 0	6 5 1	10 8 5	4 9 3
1952-53	4 1 4	3 15 1	5 11 8	4 18 11	5 8 11	10 14 8	4 12 2
1953-54	3 15 10	3 18 3	5 19 11	5 11 3	5 14 7	11 9 10	4 14 3
1954-55	3 19 1	4 0 3	5 19 2	5 9 8	5 18 8	12 17 11	4 16 11

(a) Details for the Australian Capital Territory and the Northern Territory are excluded for years prior to 1954-55. (b) Net value of production (i.e. local value less value of materials used in the course of production) has been included for certain years for Victoria and Western Australia.

5. *Employment.*—(i) *Forestry Operations.* The estimated number of persons employed in forestry operations at 30th June, 1954, including working proprietors, but excluding those employed in the sawmilling industry, as recorded at the 1954 Census, was 15,300.

(ii) *Milling Operations.* Details of the average number of persons employed, including working proprietors, in the milling operations of sawmills during the year 1954-55 are shown in the next table. Further details regarding the operations of these mills are shown in Chapter VII.—Manufacturing Industry.

SAWMILLS : AVERAGE NUMBER OF PERSONS EMPLOYED, 1954-55.

Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (a)
Males	9,526	7,481	6,853	2,038	4,511	2,386	32,795
Females	366	192	323	152	34	37	1,104
Total	9,892	7,673	7,176	2,190	4,545	2,423	33,899

(a) Excludes Northern Territory and Australian Capital Territory, details for which are not available.

§ 6. Imports and Exports of Timber and Tanning Substances.

1. Imports of Timber, Veneers and Plywood.—The quantities of timber imported into Australia during the year 1954-55 are shown in the following table according to countries of origin:—

 IMPORTS OF TIMBER, VENEERS AND PLYWOOD INTO AUSTRALIA :
 COUNTRIES OF ORIGIN, 1954-55.

Country of Origin.	Logs (including desapped). (‘000 super ft.)		Undressed timber.(a) (‘000 super ft.)		Box shooks.	Dressed timber.	Veneers.	Ply-wood.
	Soft-wood.	Hard-wood.	Soft-wood.	Hard-wood.	(‘000 super ft.)	(‘000 super ft.)	(‘000 sq. ft.)	(‘000 sq. ft.)
United Kingdom ..	..	156	..	68	1	11	2,664	22
Australian Territories—								
New Guinea ..	1,340	1,575	1,921	9	125	..	5,054	8,468
Borneo ..	261	29,920	29	8,469	..	..	..	..
Canada ..	3	..	133,160	38	..	1	625	..
New Zealand ..	4	..	35,904	68	567	406	..	4
Pacific Is. (British)—Solomon Is. ..	2,387	1,773	..	..	..	..	..	..
Other British Countries ..	146	632	440	18,611	753	55	6	..
Brazil ..	..	..	4,561	396	..	..	..	..
Finland ..	..	..	318	..	232	8,680	34	..
Norway ..	..	..	..	..	14	5,118	..	..
Sweden ..	..	..	2,499	763	185	18,850	308	10
United States of America ..	4	10	81,760	763	..	..	847	..
Other Foreign Countries ..	..	32	3,559	529	172	427	4,494	5,326
Total ..	4,145	34,098	264,151	28,951	2,049	33,548	14,032	13,830

(a) Excluding railway sleepers.

Most of the logs imported are hardwoods from Borneo, the value of all logs imported being £899,000 during 1954-55. In the same year, the value of undressed timber imported totalled £12,366,000, of which more than 90 per cent. was softwood. The principal undressed timber imported was oregon pine from North America. The balance was mainly hemlock also from North America, pines from New Zealand, Indonesia and the United States of America and hickory from the United States of America. The bulk of the imports of dressed timber now comes from Finland, Sweden, Norway and New Zealand and consists mainly of tongued and grooved timber, weatherboards, etc. The total value of dressed timber shown in the table above amounted to £2,254,000 during 1954-55. New Guinea was the largest supplier of both veneers and plywood, imports of which were valued at £184,000 and £335,000 respectively.

2. Exports of Timber, Railway Sleepers, Veneers and Plywood.—The quantities of timber, railway sleepers, veneers and plywood exported during the year 1954-55 are shown below, together with the countries of consignment.

 EXPORTS OF TIMBER, RAILWAY SLEEPERS, VENEERS AND PLYWOOD FROM
 AUSTRALIA : COUNTRIES OF CONSIGNMENT.

Country of Consignment.	Logs (including desapped). (‘000 super ft.)		Undressed timber. (‘000 super ft.)		Railway sleepers.	Dressed timber.	Veneers.	Ply-wood.
	Soft-wood.	Hard-wood.	Soft-wood.	Hard-wood.	(‘000 super ft.)	(‘000 super ft.)	(‘000 sq. ft.)	(‘000 sq. ft.)
United Kingdom ..	..	4	..	3,276	131	568	2,374	130
Australian Territories—								
New Guinea ..	..	185	13	548	..	104	4	92
Papua ..	..	..	16	1,246	..	64	..	95
Other ..	..	5	63	200	..	..	..	35
New Zealand ..	132	2,990	34	12,502	5,849	18	381	244
Pacific Islands (British)—								
Fiji ..	3	104	1	578	168	..	..	13
Gilbert and Ellice Is. ..	..	10	131	272	..	1	..	5
Other ..	..	3	20	129	..	44	1	32
Other British Countries ..	..	1	..	1,241	805	12	75	3
Foreign Countries ..	..	24	..	776	..	46	111	19
<i>Australian Produce</i> ..	135	3,326	279	20,768	6,953	857	2,946	668
<i>Re-exports</i> ..	1	..	877	27	..	43	139	3
Total ..	136	3,326	1,156	20,795	6,953	900	3,085	671

Exports of timber were consigned mainly to New Zealand and the United Kingdom, and consisted largely of the Western Australian hardwoods, jarrah and karri, which have earned an excellent reputation for such purposes as harbour works and wood paving, etc. The total value of exports of undressed timber, excluding railway sleepers, during 1954-55 was £1,218,000 (hardwood £1,132,000, softwood £86,000). Railway sleepers exported were valued at £308,000.

3. **Classification of Imports and Exports.**—(i) *General.* The quantities and values of timber, according to items, imported and exported during the year 1954-55 are shown in the following table:—

TIMBER: IMPORTS AND EXPORTS, AUSTRALIA, 1954-55.

Item.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
	'000 super. ft.	£A. f.o.b.	'000 super. ft.	£A. f.o.b.
Logs, not sawn—				
Softwoods	4,145	105,896	136	7,151
Hardwoods	34,098	793,125	3,326	184,086
Timber, undressed (including railway sleepers)—				
Softwoods	264,151	10,715,028	1,156	86,074
Hardwoods	29,729	1,651,219	27,748	1,440,643
Timber for boxmaking	2,049	128,858	(a)	(a)
Timber, dressed—				
Flooring, lining and weatherboards ..	32,801	2,206,261	} 900	96,855
Other	747	47,296		
	'000 sq. ft.		'000 sq. ft.	
Veneers	14,032	184,296	3,085	60,160
Plywood	13,830	334,793	671	44,085
Other Timber (b) .. .. .	..	74,616	..	..
Total .. .. .	..	16,241,388	..	1,919,054

(a) Not recorded separately.

(b) Includes dunnage and timber for which quantity data no available.

(ii) *Tanning Substances.* The imports of tanning substances of natural origin in 1954-55 amounted to 199,096 cwt. valued at £648,769 (bark, 2,499 cwt., £5,163; extracts, 154,390 cwt., £592,414; and other tanning substances including valonia, myrabolans, cutch, etc., 42,207 cwt., £51,192) compared with 176,440 cwt. valued at £574,060 (bark, 2,634 cwt., £5,245; extracts, 127,556 cwt., £506,378; and other tanning substances 46,250 cwt., £62,437) in 1953-54. Exports during the same periods were 96,965 cwt. valued at £350,801 (extracts, 92,262 cwt., £335,438; and other tanning substances, 4,703 cwt., £15,363) and 163,764 cwt. valued at £549,718 (extracts, 121,497 cwt., £451,324; and other tanning substances, 42,267 cwt., £98,394) respectively.

The imports of tanning bark consist almost exclusively of wattle bark from the plantations in South Africa. One species of Australian wattle, *Acacia mollissima*, is chiefly relied upon for the production of wattle bark in the South African plantations, most of the seed being obtained from the best wattle bark areas in eastern Tasmania and western Victoria. Two reasons are given to account for the success of the industry in the Union of South Africa:—(a) The suitability of the treeless, grassy highlands of Natal; and (b) the availability of native labour.

CHAPTER XXVI.

FISHERIES.

§ 1. General.

1. **Fish Resources.**—The waters surrounding the Australian continent contain a great variety of marine fauna. Despite this, the fish stocks of Australia, in common with those of other countries of the Southern Hemisphere, with the exception of South Africa, are small by comparison with the stocks in the Northern Hemisphere. The reasons for this comparative shortage have not been fully explained but it seems clear that the basic factors generally involved are the absence of large expanses of shallow water and the much lower fertility of the oceans of the Southern Hemisphere.

The existence of greater fish stocks largely explains why approximately 98 per cent. of the world production of fish comes from the Northern Hemisphere. Nevertheless, the Australian catch is low even after making allowance for the smaller resources available. Further explanation must be sought in terms of the socio-economic factors which determine the demand for and supply of fish.

By comparison with the populations of other countries, notably those in the Northern Hemisphere, Australians are not large fish eaters. Consequently, there is not the pressure on resources so necessary to induce expansion in the fishing industry and to encourage the investment of large amounts of capital. On the other hand, even this somewhat restricted Australian demand for fish cannot be met from purely local sources of supply. The result is that quantities of fish are imported each year.

This apparent paradox is explained by the fact that the Australian fishing industry has consistently over-exploited some sources of supply and under-exploited others.

Thus, on the one hand, the fisheries in the estuaries of the Australian coasts (the so-called estuarine fisheries) and those offshore for fish that dwell on the bottom of the sea (the demersal fisheries) have frequently been overfished with a consequent diminution of stocks. On the other hand, those species of fish which dwell near the surface of the sea (the pelagic species) have barely been exploited at all.

It is anticipated that the greatest future development of the Australian fishing industry will take place in the pelagic fisheries. However, no great contribution to the supplies of fresh fish can be expected from this source since most of the pelagic species caught are canned or processed.

An increase in the supply of fresh fish available to the Australian consumer will therefore have to come largely from an expansion of the estuarine and demersal fisheries. In view of the over-exploitation of existing estuarine and demersal fisheries, such an expansion will require the development of new fishing areas.

While it is known that promising fishing grounds exist to the south and north of Australia, it appears that the trawling grounds of the Great Australian Bight are the most suitable for development. However, it is not considered that any great expansion of production can come from this source.

2. **Fishing Areas.**—The principal fishing areas at present are the coastal lakes, streams, estuaries and beaches, from Cairns in Queensland to Ceduna in South Australia, and from Esperance to Geraldton in Western Australia. For the most part, these fishing grounds are associated with the coastal streams. The demersal grounds fall into two classes—(a) the reefs from which cod, snapper, etc. are taken; and (b) the grounds from which flathead, morwong, etc., are taken. The reefs extend intermittently from northern Queensland around the southern part of the continent to Shark Bay in Western Australia. The flathead grounds lie on the continental shelf off south-east Australia, chiefly from Crowdy Head to south of Cape Everard and further off the east Tasmanian coast from Babel Island southwards to Storm Bay. As mentioned in the previous section, other demersal grounds exist in the Great Australian Bight but would require large modern trawlers for commercial exploitation. The demersal shark grounds lie principally in Bass Strait and on the continental shelf off eastern South Australia. Other grounds have been located off southern Western Australia.

The grounds of existing pelagic fisheries include that for the Spanish mackerel off the north-eastern coast from about Coff's Harbour to Cairns and that for barracouta in Bass Strait and off eastern Tasmania. Jack mackerel is found in the waters of eastern Tasmania,

the south-east coast of New South Wales, and Western Australia. Tuna is now being taken in commercial quantities on the New South Wales coast.

Of the crustaceans exploited in Australia, crayfish are the most important and are taken on reefs of the continental shelf in the waters of all southern States, the fishery extending (with a major interruption in the Bight) from Port Macquarie in New South Wales to Geraldton in Western Australia. Considerable development has taken place in the crayfish fisheries, particularly in South Australian and Western Australian waters, owing to the opening up of markets in the United States of America for frozen crayfish tails. Crabs of various species are found in practically all coastal waters. Prawns are taken in the temperate waters of Queensland and New South Wales.

In the mollusc group, edible oysters are found in the temperate waters of Queensland, New South Wales and Victoria. Some cropping of natural resources takes place in Queensland, but the principal cultivation grounds are found in New South Wales. Until 1956, scallops were taken commercially in Tasmanian waters only, but since then, they have been taken also in Queensland.

Pearlshell is fished from Cooktown in Northern Queensland, and from Thursday Island, round the north coast of Australia to Exmouth Gulf in Western Australia. Trochus shell is obtained from Mackay in Queensland round the north coast to King Sound in Western Australia.

Whales emigrating from Antarctic waters to their breeding grounds in the warmer waters of low latitudes pass up both the western and eastern coasts of Australia, returning to the Antarctic in the spring. Two whaling stations operate in Western Australia (Babbage Island near Carnarvon and Cheynes Beach near Albany), one in New South Wales (Byron Bay) and one in Queensland (Moreton Island). The company operating at Byron Bay (N.S.W.) also opened a station at Norfolk Island in 1956.

3. Fishing Boats and Equipment.—The fishing equipment includes almost every possible type of gear, and appropriate boats are employed. The on-shore equipment includes mesh-nets, trawl-nets, and traps of various types. The demersal reef-fishery is worked with traps, hand lines and long lines. The demersal flathead fishery is worked by both otter trawl (with Vigneron-Dahl gear) and Danish seine; in addition some hand-lining is carried out. The demersal shark fishery is worked by long lines. The pelagic mackerel fishery employs trolling gear with lures of various types, while the pelagic barracouta fishery employs principally barbless jigs. Tuna is taken by trolling and, more recently, by pole fishing with live bait.

The boats for the on-shore fisheries are almost invariably small vessels fitted with low-power petrol engines. The vessels working the reefs are larger (up to 50 feet) and have more power. The otter trawl vessels are steam trawlers, and the Danish seine vessels are 40 to 70 feet in length with diesel engines. The shark boats have diesel power and range from 35 to 50 feet in length.

4. Administration.—The fisheries within the three-mile limit are administered by State Departments while the Commonwealth Fisheries Office, a division of the Department of Primary Industry, administers fisheries in extra-territorial waters, co-ordinates fisheries administration and develops the extra-territorial fisheries of Australia.

The administration of the fisheries was discussed in greater detail in Official Year Book No. 41, p. 844, and in earlier issues.

§ 2. Development and Present Condition of the Fishery.

1. Fisheries Proper.—(i) *General.* The development of Australian fisheries has almost invariably followed the same sequence at each centre. The earliest fisheries were on-shore followed by demersal reef fishing using long lines. Trawling operations have followed line fishing in suitable areas and more recently again the exploitation of pelagic fisheries has commenced.

Until about 1900, the expansion of the industry consisted chiefly of the extension of on-shore and demersal fishing with long lines into areas previously unworked. Barracouta was fished in Tasmanian waters at least by 1880, if not earlier, although the main development of this fishery occurred towards the end of the 1939–45 War and in later years to meet demands for canned fish.

The first major development of the industry came with the institution of trawling operations off the New South Wales coast in 1918 by the New South Wales Government. The State enterprise failed, but the fishery was found very profitable by private enterprise. In 1936, the use of Danish seine vessels began and the fleet of these vessels rapidly expanded, and in 1946 (after the return of vessels requisitioned in war-time) a peak was reached when thirteen steam trawlers and 120 Danish seine vessels were licensed. The total catch of trawled fish in 1946-47 was 16,000,000 lb. Of the species taken by the trawl fishery, tiger flathead, morwong, and nannygai are the most important and of these flathead may be regarded as the prime fish and commands a higher price. Since 1947, the composition of the catch has changed, because of depletion of the flathead stocks, and the lower-priced fish have become a larger proportion of the catch. In 1955-56, four steam trawlers (all based at Sydney but fishing right down the coast to Bass Strait) and a considerably larger number of Danish seine vessels in New South Wales and Victoria were engaged in the trawl fishery.

In Queensland waters, since 1930, the Spanish mackerel has been taken by line fishermen, operating in off-shore waters out to the Barrier Reef between Gladstone and Cairns.

In 1930 also, fishing for snapper shark commenced in south-eastern waters, particularly off the Victorian and Tasmanian coasts. This fishery rapidly extended its area of operations, and in 1954-55 the catch of edible sharks was 7,800,000 lb. round weight. Great impetus was given to the fishery during the war years by the demand for livers for fish oil production for medicinal purposes. Demand eased with the return of cod-liver oil and availability of synthetic vitamin "A". The shark fishery is still important, however, as the flesh, which is sold as "flake", brings substantial prices, mainly in Melbourne.

As far as pelagic fisheries are concerned, pilchards occur in the southern waters of Australia from Port Stephens to the south-west of Western Australia and also as far north as Moreton Bay. Commercial catches have been made with lampara nets and to a lesser extent with purse seines. Anchovies are caught in Port Phillip Bay and also in Lakes Entrance and are used for processing. Sprats in Tasmanian waters are caught in payable quantities, though there is usually some difficulty in finding a market for them. Jack mackerel have been caught in commercial quantities off the east coast of Tasmania and off Eden in New South Wales.

The tuna fishery was established on the New South Wales coast during 1949, when fishermen, using improvised trolling gear, caught 1,000 tons of southern bluefin tuna. The catch was canned at Eden and Narooma and some was frozen raw and sold direct to Californian canneries. The American-owned tuna clipper *Semibua*, whose operations were subsidized by the Commonwealth, demonstrated that Australian tunas could be caught by pole fishing with live bait. In 1955, 40 tuna boats were operating on the south coast of New South Wales, but their catch was limited by the canneries to quantities which could be marketed in canned form in Australia and overseas as the price of raw tuna in California was reduced below the level necessary to make export profitable. In 1955, a new plant on the south coast of New South Wales began producing smoked and cooked tuna, giving further support to the tuna fishery.

Southern bluefin tuna occurs all along the southern coastline of the continent. In addition, albacore, yellowfin, striped (skipjack) and northern bluefin tuna occur, but the taking of these fish has not been developed.

(ii) *Production.* The statistics of production published in this chapter are in terms of "round" or "gross" weights. Round weights are calculated from recorded weights using conversion factors which allow for the fact that the weights of fish reported are frequently in a gutted, headed and gutted, or otherwise reduced condition. Publication on a round weight basis has been made possible in recent years largely as a result of the efforts of the Commonwealth Fisheries Office.

In interpreting Australian fisheries statistics, allowance should be made for the incomplete coverage. Returns are collected in most States from licensed professional fishermen only, and as a result the published totals fall short of total fish production to the extent of the catch by amateur fishermen, the commercial catch by persons not licensed as professional fishermen and unrecorded catch by professional fishermen.

Production by States for the years 1950-51 to 1954-55 is shown in the following table on a round weight basis.

RECORDED PRODUCTION OF FISH.

(EQUIVALENT ROUND WEIGHT.)

('000 lb.)

State.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
New South Wales	26,333	28,331	32,660	32,332	26,441
Victoria (a)	12,044	13,285	13,069	13,820	13,833
Queensland	9,454	9,594	11,354	10,525	9,368
South Australia	6,874	7,856	8,102	8,317	8,154
Western Australia	8,652	7,344	9,225	10,913	9,393
Tasmania (a)	7,924	5,162	6,882	2,821	3,115
Northern Territory	56	62	87	100	118
Total	(b) 71,337	71,634	81,379	78,828	70,422

(a) Catch by Victorian fishermen in Tasmanian waters is included in Victoria from 1951-52 onwards.

(b) Incomplete, excludes catch by Victorian fishermen in Tasmanian waters.

In the following table, total Australian recorded production of fish by species is shown by States in terms of equivalent round weight for the year 1954-55. As an aid to identification, scientific names have been listed in addition to common names.

FISH—RECORDED PRODUCTION BY SPECIES, 1954-55.

(EQUIVALENT ROUND WEIGHT.)

('000 lb.)

Species.	N.S.W.	Vic.(a)	Qld.	S.A.	W.A.	Tas.(a)	Aust.
Mullet—							
<i>Mugil dobula</i> , <i>Aldrichetta forsteri</i> , <i>Moolgarda argentea</i> , <i>Myxus elongatus</i> , <i>Mugil caeruleomaculatus</i>	6,206	634	4,451	477	731	29	12,528
Australian Salmon—							
<i>Arripis trutta</i>	575	1,099	..	876	4,435	430	7,415
Shark—							
<i>Galeorhinus australis</i> , <i>Emissola antarctica</i> , <i>Flakeus megalops</i> , <i>Pristiophorus cirrhatu</i>	1,818	2,895	..	2,114	276	663	7,766
Flathead—							
<i>Neoplatycephalus richardsoni</i> , <i>Trudis caeruleopunctatus</i> , <i>P. basensis</i> , <i>Platycephalus fuscus</i> , <i>P. indicus</i> , <i>P. arenarius</i> , <i>Leviprora laevigata</i>	3,662	1,856	210	4	27	115	5,874
Barracouta—							
<i>Thryxites atun</i>	86	5,378	..	(b)	..	1,485	6,949
Snapper—							
<i>Chrysophrys guttulatus</i> , <i>C. unicolor</i>	1,228	124	151	465	1,229	..	3,197
Morwong, Jackass-Fish, Perch, Queen Snapper—							
<i>Nemadactylus macropterus</i> , <i>N. valenciennesi</i> , <i>Other N. spp.</i> , <i>Cheilodactylus spp.</i>	2,900	1	..	..	3	9	2,913
Leatherjacket—							
<i>Aluteridae</i>	1,764	16	6	1	22	(b)	1,809
Whiting—							
<i>Sillago ciliata</i> , <i>S. macculata</i> , <i>S. bassensis</i> , <i>Sillaginodes punctatus</i>	163	154	505	1,211	419	..	2,452
Mackerel—							
<i>Scomberomorus commerson</i> , <i>S. queenslandicus</i> .. ..	..	..	1,199	..	14	..	1,213
Other Species	8,039	1,676	2,846	3,006	2,237	384	(c) 18,306
Total	26,441	13,833	9,368	8,154	9,393	3,115	70,422

(a) Catch by Victorian fishermen in Tasmanian waters is included in Victoria.

500 lb.

(b) Less than

(c) Includes Northern Territory production—species details not available.

2. **Crustaceans and Molluscs.**—Crayfish are taken (in pots) in all States other than Queensland. Cray fisheries have developed greatly since the 1939–45 War to take advantage of the market in the United States of America for frozen crayfish tails, the total catch increasing from approximately 3 million lb. in 1945–46 to 20.2 million lb. in 1954–55.

Prawns are taken by otter trawl in the waters of New South Wales, Queensland and Western Australia. Prawns have been found in considerable quantity in the ocean waters of northern New South Wales and southern Queensland. An important development is anticipated with improvement of handling and distribution and opening up of oversea markets.

Initially the Australian oyster fisheries depended solely upon the harvesting of naturally grown stock in littoral and submarine areas. However, the stocks soon deteriorated and attention was turned to methods of cultivation. This is carried on mainly in New South Wales where there has been constant improvement in methods, and the present technique in certain areas is highly efficient. The production for Australia in 1954–55 was 10,454,000 lb. (in shell). Scallops are taken by dredge in the D'Entrecasteaux Channel in Tasmania and recently they have been taken by trawl in Hervey Bay, Queensland.

Details of production of crustaceans and molluscs are shown by States in the table below on a gross (in-shell) weight basis for the year 1954–55.

RECORDED PRODUCTION OF CRUSTACEANS AND MOLLUSCS, 1954-55.

(GROSS (IN-SHELL) WEIGHT.)

('000 lb.)

Item.	N.S.W.	Vic.(a)	Qld.	S. Aust.	W. Aust.	Tas.(a)	Aust.
<i>Crustaceans—</i>							
Crayfish	545	1,263	9	4,589	10,906	2,895	20,207
Crabs ..	237	..	556	1	19	..	813
Prawns ..	4,603	19	2,000	..	26	..	6,648
<i>Total</i> ..	5,385	1,282	2,565	4,590	10,951	2,895	27,668
<i>Molluscs—</i>							
Oysters ..	10,198	15	158	..	39	44	10,454
Scallops ..	..	..	27	..	12	5,406	5,406
Other ..	..	32	..	..	..	..	71
<i>Total</i> ..	10,198	47	185	..	51	5,450	15,931

(a) Catch by Victorian fishermen in Tasmanian waters is included in Victoria.

3. **Pearl-shell and Trochus.**—The industry, which ceased operations on Japan's entry into the war in December, 1941, did not resume on a commercial basis at Queensland centres until late in 1945, and at Western Australian centres until 1946, while operations off the Northern Territory coast were not resumed until 1948.

Before the war, a large proportion of the key men were Japanese; the others included Malays, Chinese, Koepangers, Filipinos, Papuans and Torres Straits Islanders. On the resumption of operations without the Japanese, the labour available was, with few exceptions, inefficient. The expansion of the industry at Darwin has been retarded by the fact that the key men lack the local knowledge acquired by the Japanese. Western Australian centres also suffered from lack of skilled labour. In 1953, the Commonwealth permitted the employment at Broome, under certain conditions, of 35 Japanese divers, tenders and engine-drivers. Queensland, with a more ready source of labour from the Torres Strait Islands and mainland, was able to expand its fishing more rapidly, and in the 1949 season, achieved its second highest pearl-shell production on record.

In 1953, a Japanese fleet, which had been pearling in the Arafura Sea while a Japanese Mission in Canberra was discussing a fisheries agreement with the Australian Government, moved into an area in which they had been asked not to fish. Their action was regarded

as having broken off the negotiations, and proclamations were issued in September, 1953 declaring Australia's sovereign rights over the natural resources of the sea bed and sub-soil of the Continental Shelf adjoining Australia, its territories and the Trust Territory of New Guinea. In September, the Pearl Fisheries Act 1952-53, providing for licensing and control of pearling, was brought into operation.

Japan disputed Australia's right to apply this legislation to foreign ships, and Australia agreed to refer the dispute to the International Court of Justice on condition that meantime Japanese pearling in Australian waters would be conducted in conformity with the Australian Government's policy of regulation and conservation, and that Japan would abide by the Court's decision. On these conditions, a Japanese pearling fleet has operated in prescribed waters since 1954.

Australian production of pearl-shell and trochus-shell was 2,489,000 lb. and 2,784,000 lb. respectively in 1954-55. In addition, Japanese pearlers took 2,105,000 lb. of pearl-shell in Australian waters.

Reference to inquiries into the pearl-shell fishing industry by a Royal Commission in 1912, and by the Tariff Board in 1935, is made on p. 1031 of Official Year Book No. 37.

§ 3. Marketing and Distribution.

1. **Marketing.**—Most of the fish taken in Australian waters is sold in metropolitan markets. In Queensland, fish marketing is under the control of a Fish Board, which has representatives of producers, wholesalers and consumers, and a Government nominee as chairman. A central market is located in Brisbane and there are branch markets or depots at fourteen centres along the coast. The organization ensures that all fish is marketed through these channels, and the board has encouraged to a very marked extent the steadily increasing fish production of the State. The fish marketing methods in this State have proved successful. In New South Wales, the central market in Sydney is conducted by the Chief Secretary's Department, and the port depots in various centres along the coast by fishermen's co-operatives. These co-operatives distribute some of their fish to local centres and to inland country districts, and send the balance to the central market in Sydney. In Victoria, South Australia and Western Australia, fish is sold in central markets by agents. The greater part of the catch of fish in Tasmania is either processed in canneries in that State or exported to the mainland. There is some interstate export of fish from the northern rivers of New South Wales to Queensland, from Tasmania to New South Wales and Victoria, and from South Australia to Victoria.

2. **Consumption of Fish.**—Prior to the 1939-45 War, Australians consumed annually the fresh and canned equivalent of about 131 million lb. of round fish, or 19.0 lb. per person. About 70 million lb. were produced locally and the remainder was imported. Total consumption (including canned and cured) during 1954-55 is estimated at 94.2 million lb. edible weight (10.4 lb. per head) as compared with 87.8 million lb. edible weight (9.9 lb. per head) in the previous year. This is equivalent to approximately 186.5 million lb. fresh round weight (20.5 lb per head) and 174.4 million lb. fresh round weight (19.6 per head) respectively.

3. **Processing, including Canning.**—The equipment for handling fish was in the past rather inadequate, but in most States cold storage facilities have been improved and increased in recent years. In Queensland and New South Wales, particularly, the depots which have been established at fishing ports have been equipped with cold storage space. In several States, there has been a development of establishments equipped for snap freezing of fish, in particular the freezing of crayfish tails, prawns and scallops for export. A number of vessels have been equipped with freezing plants to process crayfish at sea.

In all States, there has been a development of facilities for light processing of fish.

Reference to the production of processed fish and number of factories operating will be found in § 5, para. 4, p. 967. Considerable expansion has taken place in the industry, particularly since 1945-46. In 1938-39, three factories processed 1,472,592 lb. of fish valued at £29,581, whereas in 1954-55 nine factories processed 10,585,052 lb., valued at £341,240.

4. **By-products.**—Processing of offal for fish-meals, etc., has been established in certain States. The processing of livers for vitamin-rich oils was undertaken in several States but as mentioned previously production has fallen to a low level in recent years.

§ 4. Inquiries and Research.

1. **General.**—The Australian fishing industry has been the subject of a number of official inquiries seeking an explanation of the very slow rate of development and the unfortunate conditions prevailing within the industry as well as the paucity of supplies available to the public. Details of the inquiries undertaken, the recommendations arising from them, and subsequent developments will be found in Official Year Book No. 38, p. 1082.

2. **Commonwealth Scientific and Industrial Research Organization, Division of Fisheries and Oceanography.**—Details of the establishment, organization and functions of the Division of Fisheries of the Commonwealth Scientific and Industrial Research Organization will be found in Official Year Book No. 38, p. 1083. The scientific basis on which the work of the Division is carried out has now been widened, and, to provide for this, the name of the Division has been amended to "Division of Fisheries and Oceanography".

Research carried out by the Division has assisted greatly in the development and preservation of Australian fisheries. Details may be found in Official Year Book No. 41, p. 848, and in previous issues.

3. **Commonwealth Fisheries Office.**—The Commonwealth Fisheries Office, a division of the Department of Primary Industry, arose out of a Tariff Board recommendation in 1941, following a public inquiry into the fishing industry, that a Commonwealth developmental authority should be established. Details of the establishment, organization and functions of the office will be found in Official Year Book No. 38, p. 1084.

In accordance with the Tariff Board report, scientific research, as distinct from developmental and administrative functions, was left to the Commonwealth Scientific and Industrial Research Organization which had established a Division of Fisheries for this purpose in 1937.

The Commonwealth is responsible for extra-territorial waters, whaling, pearling, rehabilitation of ex-servicemen in the fishing industry, fishery training schools, commercial development of fisheries, promotion of uniform conditions governing catches of various species of fish, statistics, information and publications.

4. **North Australia Development Committee.**—In 1946, the North Australia Development Committee recommended that a hydrological and oceanographical survey should be made of North Australian waters. It also suggested that a biological survey should be made of the pearl oyster with particular reference to the possibility of instituting pearl culture.

Further reference to these and other recommendations may be found in Official Year Book No. 41, p. 848.

The C.S.I.R.O. Division of Fisheries subsequently set up a biological research station on Thursday Island, mainly for the pearl and pearl-shell investigations. Since 1951, a research vessel has been based on Thursday Island and is used for diving, biological and hydrological work.

5. **Whaling.**—The Commonwealth Fisheries Office carried out extensive investigational and preparatory work for the establishment of an Australian whaling industry. In 1949, a privately-owned station began operating at Pt. Cloates, Western Australia. The same year the Australian Whaling Commission was established. The Commission built a station at Babbage Island, near Carnarvon, Western Australia, but it did not begin operating until almost the end of the 1950 season. In 1956, legislation was passed to dissolve the Commission, and its assets were sold to Nor' West Whaling Company. From the proceeds of the sale a Fisheries Development Trust Account was set up to foster the development of the Australian fishing industry. There is also a small station in Western Australia at Cheynes Beach near Albany. A large station began operating in 1952 at Moreton Island (Queensland), and in 1954 a small station began operating at Byron Bay (New South Wales). In 1956, the company operating the Byron Bay station established a station at Norfolk Island. In the same year, the station operating at Pt. Cloates (W.A.) closed down. In

1955, the five stations operating processed 1,840 whales, producing whale oil and other products valued at £1,953,000. A table showing statistics of whaling operations appears in § 5, para. 2, following.

The Director of Fisheries represents Australia on the International Whaling Commission, which controls whaling throughout the world.

§ 5. The Fishing and Whaling Industry—Statistics.

1. Fisheries.—(i) *Quantity and Gross Value of Take.* Recorded production for all fisheries is shown in the following table.

RECORDED FISHERIES PRODUCTION: QUANTITY AND GROSS VALUE OF TAKE, 1954-55.

Particulars.	Unit.	N.S.W.	Vic.(a)	Qld.	S.A.	W.A.	Tas.(a)	Aust.(b)
<i>Fish—</i>								
Equivalent Round Weight	'000 lb.	26,441	13,833	9,368	8,154	9,393	3,115	70,422
Gross Value	£'000	1,824	866	499	768	510	153	4,632
<i>Crustaceans—</i>								
Gross Weight	'000 lb.	5,385	1,282	2,565	4,590	10,951	2,895	27,668
Gross Value	£'000.	755	147	279	396	1,099	253	2,929
<i>Molluscs—</i>								
In-shell Weight	'000 lb.	10,198	47	185	..	51	5,450	15,931
Gross Value	£'000.	669	1	7	..	2	150	829
<i>Shark Livers—</i>								
Gross Weight	'000 lb.	..	60	..	110	..	..	170
Gross Value	£'000.	..	8	..	14	..	..	22
<i>Pearl-shell(c)—</i>								
Weight	'000 lb.	..	..	896	..	1,250	..	2,489
Gross Value	£'000.	..	..	202	..	356	..	647
<i>Trochus-shell(c)—</i>								
Weight	'000 lb.	..	..	2,775	..	9	..	2,784
Gross Value	£'000.	..	..	349	..	1	..	350

(a) Catch by Victorian fishermen in Tasmanian waters is included in Victoria. (b) Includes Northern Territory; 118,000 lb. of fish valued at £12,000 and 343,000 lb. of pearl-shell valued at £89,000. (c) Western Australia season ended 15th December. Northern Territory season ended 31st January.

RECORDED FISHERIES PRODUCTION: QUANTITY AND GROSS VALUE OF TAKE, 1950-51 TO 1954-55.

Particulars.	Unit.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>Fish—</i>						
Equivalent Round Weight	'000 lb.	(a) 71,337	71,634	81,379	78,828	70,422
Gross Value	£'000.	3,317	3,810	4,514	4,716	4,632
<i>Crustaceans—</i>						
Gross Weight	'000 lb.	17,657	17,260	19,722	22,265	27,668
Gross Value	£'000.	1,290	1,863	2,106	2,510	2,929
<i>Molluscs—</i>						
In-shell Weight	'000 lb.	8,632	9,761	11,719	13,570	15,931
Gross Value	£'000.	369	436	487	641	829
<i>Shark Livers—</i>						
Gross Weight	'000 lb.	(a) 250	199	308	254	170
Gross Value	£'000.	(a) 25	25	40	34	22
<i>Pearl-shell—(b)</i>						
Weight	'000 lb.	2,441	1,906	2,048	2,337	2,489
Gross Value	£'000.	479	459	487	595	647
<i>Trochus-shell—(b)</i>						
Weight	'000 lb.	2,883	2,634	2,238	3,057	2,784
Gross Value	£'000.	228	234	146	260	350

(a) Incomplete; excludes catch by Victorian fishermen in Tasmanian waters, details of which are not available. (b) Western Australia, season ended 15th December. Northern Territory, season ended 31st January.

(ii) *Boats and Men Engaged, etc.* The following table shows particulars of boats and equipment used and persons engaged in the various fisheries. Details relating to oyster leases are also shown.

**FISHERIES : BOATS AND EQUIPMENT IN USE AND PERSONS
ENGAGED, 1954-55.**

Particulars.	Unit.	N.S.W.	Vic.	Qld.	S.A.	W.A. (a)	Tas.	N.T.	Aust.
<i>General Fisheries—(b)</i>									
Boats Engaged ..	No.	2,280	726	4,331	1,439	616	621	17	10,030
Value of Boats and Equipment ..	£'000	1,668	776	1,561	510	1,245 (c)	475	5	6,240
Persons Engaged ..	No.	2,239	1,018	9,157	5,037	1,069	1,126	39	19,685
<i>Edible Oyster Fisheries—</i>									
Boats Engaged ..	"	1,038	4	52	..	..	10	..	1,104
Value of Boats and Equipment ..	£'000	113	(d)	10	..	..	(c)	..	123
Persons Engaged ..	No.	783	5	109	..	15	10	..	922
Leases Granted ..	"	(e)5,291	5	364	..	..	..	..	5,660
Length of Foreshore in Leases ..	'000 yds	(f)1,027	16	(g)	..	..	..	..	(h)1,043
<i>Pearl, Pearl-shell and Trochus-shell Fisheries—</i>									
Boats Engaged ..	No.	..	..	88	..	30	..	9	127
Value of Boats and Equipment ..	£'000	..	..	367	..	147	..	50	564
Persons Engaged ..	No.	..	..	1,114	..	314	..	78	1,506
<i>Total, All Fisheries—</i>									
Boats Engaged ..	No.	3,318	730	4,471	1,439	646	631	26	11,261
Value of Boats and Equipment ..	£'000	1,781	776	1,938	510	1,392	475	55	6,927
Persons Engaged ..	No.	3,022	1,023	10,380	5,037	1,398	1,136	117	22,113

(a) Year ended 31st December, 1954. (b) Includes Crustacean and Scallop Fisheries. (c) Value of boats engaged in Oyster Fisheries is included in General Fisheries. (d) Less than £500. (e) As at 30th June, 1955. (f) Also, 6,547 acres offshore. (g) Not available. (h) Incomplete.

**FISHERIES : BOATS AND EQUIPMENT IN USE AND PERSONS
ENGAGED, 1950-51 TO 1954-55.**

Particulars.	Unit.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
<i>General Fisheries—(a)</i>						
Boats Engaged ..	No.	8,628	8,872	9,407	9,877	10,030
Value of Boats and Equipment ..	£'000	4,149	4,613	5,028	5,936	6,240
Persons Engaged ..	No.	14,870	16,602	17,401	18,598	19,685
<i>Edible Oyster Fisheries—</i>						
Boats Engaged ..	No.	1,020	1,114	1,079	978	1,104
Value of Boats and Equipment ..	£'000	90	98	103	129	123
Persons Engaged ..	No.	664	901	871	700	922
Leases Granted ..	"	5,403	5,495	5,543	5,634	5,660
Length of Foreshore in Leases(b)(c) ..	'000 yds.	1,016	1,006	1,039	1,020	1,043
<i>Pearl, Pearl-shell and Trochus-shell Fisheries—</i>						
Boats Engaged ..	No.	154	132	114	124	127
Value of Boats and Equipment ..	£'000	558	523	441	502	564
Persons Engaged ..	No.	1,621	1,516	1,152	1,386	1,506
<i>Total, All Fisheries—</i>						
Boats Engaged ..	No.	9,802	10,118	10,600	10,979	11,261
Value of Boats and Equipment ..	£'000	4,797	5,234	5,572	6,567	6,927
Persons Engaged ..	No.	17,155	19,019	19,424	20,684	22,113

(a) Includes Crustacean and Scallop Fisheries. (b) Incomplete; details for Queensland are not available. (c) Also (in N.S.W.) 5,628 acres offshore in 1950-51; 5,749 in 1951-52; 5,888 in 1952-53; 6,296 in 1953-54; and 6,547 in 1954-55.

2. Whaling.—The information summarized in the table below was supplied by the Commonwealth Fisheries Office. Details relate to seasons extending from about May to October of each year.

WHALING STATISTICS, AUSTRALIA.

Particulars.	Unit.	1951.	1952.	1953.	1954.	1955.
Seasonal Quota(a)	No.	1,250	1,850	2,000	2,040	1,840
Whales Taken	"	1,224	1,787	2,001	(b) 2,039	1,840
Whales Processed	"	1,220	1,780	2,001	(b) 2,039	1,840
Average Length of Whales Processed	ft.	40.3	40.1	40.0	39.8	40.8
Average Oil Production per Whale Processed	Barrel c	45.9	51.3	51.2	49.1	51.8
Persons Employed—At Sea	No.	48	110	110	114	124
Persons Employed—Ashore	"	230	390	390	420	433
Whale Oil Produced—Quantity	Barrel c	56,051	91,360	102,354	100,068	95,258
Whale Products—Value	£'000	1,601	1,670	1,803	1,960	1,953

(a) In terms of humpback whales, as determined by the Minister for Primary Industry, acting on the advice of the Director of Fisheries. For quota purposes, 1 blue whale is taken as equivalent to 2 fin whales, 2½ humpback whales or 6 sei whales. (b) Includes one blue whale. (c) 6 barrels = 1 ton.

3. Value of Production.—(i) *Gross and Local Values, 1954–55.* Although statistics of the value of production of the fishing industry have been on an established basis for some years, attention is drawn to the fact that the actual collection of statistics of the quantity of fish taken presents many difficulties and consequently any defects which may occur in the collection must necessarily be reflected in the value of production. Particulars of the value of materials used in the process of production are not available for all States, so the values can only be stated at the point of production and not on a net basis as has been done with other industries. Variations in the relative proportions of marketing costs to gross production suggest that complete uniformity in method has not yet been attained.

GROSS AND LOCAL VALUE OF PRODUCTION: FISHING AND WHALING, 1954-55. (£'000.)

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.
New South Wales	3,268	529	2,739
Victoria	1,002	153	849
Queensland	1,436	161	1,275
South Australia	1,178	132	1,046
Western Australia	2,192	43	2,149
Tasmania	556	..	556
Northern Territory	113	..	113
Total	9,745	1,018	8,727

(ii) *Local Values, 1934–35 to 1938–39 (Average) and 1950–51 to 1954–55.* In the following table, the local value of fisheries production and the local value per head of population are shown by States for the average of years 1934–35 to 1938–39 and for each of the years 1950–51 to 1954–55. Local value is gross value less marketing costs and is the value at the place of production. Because the value of materials used in the course of production is not available for all States it is not possible to show a comparison of net values.

LOCAL VALUE OF FISHING AND WHALING PRODUCTION.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
LOCAL VALUE. (£'000.)							
Average, 1934-35 to							
1938-39 ..	588	159	292	182	229	80	1,530
1950-51 ..	1,730	700	812	404	812	411	4,869
1951-52 ..	1,821	706	835	701	1,225	441	5,729
1952-53 ..	2,233	753	844	851	1,610	606	6,897
1953-54 ..	2,642	834	951	1,015	1,867	432	7,741
1954-55 ..	2,739	849	1,275	1,046	2,149	556	(a) 8,727

LOCAL VALUE PER HEAD OF POPULATION.
(s. d.)

Average, 1934-35 to							
1938-39 ..	4 5	1 9	5 11	6 3	10 0	6 11	4 6
1950-51 ..	10 8	6 3	13 5	11 2	28 6	29 0	11 9
1951-52 ..	10 11	6 1	13 5	18 11	41 6	30 1	13 6
1952-53 ..	13 3	6 4	13 3	22 3	52 8	40 1	15 11
1953-54 ..	15 6	6 10	14 7	25 10	59 2	27 11	17 6
1954-55 ..	15 10	6 10	19 3	25 11	66 3	35 6	(a) 19 3

(a) Includes Northern Territory.

4. Fish Preserving.—The attempt to establish the fish preserving industry at the commencement of this century met with little success although a bounty was paid to encourage production. The industry, however, continued to operate, but there was no marked development until about 1945-46 when the production of canned fish amounted to 1,700,000 lb. After that year, production increased considerably and reached a peak of 10,900,000 lb. in 1948-49, but by 1950-51 it had declined to 7,300,000 lb. It increased again to 7,700,000 lb. in 1952-53, but declined again to 6,600,000 lb. in 1953-54 and was at approximately the same level in 1954-55.

In addition to the canning of fish, other fish products are produced. In 1954-55, these included 66,000 lb. of smoked fish, 1,055,000 lb. of fish paste and a considerable quantity of frozen crayfish tails for export.

In 1939, New South Wales and Tasmania were the only States canning fish, but the industry has since been extended to Victoria, South Australia and Western Australia. Details of production are given in the following table for the years 1938-39 and 1950-51 to 1954-55.

PRODUCTION OF CANNED FISH(a): AUSTRALIA.

Particulars.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories operating ..	3	18	17	13	11	9
Quantity produced .. lb.	603,302	7,279,033	7,294,622	7,705,081	6,604,587	6,645,552
Value .. £	13,700	723,689	965,100	1,020,307	838,179	834,090

(a) Including the canning of fish loaf and crustaceans.

The varieties canned in the several States differ according to the species caught, but separate details for each variety are not available. In New South Wales, Australian salmon and tuna are the principal varieties. Barracouta is of major importance in Victoria and Tasmania; and Australian salmon predominates in South Australia and Western Australia; herrings are also important in the latter State.

5. **State Revenue from Fisheries.**—The revenue from fisheries during the year 1954–55 was £62,416, compared with £66,420 in 1953–54 and £34,273 in 1938–39. Of the total of £62,416 in 1954–55, New South Wales collected £30,037, Victoria £4,031, Queensland £13,057, South Australia £4,779, Western Australia (year ended December, 1954) £5,596, Tasmania £4,843 and Northern Territory £73.

§ 6. Oversea Trade in Fishery Products.

NOTE.—Values of Australian oversea trade shown in this section are expressed in £A. f.o.b., port of shipment.

1. **Imports of Fish.**—The equivalent, in the round, of imported fish consumed in Australia in 1954–55 was 34 per cent. of the total consumption. Particulars of the imports of fish are shown below for the years 1950–51 to 1954–55 in comparison with 1938–39.

FISH (INCLUDING SHELL FISH): IMPORTS INTO AUSTRALIA. (Cwt.)

Classification.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Fresh or preserved by cold process	84,028	103,926	150,972	86,397	140,769	165,072
Potted or concentrated	9,435	1,959	1,766	583	1,359	1,388
Preserved in Tins—						
Fish—						
Herrings	38,917	95,227	88,149	20,030	61,277	60,542
Salmon	166,695	14,923	20,387	24,855	27,339	57,897
Sardines, Sild and Pilchards	29,372	81,575	74,375	3,842	41,695	51,050
Other	14,306	4,535	15,455	916	3,459	5,574
Crustaceans and Molluscs—						
Crustaceans	6,829	6,194	3,308	2,150	4,141	4,922
Oysters	1,939	121	198	115	272	} 496
Other	(a)	74	225	113	137	
'Smoked or Dried (not salted) ..	8,122	64,099	56,235	55,929	50,291	60,485
'Other (including salted)	7,987	8,655	11,911	6,878	11,296	12,294

(a) Not recorded separately.

The value of fish and fish products imported during 1954–55 amounted to £5,571,000, compared with £4,104,000 in 1953–54.

Canned fish (total imports of which in 1954–55 were valued at £3,532,000) accounted for most of the imports; salmon from the U.S.S.R. and Japan, herrings from the United Kingdom and Norway and sardines from Norway were the chief varieties imported. A considerable proportion of the fresh fish imported in 1954–55 came from the United Kingdom, the Union of South Africa and New Zealand, and the potted fish came chiefly from the United Kingdom; the bulk of the remainder came from South Africa and the United Kingdom.

2. **Exports of Fish.**—During 1954–55, the exports of fish of Australian origin were as follows:—Fresh or frozen crayfish tails, 39,906 cwt., £1,673,110; other fish (including shell fish), fresh or preserved by cold process, 9,163 cwt., £92,562; oysters in shell, 475 cwt., £4,322; potted or concentrated, 21 cwt., £515; fish preserved in tins, 3,737 cwt., £77,666; shell fish in tins, 446 cwt., £15,114; smoked or dried, 99 cwt., £1,942.

3. **Exports of Pearl and other Shell.**—The exports of pearl, trochus and other shell of Australian origin are shown hereunder for the years 1938–39 and 1950–51 to 1954–55.

PEARL, TROCHUS AND OTHER SHELL: EXPORTS FROM AUSTRALIA.

Article.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Pearl-shell	cwt. 52,532	22,877	14,473	24,714	23,020	23,924
	£ 244,266	485,685	370,096	694,029	653,797	690,204
Trochus-shell	cwt. 9,108	27,460	42,815	34,751	47,415	36,414
	£ 34,166	231,580	515,067	247,483	591,511	578,876
Other shell	cwt. 4	621	2,531	5,732	5,853	4,938
	£ 151	6,517	35,933	58,713	69,283	68,035

CHAPTER XXVII.

MINERAL INDUSTRY.

§ 1. The Mineral Wealth of Australia.

1. **Place of Mining in Australian Development.**—Population was first attracted to Australia in large numbers by the discovery of gold in payable quantities. This discovery was thus a significant factor in Australia's early development. In more recent times, the rapid growth of Australia's secondary industries has been associated with considerable expansion in mining for silver-lead-zinc, copper and iron ores, and coal. The value of mineral production, however, has lagged behind that recorded for Australia's large rural industries and in 1954 represented only about 11 per cent. of the net value of production of all primary industries.

2. **Extent of Mineral Wealth.**—The extent of the mineral wealth of Australia, as of any country, is not determined fully at any point of time. Regional and detailed investigations are being carried out by the Commonwealth Bureau of Mineral Resources, Geology and Geophysics, by the Geological Surveys of the State Governments and by the exploration departments of mining companies, but large areas of the country still await geological survey. Important prospects of copper, iron, lead and zinc, oil, uranium ore, bauxite (aluminium ore) and some other minerals have been recorded recently and are being investigated in detail.

3. **Standardization of Mineral Statistics.**—At the 1945 Conference of Australian Statisticians, consideration was given to the defective nature of Australian mineral production statistics arising from the widely differing methods adopted by individual States in collecting, compiling and publishing the data. Further attention was given to the problem by a conference in 1948 of officers of the Bureau of Mineral Resources, Geology and Geophysics, State Mines Departments and State and Commonwealth Statistical Bureaux. Following work subsequently undertaken by the Bureau of Mineral Resources, the Commonwealth Bureau of Census and Statistics and other authorities concerned, a specific plan for standardization of Australian mineral production statistics was adopted in 1950. In accordance with the plan, numerous improvements have been introduced and with the introduction of annual Australia-wide industrial censuses for mining and quarrying.

in 1952, Australian mineral statistics are now considered to be adequate for present needs. It should be noted that the statistics included in this chapter omit particulars relating to uranium-bearing minerals.

The fundamental provision of the plan for standardization of Australian mineral statistics is that quantities and values of individual minerals produced should be reported in terms of the products in the form in which they are despatched from the locality of each mine. This involves the inclusion in the mining industry of ore-dressing and elementary smelting of metallic minerals (e.g., in the case of gold) and miscellaneous treatment of non-metallic minerals, where these operations are carried out in an associated plant at or near the mine. For example, in the case of a metal mine, the output is recorded as ore when no treatment is undertaken at the mine or as a concentrate where ore-dressing operations are carried out in associated works in the locality of the mine. In addition to the basic quantity data, the plan provides for the reporting of contents of metallic minerals and of contents or average grade of selected non-metallic minerals. Wherever practicable, contents (based on assay) of metallic minerals are shown for each metal which is a "pay-metal" or a "refiners' prize" when present in the particular mineral.

For the purpose of compiling and publishing data relating to employment, value of output, value of production, etc., a detailed statistical classification for the mining industry has been used in Australia from 1950. For the purpose of this classification, the "Mining Industry" includes all mining and quarrying and the recovery of minerals from ore dumps, tailings, etc. As mentioned above, ore dressing and miscellaneous treatment of non-metallic minerals (where these are carried out in an associated plant at or near the mine) are included in the Mining Industry. However, establishments primarily engaged in smelting and/or refining (including the smelting and refining sections of the large plants operated at Mt. Morgan and Mt. Isa in Queensland and at Mt. Lyell in Tasmania) are omitted and classified to the Manufacturing Industry. The classification divides the industry into four major groups, namely, Metal Mining, Fuel Mining, Non-metal (excluding Fuel) Mining and Construction Material Quarrying.

The adoption of revised methods of compiling and presenting mineral statistics in 1950 caused a break in continuity of the data published for earlier years, and the introduction of industrial censuses of the mining and quarrying industry in all States in 1952 has caused a further break in continuity of data, particularly those relating to values.

In the main, the data consist of official statistics of Mines Departments furnished to this Bureau by the Statisticians of the several States and by the Northern Territory Mines Branch. These statistics have been supplemented, as necessary, by data obtained from the Australian Mines and Metals Association (Inc.) the Bureau of Mineral Resources, Geology and Geophysics and several other sources. The particulars shown have been compiled as far as practicable on the standardized basis. This has involved some re-arrangement of official statistics published by Mines Departments for some States.

In the tables, individual minerals are arranged in four groups, Metallic Minerals, Fuel Minerals, Non-metallic (excluding Fuel) Minerals and Construction Materials, to correspond with the major groups of the statistical classification of the mining industry.

4. Quantity and Value of Minerals Produced in 1955.—(i) *Quantities.* In the following table particulars of the quantities of principal minerals produced are shown for each State and the Northern Territory for 1955.

QUANTITIES OF PRINCIPAL MINERALS PRODUCED, 1955.

Mineral.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aust.
METALLIC MINERALS.									
Antimony Ore and Concentrate	ton	(a) 419	4	23	..	204	..	..	650
Bauxite	"	2,847	2,991	1,725	..	..	..	..	7,563
Beryllium Ore	"	7	..	..	..	199	..	..	206
Copper Ore, Concentrate and Precipitate ..	"	3,647	..	157,867	..	12	38,105	12,020	211,651
Gold Ore, Concentrate, etc.	"	165	6	..	..	..	..	..	171
Gold—Other Forms(b) ..	oz.	18,813	44,479	(c)	(c)	(c)	(c)	(c)	(c)
Iron Ore	'000 tons	..	..	..	3,044	529	..	..	3,573
Lead Ore, Concentrate ..	ton	339,235	..	155,488	7	1,416	12,278	..	508,424
Manganese Ore	"	1,622	..	78	..	44,194	..	1,462	47,356
Monazite Concentrate ..	"	(a) 117	..	47	..	..	..	..	164
Pyritic Ore and Concentrate	"	22,850	..	77,400	28,730	49,485	45,010	..	223,475
Rutile Concentrate	"	34,403	..	25,210	..	..	..	..	59,613
Tantalite-Columbite Concentrate	lb.	..	..	..	..	..	..	..	..
Tin Concentrate	ton	(a) 378	3	1,092	..	180	1,232	5	27,139
Tungsten Concentrates—Scheelite Concentrate ..	"	9	..	(d)	..	8	1,432	..	1,449
Wolfram Concentrate ..	"	2	..	79	..	..	578	129	788
Zinc Ore and Concentrate	"	408,321	..	33,539	..	..	50,689	..	492,549
Zircon Concentrate	"	32,827	..	15,846	..	..	..	..	48,673
FUEL MINERALS.									
Coal, Black—									
Semi-Anthracite	'000 tons	2	..	80	..	..	2	..	84
Bituminous	"	14,718	133	2,460	..	..	298	..	17,609
Sub-Bituminous	"	16	..	207	455	904	..	..	1,582
Total	"	14,736	133	2,747	455	904	300	..	19,275
Coal, Brown (including Lignite)	"	..	10,112	..	..	..	..	..	10,112
NON-METALLIC (EXCLUDING FUEL) MINERALS.									
Asbestos	ton	590	..	..	..	4,762	..	..	5,352
Barite	"	2,086	..	..	4,168	10	..	..	6,264
Clays—									
Brick Clay and Shale ..	'000 tons	1,589	(e) 889	265	306	(e) 434	(e) 73	..	3,556
Other	"	497	(f) 137	(f) 10	(f) 81	(f) 43	(f) 10	..	(f) 778
Corundum	ton	..	..	..	..	9	..	..	9
Cupreous Ore and Concentrate—For Fertilizer ..	"	..	..	..	..	7,731	..	..	7,731
Diatomite	"	3,629	882	531	..	..	..	..	5,042
Dolomite	"	6,354	..	5,318	97,398	81	2,266	..	111,417
Emery .. ..	"	..	..	..	..	8	..	..	8
Felspar (including Cornish Stone)	"	11,608	..	..	5,660	3,565	..	..	20,833
Garnet .. ..	"	..	..	85	..	..	..	..	85
Glauconite .. ..	"	..	..	..	..	197	..	..	197
Gypsum	"	136,356	89,190	..	204,522	39,946	..	..	470,014
Limestone(g)	'000 tons	1,690	714	121	987	280	206	(d)	3,998
Magnesite	ton	57,262	..	..	412	..	..	..	57,674
Mica—Muscovite	lb.	20,160	..	..	..	..	..	56,649	76,809
Salt	ton	..	e 67,000	(e) 4,500	291,323	(e) 6,500	..	..	h 369,323
Silica (Glass, Chemical, etc.)	"	103,682	..	10	23,443	6,759	5,657	..	139,551
Talc (including Steatite) ..	"	817	..	..	9,163	2,587	..	..	12,567
CONSTRUCTION MATERIALS. (f)									
Sand	'000 tons	1,362	1,041	(c)	1,319	10	(c)	..	3,732
Gravel and Gravel Boulders, River Origin ..	"	1,514	229	(c)	..	..	..	..	1,743
Dimension Stone	"	111	12	4	59	88	..	..	274
Crushed and Broken Stone	"	2,265	3,935	798	5,459	775	135	..	13,367
Other (Decomposed Rock, etc.)	"	10,215	536	..	..	7	..	..	10,758

(a) Despatches from the mine (or sales) as distinct from production. (b) Bullion, alluvial, retorted gold, etc. (c) Not available. (d) Less than half the unit of quantity shown. (e) Estimated. (f) Incomplete. (g) Excludes quantities used directly as a building or road material. (h) Partly estimated.

(ii) *Principal Contents of Metallic Minerals.* The following table provides a summary of the principal contents of metallic minerals produced in 1955. Further particulars, including data for earlier years, are shown in the several sections dealing with individual minerals later in this chapter.

PRINCIPAL CONTENTS OF METALLIC MINERALS PRODUCED, 1955.

Content of Metallic Minerals Produced.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aust.
Antimony ..	ton	850	3	10	..	59	..	..	922
Cadmium ..	"	795	..	..	..	..	49	..	844
Cobalt ..	"	61	..	..	..	..	..	..	61
Copper ..	"	3,492	..	30,738	..	3	8,394	2,869	45,496
Gold ..	fine oz.	30,067	38,035	64,322	50	834,326	16,882	65,357	1,049,039
Iron ..	'000 tons	..	..	..	1,979	325	..	..	2,304
Lead ..	ton	234,854	..	48,814	2	1,007	11,267	..	295,944
Silver ..	'000 fine oz.	8,823	2	4,363	..	201	1,166	..	14,555
Sulphur(a) ..	ton	142,888	2,381	47,515	14,152	22,004	38,243	..	267,183
Tin ..	"	270	2	770	..	119	853	3	2,017
Tungsten(b) ..	"	8	..	51	..	5	1,337	81	1,482
Zinc ..	"	211,478	..	17,138	..	..	27,948	..	256,564

(a) Sulphur content of zinc concentrate, pyrite and spent oxide.

(b) In terms of WO₃.

(iii) *Values.* Particulars of the estimated values of minerals (mine and quarry products) produced in 1955 are shown in the following table. The values represent the estimated selling value at the mine or quarry of minerals produced during the year.

VALUE OF MINERALS PRODUCED, 1955.

(£'000.)

Mineral.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aust.
METALLIC MINERALS.								
Copper Ore, Concentrate and Precipitate ..	289	..	10,200	..	(b)	(b)	611	15,018
Gold Ore, Concentrate, etc. ..	5	(a)	..	..	..	..	..	5
Gold—Other Forms ..	275	638	296	1	13,450	5	866	15,531
Iron Ore ..	..	..	..	(b)	(b)	..	..	4,004
Lead-Silver and Lead-Silver-Zinc Ores ..	295	..	..	(a)	20	93	..	408
Lead Concentrate ..	25,075	..	5,799	..	49	977	..	31,900
Manganese Ore ..	15	..	2	..	147	..	28	192
Pyritic Ore and Concentrate ..	118	..	239	(b)	(b)	(b)	..	1,091
Rutile Concentrate ..	1,856	..	1,139	..	..	..	..	2,995
Tin Concentrate ..	216	1	575	..	90	669	3	1,554
Tungsten Concentrates ..	10	..	69	..	7	3,171	118	3,375
Zinc Concentrate ..	6,191	..	820	..	..	868	..	7,879
Zircon Concentrate ..	246	..	146	..	..	..	..	392
Other Metallic Minerals ..	72	21	18	..	60	8	..	179
<i>Total, Metallic Minerals</i> ..	34,663	660	19,303	3,703	14,725	9,843	1,626	84,523

FUEL MINERALS.

Coal, Black ..	41,715	815	6,729	778	3,089	611	..	53,737
Coal, Brown ..	..	4,382	..	..	..	..	..	4,382
<i>Total, Fuel Minerals</i> ..	41,715	5,197	6,729	778	3,089	611	..	58,119

NON-METALLIC (EXCLUDING FUEL) MINERALS.

<i>Total, Non-metallic (excluding Fuel) Minerals</i> ..	2,338	1,128	493	2,137	1,050	194	65	7,405
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CONSTRUCTION MATERIALS.(c)

<i>Total, Construction Materials</i> ..	5,528	3,932	367	3,894	882	96	..	(d)14,824
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TOTAL.

<i>Total, All Minerals and Construction Materials</i> ..	84,244	10,917	26,892	10,512	19,746	10,744	1,691	d164,871
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(a) Less than £500.

(b) Not available for publication.

(c) Incomplete.

(d) Includes

Australian Capital Territory, £125,000.

5. Mine Production of Principal Metals and Production of Coal and Sulphur, 1951 to 1955.—Particulars of the mine production of principal metals (i.e., metallic contents of minerals produced) and production of coal and sulphur in the years 1951 to 1955 are shown in the following table.

MINE PRODUCTION OF PRINCIPAL METALS AND PRODUCTION OF COAL AND SULPHUR.

Particulars.	Unit.	1951.	1952.	1953.	1954.	1955.
Metallic Content of Minerals Produced(a)—						
Copper	ton	17,926	18,578	36,585	40,857	45,496
Gold	fine oz.	895,551	980,435	1,075,181	1,117,742	1,049,039
Lead	ton	212,013	228,196	269,344	284,862	295,944
Iron(b)	"	1,605,400	1,883,087	2,131,865	2,274,330	2,304,165
Silver	fine oz.	10,243,691	11,278,374	12,539,152	13,827,038	14,555,412
Tin	ton	1,559	1,611	1,553	2,075	2,017
Tungsten(c)	"	1,112	1,282	1,406	1,372	1,482
Zinc	"	189,227	196,450	239,324	252,659	256,564
Production of—						
Coal—Black	"	17,608,428	19,404,047	18,410,845	19,763,039	19,274,751
Brown	"	7,836,056	8,103,764	8,257,299	9,331,255	10,112,206
Sulphur(d)	"	183,126	217,242	225,197	254,403	267,183

(a) Mine production of metals. (b) Estimated. (c) In terms of WO₃. (d) Total sulphur content of zinc concentrate and pyrite produced and of spent oxide roasted.

6. Value of Output and Value of Production for Mining and Quarrying.—(i) *Individual Industries, 1954 and 1955.* The following two tables show particulars of the value of output and value of production of individual mining and quarrying industries and for all mining and quarrying for the years 1954 and 1955. The data were obtained from industrial censuses of the mining and quarrying industry which were made on a substantially uniform basis in all States and Territories.

MINING AND QUARRYING : VALUE OF OUTPUT.(a)
(£'000.)

Industry.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1954.									
<i>Metal Mining—</i>									
Gold Mining	329	880	277	1	13,381	..	839	..	15,707
Silver-Lead-Zinc Mining	26,672	..	(b)	(b)	(b)	2,374	..	..	38,905
Copper-Gold Mining	16	..	(b)	..	..	(b)	114	..	5,568
Tin Mining	212	..	549	..	67	1,068	13	..	1,909
Mineral Sands Mining	990	..	943	..	..	..	..	..	1,933
Other Metal Mining	89	7	(b)	(b)	(b)	(b)	55	..	7,128
<i>Total, Metal Mining</i>	<i>28,308</i>	<i>887</i>	<i>14,304</i>	<i>3,300</i>	<i>15,218</i>	<i>8,112</i>	<i>1,021</i>	<i>..</i>	<i>71,150</i>
<i>Fuel Mining—</i>									
Black Coal Mining	42,762	886	6,474	650	3,589	523	..	..	54,884
Brown Coal Mining .. .. .	..	3,945	..	..	..	..	..	..	3,945
<i>Total, Fuel Mining</i>	<i>42,762</i>	<i>4,831</i>	<i>6,474</i>	<i>650</i>	<i>3,589</i>	<i>523</i>	<i>..</i>	<i>..</i>	<i>58,829</i>
<i>Non-metal (excluding Fuel) Mining—</i>									
Clays(c)	773	459	92	266	281	48	..	(d)	1,919
Gypsum	165	54	..	182	32	..	..	..	433
Limestone	817	544	(b)	640	(b)	143	..	..	2,678
Salt(c) .. .. .	..	..	(b)	(b)	..	..	..	..	621
Other Non-metal (excluding Fuel) Mining	341	6	7	(b)	(b)	13	124	..	1,391
<i>Total, Non-metal (excluding Fuel) Mining</i>	<i>2,096</i>	<i>1,063</i>	<i>518</i>	<i>1,959</i>	<i>1,078</i>	<i>204</i>	<i>124</i>	<i>(d)</i>	<i>7,042</i>
<i>Total, All Mining</i>	<i>73,166</i>	<i>6,781</i>	<i>21,296</i>	<i>5,909</i>	<i>19,885</i>	<i>8,839</i>	<i>1,145</i>	<i>(d)</i>	<i>137,021</i>
<i>Construction Material Quarrying(c)</i>									
<i> Total, All Mining and Quarrying</i>	<i>5,036</i>	<i>3,299</i>	<i>307</i>	<i>2,671</i>	<i>851</i>	<i>116</i>	<i>..</i>	<i>103</i>	<i>12,383</i>
<i> Total, All Mining and Quarrying</i>	<i>78,202</i>	<i>10,080</i>	<i>21,603</i>	<i>8,580</i>	<i>20,736</i>	<i>8,955</i>	<i>1,145</i>	<i>103</i>	<i>149,404</i>

For footnotes see next page.

MINING AND QUARRYING: VALUE OF OUTPUT(a)—continued.
(£'000.)

Industry.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1955.									
<i>Metal Mining—</i>									
Gold Mining ..	283	640	295	1	13,449	..	866	..	15,534
Silver-Lead-Zinc Mining ..	31,950	..	(b)	(e)	(b)	2,669	..	..	49,143
Copper-Gold Mining ..	23	..	(b)	(e)	(b)	(b)	611	..	6,559
Tin Mining ..	216	..	575	..	90	1,128	3	..	2,012
Mineral Sands Mining ..	2,120	..	1,295	..	..	..	..	..	3,415
Other Metal Mining ..	78	20	(b)	3,702	1,116	(b)	146	..	7,867
<i>Total, Metal Mining</i>	<i>34,670</i>	<i>660</i>	<i>19,303</i>	<i>3,703</i>	<i>14,725</i>	<i>9,843</i>	<i>1,626</i>	<i>..</i>	<i>84,530</i>
<i>Fuel Mining—</i>									
Black Coal Mining ..	41,715	815	6,729	778	3,089	611	..	..	53,737
Brown Coal Mining ..	..	4,382	..	..	..	..	..	..	4,382
<i>Total, Fuel Mining</i>	<i>41,715</i>	<i>5,197</i>	<i>6,729</i>	<i>778</i>	<i>3,089</i>	<i>611</i>	<i>..</i>	<i>..</i>	<i>58,119</i>
<i>Non-metal (excluding Fuel) Mining—</i>									
Clays(c) ..	845	474	92	241	254	51	..	(d)	1,957
Gypsum ..	191	87	..	243	30	..	..	..	551
Limestone ..	842	561	(b)	775	(b)	131	..	..	2,835
Salt(c) ..	..	(b)	(b)	(b)	(b)	..	..	..	592
Other Non-metal (excluding Fuel) Mining	439	6	11	(b)	(b)	12	65	..	1,440
<i>Total, Non-metal (excluding Fuel) Mining</i>	<i>2,317</i>	<i>1,128</i>	<i>493</i>	<i>2,128</i>	<i>1,050</i>	<i>194</i>	<i>65</i>	<i>(d)</i>	<i>7,375</i>
<i>Total, All Mining</i>	<i>78,702</i>	<i>6,985</i>	<i>26,525</i>	<i>6,609</i>	<i>18,864</i>	<i>10,648</i>	<i>1,691</i>	<i>(d)</i>	<i>150,024</i>
<i>Construction Material Quarrying(c) ..</i>	<i>5,542</i>	<i>3,932</i>	<i>367</i>	<i>3,903</i>	<i>882</i>	<i>96</i>	<i>..</i>	<i>125</i>	<i>14,847</i>
<i>Total, All Mining and Quarrying</i>	<i>84,244</i>	<i>10,917</i>	<i>26,892</i>	<i>10,512</i>	<i>19,746</i>	<i>10,744</i>	<i>1,691</i>	<i>125</i>	<i>164,871</i>

(a) Selling value at point of sale of mine or quarry products, less transport costs from mine or quarry to point of sale, i.e., value of output at mine or quarry. (b) Not available for publication. (c) Incomplete. (d) Not available for publication; included with "Construction Material Quarrying". (e) Not available for publication; included with "Other Metal Mining".

MINING AND QUARRYING: VALUE OF PRODUCTION.(a)
(£'000.)

Industry.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1954.									
<i>Metal Mining—</i>									
Gold Mining ..	240	615	218	(b) —3	8,785	..	790	..	10,645
Silver-Lead-Zinc Mining ..	21,115	..	(c)	(c)	(e)	2,131	(b) (c)	..	30,186
Copper-Gold Mining ..	10	..	(c)	..	..	(c)	78	..	3,760
Tin Mining ..	181	..	421	..	43	903	10	..	1,558
Mineral Sands Mining ..	772	..	715	..	..	..	(b) (c)	..	1,487
Other Metal Mining ..	75	7	(c)	(c)	(e)	(c)	40	..	6,217
<i>Total, Metal Mining</i>	<i>22,393</i>	<i>622</i>	<i>10,151</i>	<i>3,047</i>	<i>10,350</i>	<i>6,379</i>	<i>911</i>	<i>..</i>	<i>53,853</i>
<i>Fuel Mining—</i>									
Black Coal Mining ..	34,811	728	5,192	501	2,989	432	..	..	44,653
Brown Coal Mining ..	..	3,534	..	..	..	..	..	..	3,534
<i>Total, Fuel Mining</i>	<i>34,811</i>	<i>4,262</i>	<i>5,192</i>	<i>501</i>	<i>2,989</i>	<i>432</i>	<i>..</i>	<i>..</i>	<i>48,187</i>
<i>Non-metal (excluding Fuel) Mining—</i>									
Clays(d) ..	773	417	..	241	280	43	..	(e)	1,754
Gypsum ..	128	37	..	134	32	..	..	..	331
Limestone ..	546	289	(c)	501	(e)	95	..	..	1,902
Salt(d) ..	..	..	(c)	(c)	..	..	..	..	523
Other Non-metal (excluding Fuel) Mining	278	5	7	(c)	(e)	11	117	..	1,110
<i>Total, Non-metal (excluding Fuel) Mining</i>	<i>1,726</i>	<i>748</i>	<i>395</i>	<i>1,609</i>	<i>877</i>	<i>149</i>	<i>117</i>	<i>(e)</i>	<i>5,620</i>
<i>Total, All Mining</i>	<i>58,929</i>	<i>5,632</i>	<i>15,738</i>	<i>5,157</i>	<i>14,216</i>	<i>6,960</i>	<i>1,028</i>	<i>(e)</i>	<i>107,660</i>
<i>Construction Material Quarrying(d) ..</i>	<i>5,036</i>	<i>2,514</i>	<i>197</i>	<i>1,944</i>	<i>560</i>	<i>97</i>	<i>..</i>	<i>80</i>	<i>10,428</i>
<i>Total, All Mining and Quarrying</i>	<i>63,965</i>	<i>8,146</i>	<i>15,935</i>	<i>7,101</i>	<i>14,776</i>	<i>7,057</i>	<i>1,028</i>	<i>80</i>	<i>118,088</i>

For footnotes see next page.

MINING AND QUARRYING: VALUE OF PRODUCTION(a)—continued.
(£'000.)

Industry.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1955.									
<i>Metal Mining—</i>									
Gold Mining	171	431	249 (b)	—3 (f)	9,117 (c)	..	691 ..	..	10,656
Silver-Lead-Zinc Mining ..	25,749	..	(c)	(f)	(c)	2,388 (c)	..	..	40,471
Copper-Gold Mining	10	..	(c)	(f)	(c)	..	477 ..	..	4,506
Tin Mining	181	..	437	..	50	983	3	..	1,654
Mineral Sands Mining	1,807	..	994	..	..	..	..	..	2,801
Other Metal Mining	60	20	(c)	3,292	900	(c)	141	..	6,666
<i>Total, Metal Mining</i>	<i>27,978</i>	<i>451</i>	<i>15,733</i>	<i>3,289</i>	<i>10,099</i>	<i>7,892</i>	<i>1,312</i>	<i>..</i>	<i>66,754</i>
<i>Fuel Mining—</i>									
Black Coal Mining	33,962	668	5,475	611	2,457	496	..	..	43,669
Brown Coal Mining .. ..	..	3,929	..	..	..	..	..	..	3,929
Oil Mining .. ..	..	(b) —2	..	..	..	..	..	..	(b) —2
<i>Total, Fuel Mining</i>	<i>33,962</i>	<i>4,595</i>	<i>5,475</i>	<i>611</i>	<i>2,457</i>	<i>496</i>	<i>..</i>	<i>..</i>	<i>47,596</i>
<i>Non-metal (excluding Fuel) Mining—</i>									
Clays(d)	734	442	66	211	253	46	..	(e)	1,752
Gypsum	145	75	..	174	30	..	..	..	424
Limestone	539	287	(c)	640	(c)	92	..	..	1,914
Salt(d) .. ..	..	(c)	(c)	(c)	(c)	..	..	..	443
Other Non-metal (excluding Fuel) Mining	362	5	11	(c)	(c)	11	65	..	1,236
<i>Total, Non-metal (excluding Fuel) Mining</i>	<i>1,780</i>	<i>809</i>	<i>314</i>	<i>1,711</i>	<i>941</i>	<i>149</i>	<i>65</i>	<i>(e)</i>	<i>5,769</i>
<i>Total, All Mining</i>	<i>63,720</i>	<i>5,855</i>	<i>21,522</i>	<i>5,611</i>	<i>13,497</i>	<i>8,537</i>	<i>1,377</i>	<i>(e)</i>	<i>120,119</i>
<i>Construction Material Quarrying(d)</i>	<i>5,542</i>	<i>3,012</i>	<i>210</i>	<i>2,841</i>	<i>646</i>	<i>75</i>	<i>..</i>	<i>63</i>	<i>12,389</i>
<i>Total, All Mining and Quarrying</i>	<i>69,262</i>	<i>8,867</i>	<i>21,732</i>	<i>8,452</i>	<i>14,143</i>	<i>8,612</i>	<i>1,377</i>	<i>63</i>	<i>132,508</i>

(a) Value of output at mine, less cost of power, fuel, light and other materials and stores used; depreciation and maintenance costs have not been deducted. (b) Cost of materials used, etc., exceeds value of output. (c) Not available for publication. (d) Incomplete. (e) Not available for publication; included with "Construction Material Quarrying". (f) Not available for publication; included with "Other Metal Mining".

(ii) *States, 1939 and 1951 to 1955.* Values for individual minerals produced based on estimated selling value at the mine or quarry are shown for the year 1955 in para. 4 (iii) above. Australian State and Commonwealth Statisticians have for many years used values for mine and refinery products as recorded by Mines Departments and other relevant data (including censuses of the industry in some States) to estimate value of output and value of production for the mining and quarrying industry as a whole. The following table shows estimates on this basis for the years 1939 and 1951 together with the values ascertained from the Australia-wide mineral industry censuses of 1952, 1953, 1954 and 1955. The estimates shown for 1939 and 1951 are approximate, and as value added in ore-dressing and similar treatment plants situated at or near the mine was excluded in some cases, they are not strictly comparable with later valuations which consistently include the value of such mine treatment. Northern Territory figures are not available for years prior to 1952 nor are Australian Capital Territory figures for years prior to 1953.

MINING AND QUARRYING : VALUE OF OUTPUT AND VALUE OF PRODUCTION.
(£'000.)

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
VALUE OF OUTPUT.(a)									
1939	12,914	2,789	3,438	3,648	12,496	2,145	(b)	(b)	37,430
1951	67,877	6,949	10,922	4,938	13,474	10,552	(b)	(b)	114,712
1952	77,097	8,535	17,429	6,047	17,704	8,750	1,282	(b)	136,844
1953	72,346	9,329	17,284	6,203	20,011	8,037	1,221	111	134,542
1954	78,202	10,080	21,603	8,580	20,736	8,955	1,145	103	149,404
1955	84,244	10,917	26,892	10,512	19,746	10,744	1,691	125	164,871
VALUE OF PRODUCTION.(c)									
1939	10,927	2,111	2,688	3,444	9,268 (d)	2,145	(b)	(b)	30,583
1951	59,385	4,209	8,632	4,646	9,775 (d)	10,552	(b)	(b)	97,199
1952	63,166	6,632	13,860	5,153	12,410	7,325	1,125	(b)	109,671
1953	58,042	7,277	12,906	5,051	13,998	6,392	1,117	92	104,875
1954	63,965	8,146	15,935	7,101	14,776	7,057	1,028	80	118,088
1955	69,262	8,867	21,732	8,452	14,143	8,612	1,377	63	132,508

(a) Selling value of mine and quarry products at the mine or quarry. (b) Not available.
(c) Value of output less cost of power, fuel, light and other materials and stores used; depreciation and maintenance costs have not been deducted. (d) Value of output; value of production not available.

7. Industrial Census of the Mining and Quarrying Industry, 1954 and 1955.—Industrial censuses of the mining and quarrying industry (covering employment, salaries and wages paid, fixed assets, value of output, costs of materials used, etc.) have been taken in some Australian States for many years, but on different bases. Since 1952, censuses have been taken in all States and Territories on a substantially uniform basis, thus providing important Australian statistics on mining and quarrying operations which were not previously available. A summary of the statistics collected in 1954 and 1955 is shown in the following table.

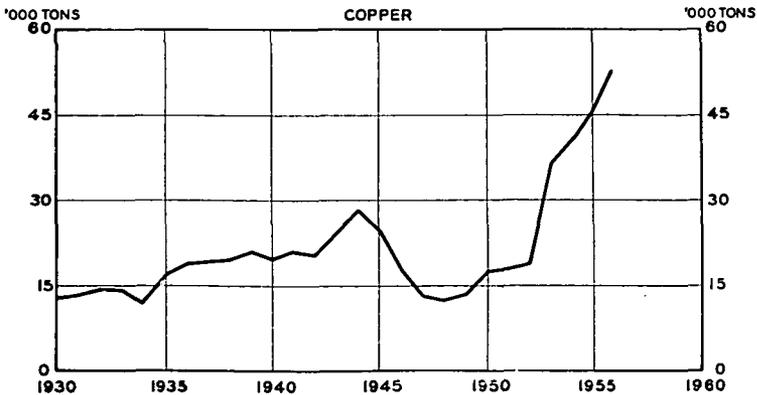
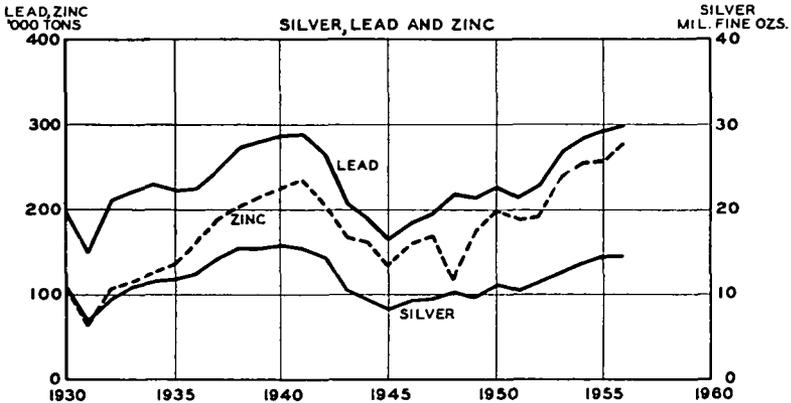
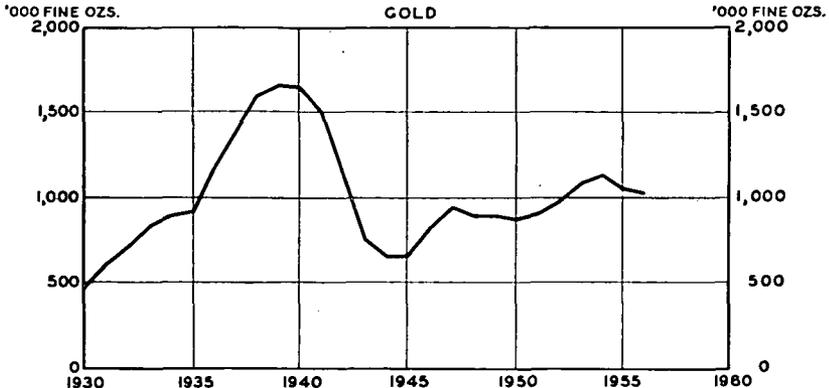
MINING AND QUARRYING : SUMMARY OF OPERATIONS, AUSTRALIA.

Particulars.	Unit.	Metal Mining.	Fuel Mining.	Non-metal (excluding Fuel) Mining. (a)	Total All Mining.	Construction Material Quarrying.(b)	Total All Mining and Quarrying.
1954.							
Mines and Quarries ..	No.	818	306	683	1,807	687	2,494
Persons Employed(c) ..		21,366	28,268	2,858	52,492	4,121	56,613
Salaries and Wages Paid(d)(e)	£'000	23,308	27,545	1,693	52,546	2,045	54,591
Value of Output(f) ..	"	71,150	58,829	7,042	137,021	12,383	149,404
Total Fuel, Materials, etc., Used ..	"	17,297	10,642	1,422	29,361	1,955	31,316
Value of Production(g) ..	"	53,853	48,187	5,620	107,660	10,428	118,088
Value of Additions and Replacements to Fixed Assets(d) ..	"	6,834	8,008	549	15,391	256	15,647
1955.							
Mines and Quarries ..	No.	870	277	743	1,890	712	2,602
Persons Employed(c) ..		21,992	27,214	2,875	52,081	4,197	56,278
Salaries and Wages Paid(d)(e)	£'000	26,246	27,826	2,270	56,342	2,439	58,781
Value of Output(f) ..	"	84,530	58,119	7,375	150,024	14,847	164,871
Total Fuel, Materials, etc., Used ..	"	17,776	10,523	1,606	29,905	2,458	32,363
Value of Production(g) ..	"	66,754	47,596	5,769	120,119	12,389	132,508
Value of Additions and Replacements to Fixed Assets(d) ..	"	7,816	7,649	1,560	17,025	304	17,329

(a) Incomplete for some industries outside the normal administrative control of State Mine Departments (e.g., clays and salt). (b) Incomplete in some States. (c) Average number employed (including working proprietors) during whole year. (d) Excludes mines and quarries employing less than four persons (less than five persons in Western Australia). (e) Excludes drawings by working proprietors; the amounts are net after deducting value of explosives sold to employees. (f) Value at mine or quarry. (g) Value of output less cost of power, fuel, light and other materials and stores used; depreciation and maintenance costs have not been deducted.

MINE PRODUCTION OF PRINCIPAL METALS (METALLIC CONTENT OF MINERALS)

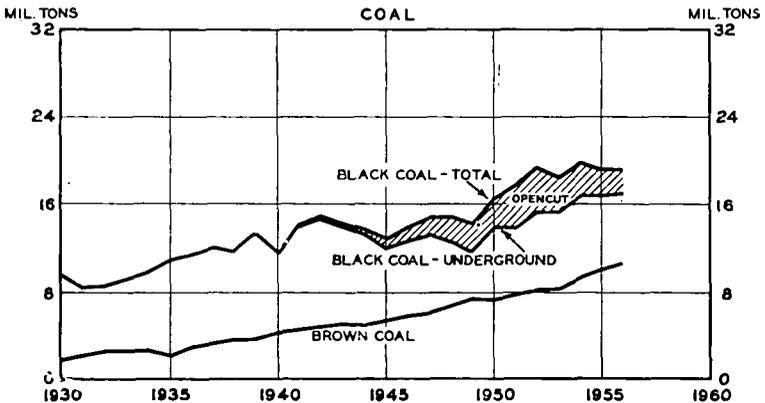
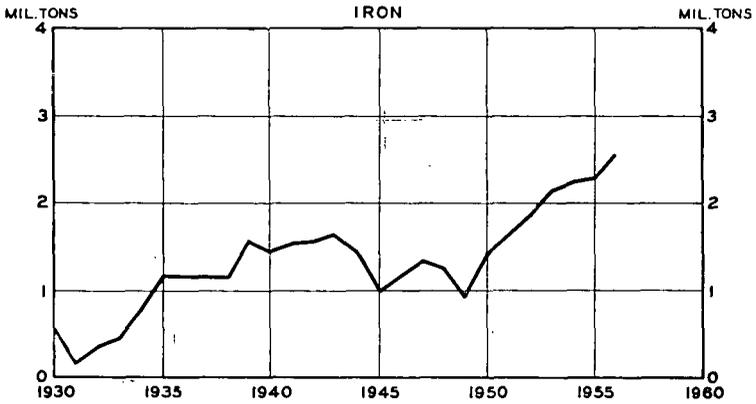
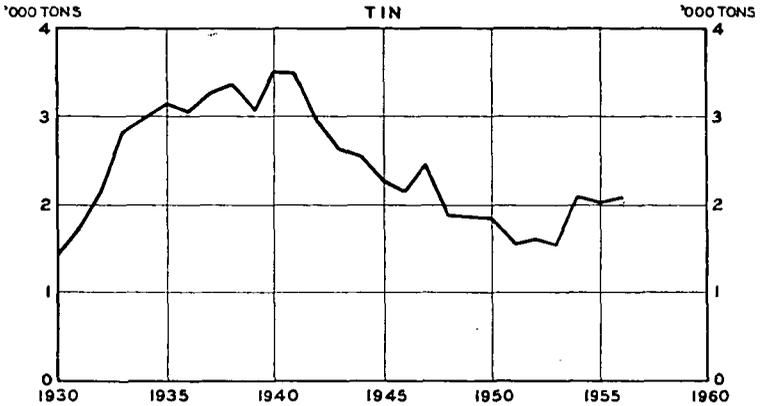
AUSTRALIA, 1930 TO 1956



MINE PRODUCTION OF PRINCIPAL METALS AND PRODUCTION OF COAL

(METALLIC CONTENT OF MINERALS)

AUSTRALIA, 1930 TO 1956



In the next table, statistics of numbers of mines and quarries, persons employed, value of output and value of production are shown for each State, the Northern Territory and the Australian Capital Territory for the years 1954 and 1955.

MINING AND QUARRYING : SUMMARY OF OPERATIONS.

State or Territory.	Mines and Quarries.	Persons Employed. (a)	Salaries and Wages Paid. (b)(c)	Value of Output. (d)	Total Fuel, Materials, etc., Used.	Value of Production. (e)	Value of Additions and Replacements to Fixed Assets.
1954.							
	No.	No.	£'000.	£'000.	£'000.	£'000.	£'000.
New South Wales ..	856	29,405	29,981	78,202	14,237	63,965	6,677
Victoria ..	267	4,707	4,031	10,080	1,934	8,146	1,811
Queensland ..	479	8,328	7,264	21,603	5,668	15,935	2,412
South Australia ..	488	2,018	1,436	8,580	1,479	7,101	1,121
Western Australia ..	254	8,887	8,651	20,736	5,960	14,776	2,157
Tasmania ..	65	2,861	2,791	8,955	1,898	7,057	840
Northern Territory ..	82	371	408	1,145	117	1,028	629
Aust. Cap. Territory ..	3	36	29	103	23	80	(f)
Australia ..	2,494	56,613	54,591	149,404	31,316	118,088	15,647
1955.							
	No.	No.	£'000.	£'000.	£'000.	£'000.	£'000.
New South Wales ..	846	29,207	31,450	84,244	14,982	69,262	7,015
Victoria ..	243	4,508	4,439	10,917	2,050	8,867	1,942
Queensland ..	570	8,694	9,287	26,892	5,160	21,732	3,213
South Australia ..	475	2,230	1,714	10,512	2,060	8,452	1,500
Western Australia ..	272	8,283	8,345	19,746	5,603	14,143	2,213
Tasmania ..	71	2,820	2,983	10,744	2,132	8,612	673
Northern Territory ..	121	501	534	1,691	314	1,377	763
Aust. Cap. Territory ..	4	35	29	125	62	63	10
Australia ..	2,602	56,278	58,781	164,871	32,363	132,508	17,329

(a) Average number employed (including working proprietors) during whole year. (b) Excludes mines and quarries employing less than four persons (less than five persons in Western Australia). (c) Excludes drawings by working proprietors; the amounts are net after deducting value of explosives sold to employees. (d) Value at mine or quarry. (e) Value of output less cost of power, fuel, and light and other materials and stores used; depreciation and maintenance costs have not been deducted. (f) Less than £500.

§ 2. Gold.

1. **Discovery in Various States.**—A detailed account of the discovery of gold in the various States appears under this section in Official Year Books Nos. 1 to 4.

2. **Production.**—The following table shows the recorded mine production of gold (i.e., gold content of minerals produced) in the several States and in Australia as a whole during each of the ten decennial periods from 1851 to 1950, and in single years from 1951 to 1955. Owing to defective information in the earlier years it is likely that the recorded production falls considerably short of the actual totals.

GOLD : MINE PRODUCTION.(a)

('000 fine oz.)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Aust.
1851-60	2,714	21,973	3	..	..	186	..	24,876
1861-70	3,220	15,327	489	..	..	3	..	19,039
1871-80	2,019	9,564	2,527	136	..	165	19	14,430
1881-90	1,014	6,689	3,259	58	42	357	168	11,587
1891-1900	2,432	7,040	5,648	52	5,252	550	214	21,188
1901-10	2,253	7,095	5,512	73	17,784	604	111	33,432
1911-20	1,145	3,067	2,263	55	10,671	202	23	17,426
1921-30	204	593	434	10	4,357	43	2	5,843
1931-40	569	1,052	1,021	53	8,474	130	84	11,383
1941-50	572	800	750	13	6,683	157	148	9,123
1951	49	66	79	(b)	648	15	39	896
1952	39	68	85	(b)	727	16	45	980
1953	26	64	92	(b)	823	17	53	1,075
1954	32	53	98	(b)	862	19	54	1,118
1955	30	38	64	(b)	835	17	65	1,049
Total, 1851-1955	16,318	73,489	22,324	450	57,358	2,481	1,025	173,445

(a) Gold content of minerals produced.

(b) Less than 500 fine oz.

The amount of gold won in Australia in any one year attained its maximum in 1903, when Western Australia also reached its highest point. For the other States, the years in which the greatest yields were obtained were as follows:—New South Wales, 1852; Victoria, 1856; Queensland, 1900; South Australia, 1904; and Tasmania, 1899. In recent years, output has expanded to record levels in the Northern Territory which is now the second largest producer in Australia.

Owing to the exhaustion of the more easily worked deposits and increased costs due to deep mining, the production of gold in Australia declined from 3,837,979 fine oz. in 1903 to 427,160 fine oz. in 1929, the lowest output since its discovery.

Increased activity in prospecting due to prevailing economic conditions resulted in some improvement in 1930, but the marked development between that year and 1939 was caused by the heavy depreciation of Australian currency in terms of gold. Following the outbreak of the 1939-45 War, there was a sharp fall in gold production to 656,867 fine oz. in 1944 and 657,213 fine oz. in 1945, but with the release of man-power after the war there has been a slight upward trend in mine production of gold, which, in 1953, exceeded 1,000,000 fine oz. for the first time since 1942. The devaluation of Australian currency in September, 1949 gave an impetus to gold production, but this was offset in the following years by increasing costs which brought about the closing of several large producers in New South Wales, Victoria and Western Australia. To enable the industry to meet the increase in costs, sales of gold on oversea premium markets at prices in excess of the official price were permitted from December, 1951. During 1952 and 1953, premium sales of gold brought an additional return to the industry amounting to about £1,800,000, but towards the end of 1953 the price of gold on oversea premium markets fell sharply and subsequent sales have been made at prices very little above the official price. This had an adverse effect on the financial position of the gold-mining industry and the Commonwealth Government passed the Gold-Mining Industry Assistance Act in 1954 to prevent any serious decline in gold-mining activity. The operation of this Act has since been extended from two years to five years. The production of gold in Australia increased from 1951 to 1954 but fell back in 1955 under the pressure of rising costs.

3. Sources of Production.—(i) *New South Wales.* Gold production in 1955 was 30,067 fine oz. The only gold producer of any significance was Wellington Alluvials Ltd., who operate a dredge on the Macquarie River, but other small quantities were won in conjunction with silver, lead and zinc at Broken Hill and at Captain's Flat, and by small prospecting parties throughout the State.

(ii) *Victoria.* The gold yield in Victoria further declined in 1955 to 38,035 fine oz., the lowest output since 1930. Only five producers—four quartz mines and one dredge—produced more than 1,000 fine oz. during the year, the largest of these being the Wattle Gully mine at Chewton in central Victoria.

(iii) *Queensland.* The output of 64,322 fine oz. during 1955 was considerably lower than the previous year owing to the lower output from Mt. Morgan, the main producer. The only other major producer is Golden Plateau N.L. at Cracow.

(iv) *South Australia.* Only 50 fine oz. of gold were won in 1955 by prospectors in central and northern parts of the State.

(v) *Western Australia.* Production of gold during 1955 was 834,326 fine oz. This was lower than production in 1954 and was due in some measure to the closing of the Big Bell mine early in 1955 and the Blue Spec mine later in the year. More than half the year's total production of gold in Western Australia came from the Coolgardie goldfields, most of the remaining production coming from the Murchison, Dundas, Yilgarn and Mt. Margaret goldfields. The Lake View and Star mine at Fimiston maintained its position as the largest gold producer in Australia, winning 166,318 fine ozs. during 1955, and ten other mines each produced over 20,000 fine ozs. in the same period.

(vi) *Tasmania.* Production of gold in Tasmania during 1955 was 16,882 fine oz. Almost all of this production was won as a by-product of lead-zinc mining at Rosebery and of copper mining at Mt. Lyell in western Tasmania. A small amount was also won in tin dredging operations in the north-eastern area of the State.

(vii) *Northern Territory.* Gold production in Northern Territory which has been steadily increasing in recent years, reached a record level of 65,357 fine oz. in 1955. Production is centred around Tennant Creek where the Nobles Nob mine is the main producer.

4. *Refinery Production.*—The quantities and values of the refinery production of new gold of Australian origin are shown in the following table for each of the years 1946 to 1955. The value of the refined new gold is based on the price fixed by the Commonwealth Bank, but allowance is made, from 1952 onwards, for premiums on sales of gold overseas and for industrial purposes in Australia.

GOLD : REFINERY PRODUCTION OF NEWLY WON GOLD OF AUSTRALIAN ORIGIN.

Year.			Quantity.	Value.	Year.			Quantity.	Value.
			'000. fine oz.	£'000.			'000. fine oz.	£'000.	
1946	..	..	820	8,830	1951	..	850	13,172
1947	..	..	969	10,430	1952	..	979	16,037
1948	..	..	884	9,517	1953	..	1,053	16,780
1949	..	..	879	10,670	1954	..	1,063	16,589
1950	..	..	844	13,077	1955	..	1,055	16,503

The unit value of refinery production of newly won gold of Australian origin rose to £12 2s. 10d. in 1949 as a result of the increase in the price to £15 9s. 10d. per fine oz. fixed by the Commonwealth Bank on 19th September, 1949, consequent upon alteration in the rate of exchange. In 1950 and 1951, the unit values were the Bank's price of £15 9s. 10d. per fine oz., and since 1952 allowance has been made for premiums on gold sold for industrial purposes in Australia and on premium markets overseas, the average value per fine oz. being £16 7s. 7½d. in 1952; £15 18s. 9¼d. in 1953; £15 12s. 0d. in 1954; and £15 12s. 11¼d. in 1955. From 1st May, 1954, the official price of gold in Australia was raised to £15 12s. 6d. per fine oz. The previous gold price was based on the price for which gold could be sold abroad in official markets less costs of movement; the new price reflects the "parity" value of Australian currency established by the International Monetary Agreement Act 1947. Further information regarding the price of gold realized, including particulars of prices for newly won gold sold on overseas premium markets since December, 1951, is given in Chapter XX.—Private Finance.

5. *Changes in Stocks of Gold held in Australia.*—The following table shows particulars of production, imports and exports of gold and changes in stocks of gold held in Australia for each of the years 1951–52 to 1955–56.

CHANGES IN STOCKS OF GOLD HELD IN AUSTRALIA.

(Fine oz.)

Particulars.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Mine Production of Gold(a)	908,813	1,037,885	1,111,420	1,080,249	1,032,546
Imports of Gold(b)(c) ..	208,143	228,407	189,628	175,166	175,649
<i>Total</i>	<i>1,116,956</i>	<i>1,266,292</i>	<i>1,301,048</i>	<i>1,255,415</i>	<i>1,208,195</i>
Exports of Gold(b)	416,652	1,250,162	863,464	864,391	531,664
Gold Content of Ores and Concentrates Exported ..	14,503	12,441	12,526	11,133	13,427
Net Industrial Absorption of Gold	33,838	37,816	51,543	45,253	34,678
<i>Total</i>	<i>464,993</i>	<i>1,300,419</i>	<i>927,533</i>	<i>920,777</i>	<i>579,769</i>
Changes in Stocks of Gold held in Australia(d)	+ 651,963	- 34,127	+ 373,515	+ 334,638	+ 628,426

(a) Gold content of minerals produced in Australia. (b) Includes gold contained in matte.
(c) Excludes gold imported in some minor minerals. (d) Includes gold content of mineral products awaiting refining; excludes gold specie.

6. **Production in Principal Countries.**—The quantities of gold produced in the principal producing countries and the estimated world total production in each of the years 1951 to 1955 are shown in the table hereunder.

GOLD : PRODUCTION IN PRINCIPAL COUNTRIES AND WORLD TOTAL.

('000 fine oz.)

Country.	1951.	1952.	1953.	1954.	1955
Union of South Africa ..	11,516	11,819	11,941	13,237	14,601
Canada	4,393	4,472	4,056	4,366	4,556
United States of America ..	1,981	1,893	1,958	1,832	1,884
Australia	896	980	1,075	1,118	1,049
Gold Coast	699	691	731	787	687
Rhodesia	488	499	504	538	527
Philippines	394	469	481	416	419
Mexico	393	459	483	387	383
Colombia	431	422	437	377	381
Belgian Congo	352	369	371	365	369
<i>Estimated World Total</i> ..	<i>23,700</i>	<i>24,300</i>	<i>24,200</i>	<i>25,700</i>	<i>26,900</i>

7. **Employment in Gold Mining.**—Particulars of the numbers of persons employed in gold mining are shown in § 13 (p. 1007).

8. **Assistance to Gold-mining Industry.**—In 1939, a tax was imposed on gold produced in Australia or any Australian Territory but this tax was suspended in 1947. Further relief was given to the gold-mining industry in 1952 and 1953 by permitting sales of gold on overseas premium markets, but with the disappearance of high premium prices overseas in late 1953, many producers were faced with the prospect of closing down. To meet this situation, the Gold-Mining Industry Assistance Act was assented to on 18th November, 1954. The

purpose of this Act was to assist the gold-mining industry by the payment of subsidy subject to certain conditions on the production and sales of gold during the two financial years 1954-55 and 1955-56. The subsidy payable to small producers whose annual output does not exceed 500 fine oz. of gold is a flat rate of £1 10s. 0d. per fine oz. For large producers, the formula for determining the amount of subsidy payable is :—

Three-quarters of the excess of average cost of production per fine oz. over £13 10s. 0d.

The maximum rate of subsidy which may be paid is £2 per fine oz. Where a producer receives an amount in excess of the official price of £15 12s. 6d. per fine oz. as a result of sales on overseas premium markets or otherwise, the subsidy payable shall be reduced by the amount of the excess. The subsidy will also be limited to the extent that the annual net profit of a producer will not, with the addition of the subsidy, exceed 10 per cent. of the capital investment in the company. A further condition of the Act is that the recovery rate of the mine shall be maintained at the level of the year previous to the Act. In 1956, the operation of the Act was extended for a further three years to 1958-59.

Payments under the Act commenced in March, 1955 and the amounts paid to gold producers in the various States and Territories of Australia during 1955 are shown in the following table.

NET SUBSIDY PAYMENTS TO GOLD PRODUCERS : 1955.

(£.)

New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Papua and New Guinea.	Total.
225	29,657	966	..	199,051	..	441	6,606	236,946

§ 3. Silver, Lead and Zinc.

1. **Production.**—The following table shows for 1954 and 1955 the mine production (metallic content of ores and concentrates produced) of silver, lead and zinc in Australia, and the respective minerals in which these metals were contained.

SILVER, LEAD AND ZINC : CONTENT OF ORES AND CONCENTRATES PRODUCED.

Minera in which contained.	Silver (fine oz.).		Lead (tons).		Zinc (tons).	
	1954.	1955.	1954.	1955.	1954.	1955.
Copper Ore and Concentrate.	1,069,600	854,722	2,845	2,171	..	..
Gold Concentrate, etc. ..	245,691	211,332	..	..	..	..
Lead-Silver Ore ..	27,398	587,387	627	3,357	..	..
Lead-Silver-Zinc Ore ..	2,118	..	93	..	74	..
Lead Concentrate ..	11,838,567	12,291,854	275,955	283,701	..	..
Zinc Concentrate ..	643,664	610,117	5,342	6,715	252,585	256,564
Total ..	13,827,038	14,555,412	284,862	295,944	252,659	256,564

The following table shows the mine production of silver, lead and zinc in Australia for the years 1951 to 1955 compared with 1939.

SILVER, LEAD AND ZINC : CONTENT OF ORES AND CONCENTRATES PRODUCED, AUSTRALIA.

Metal.	Un't.	1939.(a)	1951.	1952.	1953.	1954.	1955.
Silver	'000 fine oz.	15,320	10,244	11,278	12,539	13,827	14,555
Lead	ton	280,003	212,013	228,196	269,344	284,862	295,944
Zinc .. .. .	..	217,256	189,227	196,450	239,324	252,659	256,564

(a) Source: Australian Mines and Metals Association.

The following table shows the quantities of silver, lead and zinc contained in minerals won in the several States of Australia in the years 1954 and 1955:—

SILVER, LEAD AND ZINC : CONTENT OF ORES AND CONCENTRATES PRODUCED, STATES.

State.	Silver (fine oz.).		Lead (tons).		Zinc (tons).	
	1954.	1955.	1954.	1955.	1954.	1955.
New South Wales ..	8,680,114	8,823,211	230,392	234,854	202,646	211,478
Victoria ..	3,443	1,633	..	..	..	..
Queensland ..	3,583,776	4,363,371	41,424	48,814	19,615	17,138
South Australia ..	625	142	14	2	..	..
Western Australia ..	237,639	200,748	1,497	1,007	74	..
Tasmania ..	1,321,385	1,166,307	11,533	11,267	30,324	27,948
Northern Territory ..	56	..	2	..	..	..
Australia ..	13,827,038	14,555,412	284,862	295,944	252,659	256,564

Particulars of the values ascribed to the various minerals containing silver, lead and zinc for the year 1955 are shown in the detailed table relating to mineral production on p. 972.

2. **Sources of Production.**—(i) *New South Wales.* By far the most silver-lead-zinc ore in Australia is won from the massive silver-lead-zinc sulphide deposit at Broken Hill. The companies concerned in operating this gigantic lode are North Broken Hill Ltd., which mines the northern limb of the ore-bearing structure, Broken Hill South Ltd., and Zinc Corporation Ltd. (with which is associated New Broken Hill Consolidated), which are conducting operations on the southern limb.

The present-day sulphide ores are concentrated by gravity and flotation methods at Broken Hill. The lead (galena) concentrates are railed to Port Pirie and smelted to produce lead bullion which is later refined by a continuous lead refining process for the elimination of arsenic and antimony and the recovery of silver and gold. About half of the zinc concentrate produced at Broken Hill is exported from Australia. Most of the remainder is treated at Risdon in Tasmania and a small proportion is roasted by fertilizer plants in South Australia for the recovery of sulphur dioxide for sulphuric acid manufacture.

At Captain's Flat, Lake George Mines Ltd. is operating a lode of similar constitution. Concentration of the ore is carried out at the mine itself, after which process, individual concentrates of zinc and lead (containing silver) are despatched to Port Kembla, New South Wales, for further treatment. Concentrates of copper, pyrite and gold are also produced at this mine.

Silver-lead-zinc ore has been mined in small quantities in various other parts of the State, the more important localities being Howell, Yerranderie and Kangiara. The Conrad Mine at Howell in northern New South Wales has been re-opened and production commenced again in May, 1955.

(ii) *Victoria.* Small quantities of lead sulphide ore occur on most of Victoria's gold-fields and in minor amounts in the Omeo, Bethanga and Cassilis districts. There has been no production of lead ore in recent years, the total recorded production being about 800 tons valued at £5,892.

The whole of the Victorian mine production of silver, 1,633 fine oz. in 1955, was won as a by-product of the gold mining industry.

(iii) *Queensland.* Silver produced in Queensland is obtained mainly as a by-product of ores of other metals such as lead-zinc and copper ores at Mt. Isa and copper-gold ore at Mt. Morgan. An exception is the ore at the Silver Phantom Mine in the Cloncurry district, which produced 32,269 oz. of silver from 12 tons of ore during 1955.

Nearly all the output of lead in Queensland is produced at Mt. Isa in the far north-west of the State, where mining is carried out on extensive silver-lead-zinc ore and copper ore bodies. After concentration by flotation in the concentrating mill, the silver-lead concentrate is converted to bullion in the smelter. All Mt. Isa lead bullion is exported overseas, where certain impurities, such as antimony, arsenic and copper, as well as silver, are removed to yield a pure lead suitable for commercial use.

Zinc concentrates produced by Mt. Isa are also exported overseas. During the 1939-45 War, operations on silver-lead-zinc ores at Mt. Isa were suspended while the mine was engaged in mining copper, but in 1946 copper mining ceased, and operations on silver-lead-zinc ores were resumed. Copper mining re-commenced at Mt. Isa with the opening there of a new copper smelting plant in 1953.

(iv) *South Australia.* Output of lead from local ores has been very small in recent years. In 1955, 7 tons of lead-silver ore were produced, containing 2 tons of lead and 142 fine oz. of silver. There has been no recorded zinc production since 1903.

(v) *Western Australia.* During recent years, lead-silver-zinc ore and lead concentrates have been produced in Western Australia. Main centres of production have been the Northampton area, the Ashburton area and the West Kimberley district.

The bulk of the mine production of silver in Western Australia is obtained as a by-product of the gold-mining industry.

(vi) *Tasmania.* There are two large centres of silver-lead-zinc mining in Tasmania, the more important being that operated by the Electrolytic Zinc Company of Australasia Ltd. at Read-Rosebery. This company also operates the electrolytic zinc reduction works at Risdon near Hobart. Although the product of this field is primarily zinc, lead and copper-lead concentrates are also produced.

The lead concentrates and copper-lead concentrates produced at Rosebery are exported overseas, while the zinc concentrates, containing some lead, are sent to Risdon for roasting and refining. The Risdon plant also treats considerable quantities of zinc concentrates from the Broken Hill mines.

Of secondary importance to Rosebery is the Mount Farrell field, situated 6 miles north-east of Rosebery. These ore-bodies are mainly silver-lead lodes which yield a lead concentrate with high silver content. The zinc content is insufficient to warrant recovery.

Most of the State's silver is contained in concentrates produced at Rosebery and Mount Farrell but some is obtained from the Mount Lyell copper refinery tank house slimes which are treated at Port Kembla in New South Wales.

(vii) *Northern Territory.* There was no production of lead-silver ore in the Northern Territory in 1955.

3. **Production and Sales of Refined Silver, Lead and Zinc.**—In the following table, details are given of the production and sales of refined primary silver, lead and zinc as recorded from data received from the Australian Mines and Metals Association and the Bureau of Mineral Resources. The figures shown for refined silver production include small quantities recovered from imported materials. The data relating to lead production for the year 1939 include small quantities recovered from scrap.

REFINED SILVER, LEAD AND ZINC : PRODUCTION AND SALES, AUSTRALIA.

Part'culars.	1939.	1951.	1952.	1953.	1954.	1955.
SILVER ('000 fine oz.).						
Production (a)	9,552	6,879	6,773	6,595	8,474	7,818
Sold to Australian consumers (b) ..	1,794	1,939	1,045	1,447	1,977	1,928
Exported or sold for export (b) ..	7,518	4,924	5,876	4,735	6,989	5,793
LEAD (tons).						
Refined Lead—						
Production (a)	199,437	165,758	156,639	172,468	200,409	187,134
Sold to Australian consumers (b) ..	32,217	54,629	31,566	31,663	42,088	45,851
Exported or sold for export (b) ..	164,684	111,332	119,648	141,007	153,847	148,189
Lead Bullion—						
Produced for export (a)	43,955	31,872	37,709	34,050	38,146	37,392
ZINC (tons).						
Production (a)	71,220	77,010	87,438	90,178	104,523	101,090
Sold to Australian consumers (b) ..	31,088	45,950	50,174	58,524	61,478	71,355
Exported or sold for export (b) ..	43,137	29,411	38,132	32,881	36,130	34,049

(a) Source: Bureau of Mineral Resources.

(b) Source: Australian Mines and Metals Association.

4. **Silver, Lead and Zinc: Production in Principal Countries and World Total, 1954 and 1955.**—The following table shows, for the years 1954 and 1955, particulars of silver, lead and zinc production (mine basis) in principal producing countries, together with the estimated world total, according to data published by the Mineral Resources Division of the Colonial Geological Surveys.

SILVER, LEAD AND ZINC : MINE PRODUCTION IN PRINCIPAL COUNTRIES AND WORLD TOTAL, 1954 AND 1955.

Country.	1954.	1955.
SILVER (fine oz.).		
Mexico	39,896,467	47,957,655
United States of America	36,941,384	36,734,565
Canada	31,117,949	27,901,427
Peru	20,405,883	20,954,823
Australia	13,827,038	14,555,412
Japan	6,162,815	5,948,627
Bolivia	6,624,950	5,851,242
Belgian Congo	4,533,000	4,083,000
<i>Estimated World Total</i>	<i>189,000,000</i>	<i>192,000,000</i>
LEAD (long tons).		
United States of America	290,560	297,704
Australia	284,862	295,944
U.S.S.R.	(a) 275,000	(a) 290,000
Mexico	213,203	207,486
Canada	195,085	173,191
Peru	108,328	113,845
<i>Estimated World Total</i>	<i>2,028,000</i>	<i>2,091,000</i>
ZINC (long tons).		
United States of America	422,742	459,528
Canada	336,153	381,220
Mexico	220,215	265,144
Australia	252,659	256,564
U.S.S.R.	(a) 240,000	(a) 255,000
Peru	156,058	170,042
Poland	139,900	153,700
<i>Estimated World Total</i>	<i>2,560,000</i>	<i>2,770,000</i>

(a) Estimated.

5. **Prices of Silver, Lead and Zinc.**—The following table shows average prices in Australia and on the London Metal Exchange during the years 1938 and 1951 to 1955. Lead and zinc prices were controlled in Australia and the United Kingdom after the outbreak of war in 1939, but were decontrolled in Australia on 21st April, 1953. Free trading in lead in the United Kingdom, after thirteen years of Government control, was resumed on 1st October, 1952, while the fixing by regulation of the price of zinc was abandoned from 1st January, 1953. Silver prices have not been controlled in Australia and the United Kingdom.

PRICES OF SILVER, LEAD AND ZINC.

Metals	1938.	1951.	1952.	1953.	1954.	1955.
Australian Prices, in Australian currency—						
Silver, per fine oz. (a) ..	s. d. 2 2	s. d. 8 2	s. d. 7 9	s. d. 7 8	s. d. 7 8	s. d. 8 1
	£	£	£	£	£	£
Lead, per ton	(b)(c) 22	(b) 65	(b) 75	(d) 104	114	127
Zinc, per ton	(b)(c) 22	(b) 65	(b) 75	(d) 92	101	114
London Metal Exchange Prices, in sterling—						
Silver, per fine oz. (e) ..	s. d. 1 9	s. d. 6 6	s. d. 6 2	s. d. 6 2	s. d. 6 2	s. d. 6 4
	£	£	£	£	£	£
Lead, per ton	(b) 15	(b) 162	(e) 135	91	96	106
Zinc, per ton	(b) 14	(b) 172	(b) 150	75	78	91

(a) Silver prices have not been fixed by regulation in Australia, the prices shown represent export parity calculated from London Metal Exchange prices. (b) Prices fixed by regulation. (c) From February, 1940. (d) Price regulation was abandoned from 21st April, 1953; average market prices have been used thereafter. (e) Price regulation was abandoned from 1st October, 1952; average market prices have been used thereafter.

6. **Employment in Silver, Lead, and Zinc Mining.**—Particulars of the number of persons employed in mining for these metals are shown in § 13, p. 1007.

§ 4. Copper.

1. **Production.**—Copper is widely distributed throughout Australia. However, the principal producing States in 1955 were Queensland, Tasmania and New South Wales, in that order of magnitude. The opening of a new smelting plant at Mt. Isa in Queensland early in 1953 doubled the output of copper in Australia over the previous year, and production in 1955 was 45,496 tons. The table hereunder shows the quantity of mine production of copper (copper content of ores and concentrates produced) in Australia for the years 1951 to 1955. It should be noted that the minerals shown below contain, in addition to copper, certain other metals.

COPPER : CONTENT OF ORES AND CONCENTRATES PRODUCED, AUSTRALIA (Tons.)

Mineral in which Contained.	1951.	1952.	1953.	1954.	1955.
Copper Ore, Concentrate and Precipitate	15,739	16,125	33,007	37,041	41,674
Gold Ore, Concentrate, etc.	5	1	1	(a)	..
Lead Ore and Concentrate	1,874	2,163	3,037	3,241	3,224
Zinc Concentrate	308	289	540	575	598
Total	17,926	18,578	36,585	40,857	45,496

(a) Less than half a ton.

Particulars of the copper content of ores and concentrates produced in each producing State and the Northern Territory, as published by the Australian Mines and Metals Association for the year 1939, and as recorded by this Bureau from data obtained from the several State Mines Departments and other sources for the years 1951 to 1955, are shown in the table below.

COPPER : CONTENT OF ORES AND CONCENTRATES PRODUCED, STATES. (Tons.)

State.	1939.	1951.	1952.	1953.	1954.	1955.
New South Wales	1,155	3,679	3,562	3,626	3,182	3,492
Queensland	5,798	5,432	6,966	23,955	27,207	30,738
South Australia	110	(a)	2	1	(a)	..
Western Australia	1	7	7	15	..	3
Tasmania	13,453	8,657	7,722	8,902	9,880	8,394
Northern Territory	43	151	319	86	588	2,869
Australia	20,560	17,926	18,578	36,585	40,857	45,496

(a) Less than half a ton.

2. **Sources of Production.**—(i) *New South Wales.* The copper content of all ores and concentrates produced in New South Wales amounted to 3,492 tons in 1955. The only producer of copper concentrate in the State was the Lake George mine at Captain's Flat, but the major production of copper was as a by-product of lead and zinc mining at Broken Hill.

(ii) *Queensland.* In 1955, mine production of copper amounted to 30,738 tons. The main centre of production is the Cloncurry field in the north-western part of the State. Since the opening of the new copper smelter at Mt. Isa in February, 1953, copper production in Queensland has more than quadrupled and the Mt. Isa mine now produces about half of the present total Australian output. Lead bullion and zinc concentrate are also produced at Mt. Isa. The only other major copper producer is Mt. Morgan, just south of Rockhampton, where copper is produced in conjunction with gold.

(iii) *South Australia.* Deposits of copper were found in the past over a large portion of South Australia, but the principal fields have been exhausted and output in recent years has been negligible.

(iv) *Western Australia.* The ore sent to smelters in 1955 amounted to 12 tons, containing 3 tons of copper. Cupreous ore is mined in Western Australia for use in fertilizers as a trace-element and details of its production are given in § 12. Non-metallic Minerals (*see p. 1006*).

(v) *Tasmania.* The quantity of copper produced in Tasmania during 1955 was 8,394 tons, the Mount Lyell Mining and Railway Co. Ltd. providing the greater part thereof. The remainder consisted mainly of copper in copper-lead concentrates exported from Read-Rosebery.

(vi) *Northern Territory.* The greatest part of the output of 2,869 tons of copper in the Northern Territory during 1955, came from the Peko mine at Tennant Creek. Although originally worked as a gold mine, high-grade copper ore was discovered there, and since the new milling plant came into operation in June, 1954, the mine has become the major producer of copper in the Northern Territory. Copper concentrate is also produced at Rum Jungle by Territory Enterprises Pty. Ltd. but details are not available for publication and are not included in the Northern Territory total.

3. Production and Sales of Refined Copper.—There are two refining plants in Australia, one operated by the Electrolytic Refining and Smelting Co., Port Kembla, New South Wales, and the other by The Mount Lyell Mining and Railway Co. Ltd., Mount Lyell, Tasmania. The Port Kembla plant is a custom smelter and refinery and treats copper ore, concentrates and metal in all stages. It has an annual capacity of 27,000 tons of electrolytic copper, and fire-refinery which is a cheaper process, is done on a smaller scale when materials are amenable to that treatment. There is also a refinery for the recovery of precious metals from tank house slimes. At Mount Lyell, the electrolytic process of refining copper is employed, and apart from that sold in Tasmania, the cathode copper produced is shipped to Port Kembla for casting into merchant shapes. Construction of a new copper refinery commenced in October, 1956 near Townsville, Queensland. When it comes into operation it will treat the whole output of blister copper from Mount Isa, part of which is at present refined at Port Kembla, the balance being refined in the United States. In the following table, details are given of the production and sales of refined copper, as recorded from data received from the Australian Mines and Metals Association and the Bureau of Mineral Resources.

REFINED COPPER^(a) : PRODUCTION AND SALES, AUSTRALIA.

(Tons.)

Particulars.	1939.	1951.	1952.	1953.	1954.	1955.
Production ^(b)	17,867	13,543	19,623	16,682	29,287	28,148
Sold to Australian consumers ^(c)	18,808	14,806	17,884	15,415	29,361	27,366
Exported or sold for export ^(c) ..	100	..	..	2,607	..	..

(a) Refined from domestic primary copper.

(b) Source: Bureau of Mineral Resources.

(c) Source: Australian Mines and Metals Association.

4. Production in Principal Countries and World Total.—The following table shows the mine production of copper during 1954 and 1955 from the principal producing countries as published by the Minerals Resources Division of the Colonial Geological Surveys and their estimate of total world production in 1954 and 1955.

**COPPER: MINE PRODUCTION IN PRINCIPAL COUNTRIES AND WORLD TOTAL,
1954 AND 1955.
(Long Tons.)**

Country.	1954.	1955.
United States of America	745,957	886,250
U.S.S.R.	(a) 355,000	(a) 400,000
Chile	357,912	385,116
Rhodesia	392,000	354,016
Canada	270,296	289,825
Belgian Congo	220,257	231,394
Japan	65,228	71,845
Mexico	53,940	53,812
Australia	40,857	45,496
Union of South Africa	41,641	43,963
Peru	37,818	41,309
<i>Estimated World Total</i>	<i>2,810,000</i>	<i>3,050,000</i>

(a) Estimated.

5. **Prices.**—From the outbreak of war in 1939 to August, 1953 in the United Kingdom and October, 1954 in Australia, the price of copper was fixed by regulation. Private trading has now been resumed in both countries. Details of the average price for the years shown are given in terms of Australian currency and sterling in the following table:—

**AVERAGE PRICE PER TON OF ELECTROLYTIC COPPER IN AUSTRALIA AND
THE UNITED KINGDOM.
(£.)**

Country.	December, 1939.	1951.	1952.	1953.	1954.	1955.
Australia—in Australian currency(a)	64	254	309	330	(b) 310	437
United Kingdom—in sterling ..	62	220	259	(c) 253	249	352

(a) Ex works Port Kembla. (b) Average market prices from 26th October, 1954. (c) Average market prices from 5th August, 1953.

6. **Employment in Copper Mining.**—Particulars of the numbers of persons engaged in the mining of copper and copper-gold ores are shown in § 13, p. 1007.

§ 5. Tin.

1. **Production.**—The following table shows the tin content of concentrates produced in each State and the Northern Territory for the year 1939 as published by the Australian Mines and Metals Association, and the years 1951 to 1955 as recorded by this Bureau.

**TIN: CONTENT OF TIN CONCENTRATES PRODUCED: STATES.
(Tons.)**

State.	1939.	1951.	1952.	1953.	1954.	1955.
New South Wales ..	775	413	396	342	272	270
Victoria	148	36	39	31	26	2
Queensland	867	340	330	292	730	770
Western Australia ..	7	41	65	76	80	119
Tasmania	1,250	706	772	788	947	853
Northern Territory ..	20	23	9	24	20	3
Australia	3,067	1,559	1,611	1,553	2,075	2,017

2. Sources of Production.—(i) *New South Wales.* Production of tin concentrates in 1955 was 378 tons, with a tin content of 270 tons, compared with 377 tons (tin content 272 tons) in 1954. A large proportion of the output in this State is obtained by dredging and sluicing, principally in the New England district.

(ii) *Victoria.* With the closing down of the Eldorado gold dredge in July, 1954, the production of tin in Victoria virtually ceased. Production in the State during 1955 amounted to 3 tons of concentrates, with a tin content of 2 tons, compared with 36 tons (tin content, 26 tons) in 1954.

(iii) *Queensland.* The chief districts in Queensland producing tin concentrates during 1955 were Herberton, 941 tons; Cooktown, 47 tons; Kangaroo Hills, 45 tons; Chillagoe, 19 tons; and Stanthorpe, 13 tons. The total production in 1955 amounted to 1,092 tons, compared with 1,034 tons in 1954. The tin content in 1955 and 1954 was 770 tons and 730 tons respectively. It is interesting to compare these production figures with those recorded in this State in the early years of this century when the output ranged between 2,000 and 5,000 tons per annum.

(iv) *Western Australia.* The quantity of tin concentrates reported in this State in 1955 amounted to 180 tons with a tin content of 119 tons, compared with 121 tons in 1954 (tin content, 80 tons). Production was mainly in the Pilbara and Greenbushes fields.

(v) *Tasmania.* For 1955, the output amounted to 1,232 tons of tin concentrates, a decrease of 142 tons on the output of the previous year. The tin content for 1955 was 853 tons and for 1954, 947 tons.

(vi) *Northern Territory.* The production for 1955 amounted to 5 tons of concentrates compared with 32 tons of concentrates produced during 1954. The tin content for 1955 and 1954 was 3 tons and 20 tons respectively.

3. Production of Refined Tin.—There are two firms engaged in the smelting of tin in Australia, both located in Sydney, New South Wales. The following table shows details of refined tin produced in Australia during the years 1939, and 1951 to 1955.

REFINED TIN PRODUCTION (a): AUSTRALIA.
(Tons.)

	1939.	1951.	1952.	1953.	1954.	1955.
Production of Refined Tin	3,294	1,459	1,700	1,443	2,063	2,004

(a) Source: Bureau of Mineral Resources.

4. Production in Principal Countries and World Total.—The production of tin reached its maximum in 1941 when 241,400 tons were recorded. The chief producing countries of the world are—Federation of Malaya, Bolivia, Indonesia, Belgian Congo, Thailand and Nigeria and in recent years these countries have produced approximately 90 per cent. of the total production. Australia's share of the world's tin production is about 1 per cent.

The production of tin ore, *in terms of metal*, as published by the International Tin Study Group and other authorities, for the principal producing countries in 1954 and 1955, was as follows.

TIN : PRODUCTION IN PRINCIPAL COUNTRIES.
(Long Tons.)

Country.	Production.		Country.	Production.	
	1954.	1955.		1954.	1955.
Malaya	60,690	61,244	Australia	2,075	2,017
Indonesia	35,861	33,368	Portugal	1,283	1,390
Bolivia	28,849	27,921	Union of South Africa	1,315	1,284
Belgian Congo	15,084	15,028	United Kingdom ..	920	1,034
Thailand	9,776	11,023			
Nigeria	7,926	8,158	<i>Estimated World</i>		
China	7,500	8,400	<i>Total(a)</i>	176,800	177,000

(a) Excludes U.S.S.R.

5. Prices.—At the outbreak of war in September, 1939, the price of tin in Australia and in London was fixed by regulation. London control of tin prices ceased on 14th November, 1949, while the Australian price was decontrolled on the 21st April, 1953. Details of the movement in average prices for the years shown are given in terms of Australian currency and sterling in the following table:—

AVERAGE PRICE PER TON OF TIN IN AUSTRALIA AND THE UNITED KINGDOM.
(£.)

Country.	December, 1939.	1951.	1952.	1953.	1954.	1955.
Australia—in Australian currency (a)	299	1,222	1,151	919	911	947
United Kingdom—in sterling (b) ..	(c) 271	1,080	965	731	720	741

(a) Prices fixed by regulation ex smelters for sales of 10 cwt. or more or in ingots of 70 lb. or more to 21st April, 1953; average market prices thereafter. (b) Average spot market prices for standard tin. (c) Price fixed by regulation for standard tin.

6. Employment in Tin Mining.—The number of persons employed in tin mining is shown in § 13 (p. 1007).

§ 6. Iron.

1. General.—Although iron ore is widely distributed throughout Australia, the only known ore bodies of large extent and high grade which are easily accessible are those situated at Iron Knob, South Australia and at Yampi Sound, Western Australia. Estimates of the high grade reserves at these centres place the quantities available at approximately 200 million tons and 100 million tons respectively. Bearing in mind the expansion of the iron industry in Australia, and the limitations of these reserves the Commonwealth Government prohibited the export of iron ore from 1st July, 1938.

2. Production.—(i) *Australia.* Production of iron ore for smelting purposes and estimated iron ore content are shown below for the years 1939 and 1951 to 1955:—

IRON ORE : PRODUCTION, AUSTRALIA.
(Tons.)

Particulars.	1939.	1951.	1952.	1953.	1954.	1955.
Production of Iron Ore ..	2,575,758	2,436,229	2,907,754	3,298,718	3,518,804	3,572,609
Estimated Iron Content ..	1,548,031	1,605,400	1,883,087	2,131,865	2,274,330	2,304,165

(ii) *New South Wales.* Since 1945, no iron ore has been mined in this State for conversion into pig-iron. For many years the chief source of supply for New South Wales blast furnaces has been South Australia.

Small quantities of iron oxide produced in New South Wales are used by the various gas-works for purifying gas, and also in the manufacture of paper, and for pigments. These supplies are drawn chiefly from the deposits in the Port Macquarie Division. During 1955, 3,405 tons of oxide were won. Of this total, 3,222 tons were used for gas purification and the remaining 183 tons were used for coal washing.

(iii) *Victoria.* Deposits of iron ore exist in the Nowa Nowa area of East Gippsland, but much larger quantities of ore than are at present known will have to be proved if the area is to become an economic source of iron ore. In 1955, approximately 2,000 tons of limonite (iron oxide) were produced at Buchan for gas purification purposes.

(iv) *Queensland.* Extensive deposits of iron ore are known to exist in Queensland. Their location and size, however, in comparison with the more favourable deposits of South Australia and Western Australia, preclude their exploitation. The output of 924 tons of iron oxide for 1955 came from the Townsville district.

(v) *South Australia.* The main production of iron ore in Australia is from the deposits worked by The Broken Hill Proprietary Co. Ltd. at Iron Knob in the Middleback Ranges near Whyalla. Production in 1955 reached a record level of 3,043,979 tons (estimated iron content, 1,978,586 tons).

(vi) *Western Australia.* Plans drawn up in 1927 to develop the rich iron ore deposits on Koolon and Cockatoo Islands in Yampi Sound were realized on 24th July, 1951, when regular shipments of ore for smelting at the steelworks at Newcastle and Port Kembla commenced from Yampi Sound. Iron ore is also obtained from deposits at Wundowie and Koolyanobbing. Production of iron ore during 1955 amounted to 496,882 tons at Yampi Sound and 31,748 tons at Koolyanobbing giving a total production of 528,630 tons with an estimated iron content of 325,579 tons. There was no production of iron ore at Wundowie during the year.

The whole iron pyrite production of Western Australia is won at the Iron King and Norseman mines and is railed, in the form of ores and concentrates, to superphosphate manufacturers in Perth.

(vii) *Tasmania.* There has been no production of ironstone in Tasmania since 1943 when 7 tons were produced. The iron pyrite concentrate produced, which in 1955 amounted to 45,010 tons (sulphur content, 22,023 tons), is a by-product from the flotation of copper ores at Mount Lyell. This product is exported to the mainland, where it is used in the manufacture of chemical fertilizers.

In 1955, 106 tons of iron oxide were produced for gas purification and 6,476 tons for fluxing and other purposes.

3. **Production of Iron and Steel.**—(i) *Australia.* The production of pig-iron and steel in Australia, of which New South Wales is the main producing State, is shown in the following table for each of the years ended 31st May, 1947 to 1956.

PIG-IRON AND STEEL : PRODUCTION, AUSTRALIA.
(Tons.)

Year Ended 31st May.	Pig-iron. (a)	Steel Ingots.	Year Ended 31st May.	Pig-iron. (a)	Steel Ingots.
1947	1,143,132	1,312,439	1952	1,430,027	1,521,386
1948	1,235,574	1,344,692	1953	1,691,693	1,801,028
1949	1,044,957	1,178,010	1954	1,826,711	2,116,813
1950	1,097,635	1,217,971	1955	1,868,841	2,208,708
1951	1,313,332	1,443,831	1956	1,909,839	2,338,621

(a) Includes pig-iron for castings; excludes ferro-alloys.

The principal producers in Australia, both in New South Wales, are the Broken Hill Proprietary Co. Ltd. at Newcastle and Port Kembla and Australian Iron and Steel Ltd. at Port Kembla. The expansion of the steelworks at Port Kembla was carried a step further in October, 1956 when two new open hearth steel furnaces, each of 275 tons capacity, were brought into operation. In January, 1957, the iron ore sintering plant was completed at a cost of nearly £5,000,000. This ore beneficiation plant has been installed to handle the fine friable iron ore from Yampi Sound in Western Australia and it has been erected in a position where it will be able to receive iron ore directly from ships berthed in the inner harbour now under construction at Port Kembla. Work on the new tin-plate mill is expected to be completed in mid-1957; initially it will produce 70,000 tons of tin-plate annually by the hot dip method, but the electrolytic method will be used later and its capacity increased to 150,000 tons a year. At Newcastle, construction of the new skelp mill is proceeding, and it is scheduled for completion by the end of 1957. This mill will produce high quality steel strip for processing into tubes and it will have a capacity of 400,000 tons annually. During 1956, plans were announced for the construction of an additional blast furnace at Port Kembla. When completed in 1959, its productive capacity of 600,000 tons of pig iron annually will at least equal the world's largest blast furnace. At the end of 1956, eight blast furnaces were operating in Australia; three at Newcastle and three at Port Kembla, in New South Wales, one at Whyalla, South Australia, and one at Wundowie, Western Australia. In 1956, the B.H.P. Central Research Organization commenced activities at Newcastle. It has been specially designed to investigate problems in coal and ore beneficiation, fuel technology, iron and steel making, fabrication and heat treatment of steel, and the chemistry and physics of materials used in modern industry.

At Whyalla in South Australia, in addition to the blast furnace production, The Broken Hill Proprietary Co. Ltd. produces a small quantity of steel ingots from an electric furnace.

In Western Australia, the State-owned Wundowie Wood Distillation, Charcoal Iron and Steel Industry produces pig iron using charcoal for smelting instead of the non-coking

local coal. This high grade iron is used for the manufacture of spheroidal graphite cast iron. The output of pig iron during the year 1954-55 amounted to 11,243 tons, and during 1955-56 to 12,028 tons. At Kwinana in Western Australia, the recently built merchant steel rolling mill commenced operations in July, 1956. Previously, production, mainly of steel fencing posts, had been on a limited scale. The annual output of this mill is to be 50,000 tons of steel sections.

(ii) *Principal Countries.* Particulars of the production in the principal countries and the estimated world total production during the years 1954 and 1955 according to figures published by the Mineral Resources Division of the Colonial Geological Surveys, are shown in the next table.

IRON AND STEEL: PRODUCTION IN PRINCIPAL COUNTRIES.
(⁰⁰⁰ Tons.) (a)

Country.	Pig-iron and Ferro-alloys.		Steel Ingots and Castings.	
	1954.	1955.	1954.	1955.
U.S. of America	53,398	70,771	78,850	104,497
U.S.S.R.	29,500	32,800	40,700	44,600
Germany—				
Federal Republic	12,314	16,222	17,159	20,999
Eastern	1,282	1,492	2,307	2,460
United Kingdom	11,883	12,470	18,520	19,791
France	8,701	10,787	10,459	12,393
Japan	4,679	5,345	7,628	9,259
Belgium	4,552	5,302	4,894	5,807
Italy	1,324	1,706	4,140	5,304
Czechoslovakia	2,760	2,950	4,360	4,430
Poland	2,621	3,063	3,887	4,357
Canada	2,078	3,018	2,853	4,044
Luxemburg	2,756	3,036	2,783	3,174
Saar	2,458	2,833	2,760	3,115
China	3,100	3,700	2,190	2,740
Australia	1,849	1,889	2,144	2,240
Sweden	985	1,226	1,811	2,092
India	1,962	1,895	1,685	1,704
<i>Estimated World Total</i> ..	156,100	189,400	219,800	264,800

(a) Long tons.

§ 7. Other Metallic Minerals.

1. *Tungsten.*—Tungsten ores occur in all States. Particulars of scheelite concentrates from King Island, in Bass Strait, the major producer, are included in Tasmanian production. Other important deposits of tungsten ores occur in Queensland, New South Wales, the Tasmanian mainland and the Northern Territory, but production from Victoria, South Australia and Western Australia has been comparatively unimportant. In recent years the largest producer has been Tasmania. Production of tungsten concentrates and contents during 1955 in each State and Territory is shown below:—

TUNGSTEN CONCENTRATES : PRODUCTION, 1955.
(Tons.)

Particulars.	N.S.W.	Q'land.	W. Aust.	Tas.	N. Terr.	Australia.
Scheelite Concentrate	9	(a)	8	1,432	..	1,449
WO ₃ Content	7	(a)	5	948	..	960
Wolfgram Concentrate	2	79	..	578	129	788
WO ₃ Content	1	51	..	389	81	522

(a) Less than half a ton.

The following table shows production for Australia for the years 1939 and 1951 to 1955:—

TUNGSTEN CONCENTRATES : PRODUCTION, AUSTRALIA.
(Tons.)

Particulars.	1939.	1951.	1952.	1953.	1954.	1955.
Scheelite Concentrate.. ..	191	1,031	989	1,185	1,331	1,449
WO ₃ Content	124	632	602	729	861	960
Wolfram Concentrate.. ..	726	697	1,035	1,008	722	788
WO ₃ Content	482	467	672	672	511	522

2. **Mineral Sands.**—The recovery of mineral sands from beaches in northern New South Wales and Queensland commenced in 1934. The industry was expanded considerably following the 1939–45 War and Australia is now one of the world's largest producers of the two principal minerals obtained from treatment of the sands, namely, rutile and zircon. Small quantities of ilmenite and monazite are also produced, but most producers either prepare a low-grade concentrate which is stockpiled or make no attempt to recover the ilmenite and monazite from the beach sands, the tailings being dumped after extraction of rutile and zircon. Late in 1956, operations commenced near Bunbury in Western Australia on beach dune deposits, and chromium-free ilmenite suitable for pigment manufacture is being produced. It is hoped later to recover the rutile, zircon and monazite content of the beach sands being treated. Particulars of the quantity of rutile and zircon concentrates produced are shown in the following table for the years 1951 to 1955.

RUTILE AND ZIRCON PRODUCTION, AUSTRALIA.
(Tons.)

Year.	Rutile Concentrates.		Zircon Concentrates.	
	Quantity.	TiO ₂ Content.	Quantity.	Zircon Content.
1951	35,189	33,432	42,410	41,420
1952	38,014	36,861	27,696	27,371
1953	38,039	37,067	27,207	26,858
1954	44,659	43,011	41,453	40,920
1955	59,613	57,232	48,673	48,209

3. **Cadmium and Cobalt.**—The sources of cadmium in Australia are lead and zinc concentrates. The cadmium content of these concentrates produced during 1954 was 903 tons and in 1955, 844 tons. Most of the concentrates are treated at Risdon, Tasmania, and at Port Pirie, South Australia, for the extraction of cadmium. The remainder are exported.

Cobalt is present in zinc concentrate produced at Broken Hill, New South Wales, and at Rosebery, Tasmania. The cobalt is recovered in the form of cobalt oxide at the zinc refining plant at Risdon, Tasmania, and is sold as such to industry. The cobalt metal content of zinc concentrate produced in 1954 was estimated at 69 tons and in 1955 at 61 tons.

Production of refined cadmium and cobalt oxide for the years 1939 and 1951 to 1955 is shown in the following table:—

CADMIUM (REFINED) AND COBALT OXIDE : PRODUCTION.(a)
(Tons.)

Year.	Cadmium (Refined).			Cobalt Oxide. Extracted from Ores Mined in New South Wales.(b)
	Extracted from Ores Mined in—			
	New South Wales.	Tasmania.	Total.	
1939	124	48	172	20
1951	195	36	231	13
1952	245	41	286	16
1953	257	40	297	17
1954	239	49	288	18
1955	261	40	301	18

(a) Source: Bureau of Mineral Resources.

(b) Excludes less than a ton of cobalt oxide produced from Tasmanian ores in each of the years shown.

The figures shown in the table above refer to production in Australia only and do not include the metallic contents of cadmium and cobalt oxide contained in the ores and concentrates exported overseas.

4. **Manganese.**—There has been considerable expansion of manganese ore production in recent years, due mainly to increased output in Western Australia at Ragged Hills, 250 miles south-east of Port Hedland, and at Horseshoe, north of Meekatharra. In 1955, the mining of manganese commenced near Muchetty in the Northern Territory and 1,462 tons of ore with a manganese dioxide content of 975 tons were produced during the year.

The following table shows the production of metallurgical grade and battery and other grades of manganese ore for the years 1939 and 1951 to 1955.

MANGANESE ORE PRODUCTION: AUSTRALIA.
(Tons.)

Year.	Metallurgical Grade.					Battery and Other Grades.
	New South Wales.	Queensland.	South Australia.	Western Australia.	Australia.	
1939	146	..	7	..	153	(a)
1951	1,054	..	..	5,257	6,311	(b) 1,658
1952	981	..	..	5,045	6,026	(c) 1,043
1953	1,015	43	..	30,457	31,515	(c) 1,428
1954	749	138	..	26,448	27,335	(c) 867
1955	1,071	78	..	44,194	45,343	(d) 2,013

(a) Included with "Metallurgical Grade" 27 tons. (b) New South Wales, 1,631 tons; South Australia, 1,462 tons. (c) New South Wales only. (d) New South Wales, 551 tons; Northern Territory,

5. **Other.**—The production, in 1955 (1954 shown in parentheses) of other metallic minerals worthy of note, is as follows:—

Antimony. The antimony content of antimony-bearing minerals produced was 922 tons (731 tons). Of this amount, 615 tons (614 tons) were in lead concentrate and 307 tons (117 tons) in 650 tons (222 tons) of antimony ore and concentrate.

Bauxite. 7,563 tons (5,487 tons) of bauxite ore were produced mainly in New South Wales and Victoria. During 1956, the existence of extensive deposits of bauxite on the west coast of Cape York Peninsula, Queensland was announced. Bauxite has been found in an area about 150 miles north and south around Albatross Bay. In December, 1956, the Commonwealth Aluminium Corporation Pty. Ltd. was registered, and its authority to prospect embraces an area of about 2,500 square miles. Two separate areas, at Weipa and Pera Head, each containing 200,000,000 tons of commercial grade bauxite have already been proved. It is at present planned to produce annually 1,500,000 tons of bauxite yielding 500,000 tons of alumina which will be exported.

Beryllium. Production of beryl ore was 206 tons (149 tons) which came mainly from Western Australia where the Pilbara gold field was the main producing area. The beryllium oxide content of the beryl ore was 2,428 units (1,723 units).

Tantalite-Columbite. The production of tantalite-columbite concentrate was 27,139 lb. (117,767 lb.) and the whole of this output, excepting 1,048 lb. produced in the Northern Territory in 1954, came from Western Australia. The tantalum pentoxide and columbium pentoxide content of the concentrates was 15,454 lb. (60,348 lb.).

Other. Other metallic minerals produced in Australia in small quantities during 1955, were molybdenite concentrate, native osmiridium, and platinum concentrate.

§ 8. Coal.

1. **Total Production of Coal.**—An account of the discovery of coal in each State appears in earlier issues of the Official Year Book (see No. 3, pp. 515–16). The quantity and value of the production in each State in Australia for 1939, and for each of the years 1951 to 1955 are shown in the following table. Of the total production of black coal in 1955, 83,864 tons were classified as semi-anthracite, 17,608,498 tons as bituminous and 1,582,389 tons as sub-bituminous.

COAL PRODUCTION.

Year.	Black Coal.							Brown Coal.
	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.	Victoria.
QUANTITY ('000 tons).								
1939	11,196	365	1,317	..	558	99	13,535	3,651
1951	13,513	148	2,474	388	848	237	17,608	7,836
1952	15,022	144	2,742	418	830	248	19,404	8,104
1953	14,174	152	2,517	448	886	234	18,411	8,257
1954	15,083	141	2,761	495	1,019	264	19,763	9,331
1955	14,737	133	2,747	455	904	299	19,275	10,112
VALUE(a) (£'000).								
1939	7,027	260	1,168	..	363	74	8,892	386
1951	29,326	601	4,490	400	1,717	305	36,839	2,755
1952	43,283	728	5,956	430	2,457	475	53,329	3,255
1953	41,630	946	5,861	461	3,073	453	52,424	3,628
1954	42,762	886	6,474	650	3,589	523	54,884	3,945
1955	41,715	826	6,858	778	3,132	605	53,914	4,394

(a) At the mine.

The mining of black coal on a large scale by open-cut methods first began in Australia at Blair Athol in Queensland, where in 1937, the first year of production, 18,494 tons were produced. Open-cut mining of black coal was introduced in New South Wales in 1940, in Western Australia in 1943, in South Australia in 1944, and in Tasmania in 1950. The output from open-cuts rose slowly up to 1943 when 119,406 tons were produced, increasing rapidly from 1944 and reaching an output of over four million tons in 1952. Since then however, the output from open-cut mining has declined and in 1955 it was 2,315,568 tons only. This decline has been mainly due to the closing down of large open-cuts in New South Wales, as overproduction of coal began to occur late in 1952 and it is the policy of the Joint Coal Board that open-cut mining should provide the quantity of coal by which underground mine production fails to meet total requirements.

The production of black coal from underground and open-cut mines in each State for the years 1939 and 1951 to 1955 is shown in the following table.

BLACK COAL PRODUCTION : UNDERGROUND AND OPEN-CUT.
(*000 Tons.)

Year.	Method of Mining.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.
1939	Underground	11,196	365	1,274	..	558	99	13,492
	Open-cut	..	..	43	..	..	..	43
	Total	11,196	365	1,317	..	558	99	13,535
1951	Underground	11,224	148	1,857	..	480	231	13,940
	Open-cut	2,289	..	617	388	368	6	3,668
	Total	13,513	148	2,474	388	848	237	17,608
1952	Underground	12,492	144	2,006	..	419	240	15,301
	Open-cut	2,530	..	736	418	411	8	4,103
	Total	15,022	144	2,742	418	830	248	19,404
1953	Underground	12,452	152	1,941	..	493	234	15,272
	Open-cut	1,722	..	576	448	393	(a)	3,139
	Total	14,174	152	2,517	448	886	234	18,411
1954	Underground	13,703	141	2,067	..	608	254	16,773
	Open-cut	1,380	..	694	495	411	10	2,990
	Total	15,083	141	2,761	495	1,019	264	19,763
1955	Underground	13,835	133	2,108	..	600	284	16,960
	Open-cut	902	..	639	455	304	15	2,315
	Total	14,737	133	2,747	455	904	299	19,275

(a) Less than 500 tons.

2. **Production of Coal in Each State.**—(i) *New South Wales.* The coal deposits of New South Wales are the most important and extensively worked in Australia. The principal fields are known as the Northern, Southern and Western, and are situated in the vicinity of Newcastle, Bulli and Lithgow respectively.

The coal from the various districts differs in quality or, geologically speaking, rank—that from the Northern district being especially suitable for gas-making, household purposes and steam, while the product of the Southern and Western districts is essentially a steaming coal. The Permian Coal Measures in the Northern division are being worked extensively in the Hunter River Valley area, particularly in the vicinity of Maitland, Cessnock and, more recently, Muswellbrook. This district is the most important, from the aspect of coal mining, in Australia.

The following table shows particulars of New South Wales coal production classified according to rank and type of mining during the five years 1951 to 1955:—

COAL : PRODUCTION, NEW SOUTH WALES.
(Tons.)

Particulars.	1951.	1952.	1953.	1954.	1955.
Semi-anthracite ..	234	420	..	..	1,658
Bituminous ..	13,508,460	15,008,489	14,164,603	15,065,979	14,718,426
Sub-bituminous ..	4,550	13,191	9,228	17,281	16,313
<i>Total</i> ..	<i>13,513,244</i>	<i>15,022,100</i>	<i>14,173,831</i>	<i>15,083,260</i>	<i>14,736,397</i>
Underground mines ..	11,224,212	12,491,904	12,451,741	13,703,289	13,834,824
Open-cut mines ..	2,289,032	2,530,196	1,722,090	1,379,971	901,573

(ii) *Victoria.* (a) *Black Coal.* Production of black coal in Victoria is restricted to the Gippsland district. The State Coal Mine at Wonthaggi is the main producer, the remaining production coming from small privately-owned mines. In 1955, production of bituminous coal was 132,888 tons compared with 141,318 tons in 1954.

(b) *Brown Coal.* The mining of brown coal in Australia is carried on only in Victoria, where extensive deposits exist; estimates place the available reserves at 40,000 million tons. Large-scale developmental projects are in progress and these, when completed, will greatly reduce the dependence on fuel from other States. In the past ten years, the output of brown coal in Victoria has doubled, and in 1955 it exceeded ten million tons for the first time. Of the 10,112,206 tons of brown coal produced in 1955, 9,236,978 tons, or 93 per cent., were won at the State open-cuts at Yallourn.

The briquetting plant of the State Electricity Commission at Yallourn started operations in November, 1924, and the output, which in 1926 was 95,477 tons, had increased to 180,905 tons in 1930 and to 635,716 tons in 1955. Approximately two and a half tons of brown coal are required to make one ton of briquettes. In December, 1956, the Lurgi high pressure brown coal gasification plant at Morwell was opened. This plant is operated by the Gas and Fuel Corporation of Victoria and produces town gas which is sent to Melbourne through 103 miles of pipeline.

The table following shows the production and distribution of brown coal and the production of briquettes in Victoria for the years 1950-51 to 1954-55.

BROWN COAL : PRODUCTION AND UTILIZATION, VICTORIA.
(’000 Tons.)

Year.	Production.	Consumption as Fuel.			Consumption as Raw Material in Briquette Manufacture.	Balance (available for consumption and accumulation of stocks).	Briquettes Manufactured.
		Electricity Generation.	Briquette Factory.	Other Factories. (a)			
1950-51 ..	7,300	4,338	696	746	1,391	129	511
1951-52 ..	8,096	4,784	776	876	1,553	107	568
1952-53 ..	8,075	4,933	729	837	1,457	119	545
1953-54 ..	8,731	5,307	780	920	1,560	164	587
1954-55 ..	9,668	5,899	842	1,088	1,684	155	631

(a) Recorded consumption.

(iii) *Queensland.* The production of coal classified according to rank and type of mining during the years 1951 to 1955 was as follows:—

COAL : PRODUCTION IN QUEENSLAND.
(Tons.)

Particulars.	1951.	1952.	1953.	1954.	1955.
Semi-anthracite ..	80,722	83,373	80,979	72,459	80,442
Bituminous ..	2,137,994	2,312,167	2,215,078	2,377,883	2,459,727
Sub-bituminous ..	255,059	346,696	220,755	310,468	206,996
<i>Total</i> ..	<i>2,473,775</i>	<i>2,742,236</i>	<i>2,516,812</i>	<i>2,760,810</i>	<i>2,747,165</i>
Underground mines ..	1,856,842	2,006,321	1,941,631	2,066,788	2,108,065
Open-cut mines ..	616,933	735,915	575,181	694,022	639,100

The principal coal-producing districts in Queensland are Ipswich, Clermont, Mount Morgan and Bowen; output from these areas in 1955 amounted to 2,296,110 tons or 84 per cent. of the total.

The open-cut method of mining for black coal has advanced considerably in Queensland in recent years. In 1946, 106,444 tons (or 7 per cent. of total production) were won from open-cuts while in 1954, 694,022 tons (25 per cent.) were mined in this manner. In 1955, the output from open-cuts declined to 639,100 tons, or 23 per cent. of the total.

(iv) *South Australia.* Coal mined in South Australia is won by open-cut methods at Leigh Creek, some 380 miles by rail north of Adelaide. This important deposit yields a low grade sub-bituminous coal of Triassic age, and has known reserves of about 380 million tons. However, this State relies to a great degree on bituminous coal from New South Wales to supplement the demand created by industrial expansion. In the first year of major production of the Leigh Creek mine in 1944, 34,620 tons were won. Production has risen considerably in more recent years, and amounted to 455,287 tons in 1955.

(v) *Western Australia.* The only coal deposits which have been developed on a commercial scale are at Collie in the south-west of the State. Collie coal is sub-bituminous in rank. Production in 1955 was 903,793 tons, compared with 1,018,343 tons in 1954. Although a large proportion of the coal produced in Western Australia comes from open-cut mines, the amount available from these mines is limited, as present surveys estimate that only 8,000,000 tons can be extracted by open-cut methods. In 1955, 304,130 tons, or about one-third of the total production, were won by open-cut mining.

(vi) *Tasmania.* Two periods of coal formation are represented in Tasmania. The older (Permo-Carboniferous) seams contain fairly high ranking semi-anthracitic coal, with a high sulphur content, but production from these mines, 1,764 tons in 1955, represents less than one per cent. of Tasmanian black coal output. The more recent Mesozoic coal of bituminous rank is mined in the north-east of the island, the Cornwall and Mt. Nicholas mines being the most prolific producers. In 1955, output amounted to 299,221 tons of which 15,478 tons came from open-cut mining.

(vii) *Australia's Coal Reserves.* The latest available estimate of the actual and probable coal reserves of Australia is that prepared by the Coal and Lignites Panel of the Power Survey Sectional Committee of the Standards Association of Australia, and is shown in the following table.

COAL RESERVES OF AUSTRALIA.
(Million Tons.)

State.	Anthracitic and Bituminous Coal.	Sub-bituminous Coal.	Lignites and Brown Coal.
New South Wales ..	11,000	500	..
Victoria ..	12	..	40,000
Queensland ..	4,000	3	50
South Australia ..	..	380	225
Western Australia ..	..	1,000	2
Tasmania ..	240	..	2

3. **Production in Principal Countries.**—The following table shows the production of the principal countries in 1955 as published by the Mineral Resources Division of the Colonial Geological Surveys.

COAL : PRODUCTION IN PRINCIPAL COUNTRIES, 1955.
(⁰000 Tons.)(a).

Country.	Black Coal.		Brown Coal and Lignite.	
	1954.	1955.	1954.	1955.
United States of America ..	371,917	449,342	3,788	4,200
U.S.S.R.	239,900	271,700	101,800	113,100
United Kingdom	224,090	221,601	..	..
Germany—				
Federal Republic	127,713	130,452	86,426	88,930
Eastern	3,000	3,000	179,100	198,200
Poland	90,200	93,000	5,800	5,900
China	82,000	91,000	..	..
France	53,546	54,461	1,880	2,021
Japan	42,045	41,750	1,422	1,346
India	36,881	38,213	..	..
Union of South Africa ..	28,852	31,639	..	..
Belgium	28,787	29,503	..	..
Czechoslovakia	21,200	21,800	38,100	40,100
Australia	19,763	19,275	9,331	10,112
Saar	16,552	17,056	..	..
Spain	12,403	12,188	1,727	1,795
Netherlands	11,881	11,707	248	251
Canada	11,426	11,175	1,890	2,048
Hungary	2,397	2,649	18,799	19,314
Yugoslavia	972	1,119	12,475	13,848
<i>Estimated World Total ..</i>	<i>1,462,600</i>	<i>1,584,000</i>	<i>478,400</i>	<i>518,000</i>

(a) Long tons.

4. **Exports.**—(i) *General.* The quantities and values of the oversea exports of Australian coal and of bunker coal for oversea vessels for the five years 1951–52 to 1955–56 are shown in the following table. These shipments were made mainly from New South Wales.

COAL : OVERSEA EXPORTS AND BUNKER, AUSTRALIA.

Year.	Oversea Exports (a)		Bunker-Coal for Oversea Vessels.	
	Quantity.	Value.	Quantity.	Value.
	Tons.	£	Tons.	£
1951–52	139,140	608,045	54,207	246,258
1952–53	255,832	1,178,466	42,623	215,776
1953–54	385,812	1,528,788	31,718	129,977
1954–55	291,226	1,147,441	25,363	111,625
1955–56	193,813	780,284	38,749	165,224

(a) Excludes bunker coal.

(ii) *New South Wales.* New South Wales is the principal Australian coal-producing State and in addition to meeting requirements within the State, supplies considerable quantities of coal to other States and for export overseas as well as bunker coal for vessels calling at New South Wales ports. Of the total New South Wales coal production in 1955–56 (14,630,702 tons), 12,048,715 tons (82 per cent.) were available for consumption in the State, 2,148,044 tons (15 per cent.) were exported interstate and 433,943 tons (3 per cent.) were exported overseas or supplied as bunker coal for interstate and oversea vessels.

5. **Consumption in Australia.**—Details of the production of black coal and its disposal in Australia are given in the following table for the years 1950–51 to 1954–55.

BLACK COAL : PRODUCTION AND DISPOSAL.
(^{'000} Tons.)

Particulars.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Production(a)	16,418	19,170	18,545	19,424	19,352
Imports	598	285	146	2	5
Total	17,016	19,455	18,691	19,426	19,357
Disposals—					
<i>Consumption as Fuel—</i>					
Electricity Generation ..	4,672	5,042	5,071	5,590	5,916
Factories	2,967	3,090	3,097	3,367	3,329
Railway Locomotives(b)..	3,183	3,291	3,110	3,208	3,112
Bunker Coal—					
Oversea Vessels ..	69	54	43	32	25
Interstate Vessels ..	225	227	229	228	218
Total	11,116	11,704	11,550	12,425	12,600
<i>Consumption as raw material—</i>					
Gas works	1,964	2,097	2,081	2,047	2,063
Coke works	2,618	2,835	3,071	3,252	3,314
Total	4,582	4,932	5,152	5,299	5,377
Exports (Oversea) ..	72	139	256	386	291
Balance—Unrecorded consumption, other purposes(c)	1,246	2,680	1,733	1,316	1,089
Grand Total	17,016	19,455	18,691	19,426	19,357

(a) Includes miners' and colliery coal. (b) Government railways only. (c) Includes net change in stocks.

After the 1939-45 War, it was found necessary to augment local supplies of black coal in Australia by increasing imports. The quantity imported reached a post-war peak of 597,866 tons in 1950-51, but since then has declined, as in recent years production has expanded considerably. Since 1952-53, exports have exceeded imports by a wide margin; in 1955-56, exports of black coal were 193,813 tons and imports were 4,117 tons.

6. Coal Value at the Mine in New South Wales.—Particulars of the average values at the mine (or at screens where these are at a distance from the mine) of saleable coal for each district and for New South Wales as a whole are shown in the following table for the years 1951 to 1955. Saleable coal is taken to exclude miners' coal, coal consumed at the mines and other producer-consumed coal. Stocks of coal held at grass by the Commonwealth Government are also excluded. No deduction has been made in respect of excise duty operative from 1st November, 1949.

**AVERAGE SELLING VALUE AT THE MINE PER TON OF SALEABLE COAL :
NEW SOUTH WALES.**

(s. d.)

Year.	Northern District.	Southern District.	Western District.	Average for State.
1951.. ..	51 5	50 8	42 10	49 8
1952.. ..	62 3	60 3	56 7	61 2
1953.. ..	62 1	61 0	56 9	61 1
1954.. ..	59 11	59 0	57 1	59 3
1955.. ..	59 3	58 10	55 3	58 7

7. Values in New South Wales, Great Britain and the United States of America.—The following table shows, for the years 1951 to 1955, average values of coal produced in New South Wales, Great Britain and the United States of America. The figures give an indication of changes in average value or price within each country but they do not necessarily show the relative levels as between the countries concerned.

PRODUCTION VALUES OF COAL PER TON : NEW SOUTH WALES, GREAT BRITAIN AND UNITED STATES OF AMERICA.

Country.	1951.	1952.	1953.	1954.	1955.
	<i>s. d.</i>	s. d.	s. d.	s. d.	s. d.
New South Wales—Bituminous(a) ..	49 8	61 2	61 1	59 3	58 7
Great Britain—Deep mined(b)	51 2½	57 3	61 1½	63 6	68 0½
United States of America— Bituminous and lignite(c) ..	\$ 4.92	\$ 4.90	\$ 4.92	\$ 4.82	\$ (d)

(a) Average selling value at the mine per ton of 2,240 lb.; the figures relate to saleable coal and include excise duty from November, 1949. (b) Average value in sterling at the mine per ton of 2,240 lb. (c) Average value in United States currency at the mine per ton of 2,000 lb. (d) Not yet available.

8. **Employment in Coal-mines.**—The number of persons employed, both above and below ground, in coal-mines in each State for each of the years 1952 to 1955 is shown in the following table.

COAL-MINES : PERSONS EMPLOYED.

Year.	New South Wales.	Victoria.		Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
		Black.	Brown.					
1952	20,151	848	1,694	3,715	220	1,326	349	28,303
1953	19,961	900	1,598	3,673	250	1,478	344	28,204
1954	19,979	786	1,598	3,638	270	1,583	358	28,212
1955	19,260	687	1,502	3,618	280	1,432	367	27,146

The year of maximum employment was 1926 when 31,774 persons were engaged in the coal-mines of Australia. Shortly after that year, the industrial depression and a prolonged stoppage of work on one of the principal fields of New South Wales during 1929 and 1930 seriously affected the figures of employment. Since 1933 there has been a gradual increase, but the numbers employed in 1953 were only 86 per cent. of the maximum figure already quoted. In New South Wales in 1955, 8,787,538 tons of coal, or 60 per cent. of the total output of underground coal, were cut by machinery, compared with 3,594,000 tons or 32 per cent. in 1939. Similar details for other States are not available.

9. **Production of Black Coal per Man-shift.**—(i) *Underground Mines.* The following table shows particulars of estimated black coal output per man-shift worked (a) at the coal face and (b) by all employees in respect of underground mines for each State concerned and for Australia for the years 1951 to 1955. These estimates have been calculated by the Joint Coal Board from data collected fortnightly in respect of coal production and the number of man-shifts actually worked. In South Australia, black coal is won only by open-cut mining.

PRODUCTION OF BLACK COAL PER MAN-SHIFT : UNDERGROUND MINES.
(Tons.)

Year.	N.S.W.	Vic.	Q'land.	W. Aust.	Tas.	Australia.
PRODUCTION PER MAN-SHIFT WORKED AT COAL FACE.						
1951	10.82	2.43	6.40	8.22	6.01	9.39
1952	10.06	2.24	6.36	6.82	6.03	8.88
1953	9.72	2.09	6.37	4.86	6.15	8.49
1954	10.16	2.03	6.54	4.82	5.95	8.81
1955	10.76	2.13	6.61	4.74	6.54	9.24
PRODUCTION PER MAN-SHIFT WORKED BY ALL EMPLOYEES.						
1951	2.96	0.93	2.55	1.85	3.03	2.78
1952	3.00	0.83	2.55	1.64	3.01	2.81
1953	3.08	0.81	2.53	1.67	3.00	2.84
1954	3.25	0.82	2.61	1.92	3.07	3.00
1955	3.39	0.86	2.66	2.06	3.08	3.14

(a) In April, 1952, the definition of persons working "at coal face" was clarified resulting in a considerable increase in the number of persons assigned to this category in New South Wales.

(ii) *Open-cut Mines.* In the next table, the Joint Coal Board's estimates of production of black coal per man-shift worked by all employees in open-cut mines are shown for the years 1951 to 1955. There are no open-cuts producing black coal in Victoria.

PRODUCTION OF BLACK COAL PER MAN-SHIFT : OPEN-CUT MINES.(a)
(Tons.)

Year.	N.S.W.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1951	8.02	11.80	3.05	6.73	5.28	7.03
1952	7.92	11.78.	3.22.	6.13.	4.63	7.07
1953	8.51	10.97	3.57	5.37	..	6.92
1954	8.97	12.27	(a) 4.52	4.71	7.91	7.31
1955	9.18	11.42	6.02	5.77	7.78	8.11.

(a) Figures prior to July, 1954 include manshifts on other than mine work:

10. **Joint Coal Board.**—After the 1939–45 War, the Governments of the Commonwealth and New South Wales agreed to create jointly a coal authority with powers similar to and in some respects wider than those possessed under Commonwealth war-time legislation. Following this agreement, the Joint Coal Board was created and has functioned as from 1st March, 1947. Briefly, it is the responsibility of the Board to ensure that the coal of the State is conserved, developed, worked, distributed and used to the best advantage in the public interest, and to promote the welfare of the workers in the industry. Further details of the powers and functions of the Board are contained in earlier issues of the Official Year Book.

§ 9. Coke and Other By-products from Coal.

1. **Coke.**—The production of metallurgical coke in Australia was limited to about 250,000 tons per annum prior to the 1914–18 War. This was below local requirements and necessitated an annual import of about 27,000 tons. By 1920, production had risen to more than 500,000 tons, by 1938–39 to 1,164,873 tons, and in 1954–55 it reached the record level of 2,046,790 tons. Imports exceeded exports prior to 1952–53 but in 1952–53 and later years there has been a net export surplus. In 1954–55, exports amounted to 21,885 tons and 5,900 tons were imported, while in 1955–56 exports further increased to 66,590 tons (61,093 tons to New Caledonia) and imports amounted to 3,444 tons.

In addition to metallurgical coke referred to above (which is produced by specialized coke works), considerable quantities of coke are produced in gas works as a by-product of the manufacture of gas. Production in gas works in 1954–55 was 1,099,859 tons.

In order to avoid duplication with coal values, the figures for coke have not been included in the general tables of mineral production in the early part of this chapter.

In the following table, particulars of the production of coke in coke works and gas works in Australia are shown for the years 1950–51 to 1954–55. The figures exclude output of coke breeze, which in 1954–55 amounted to 331,602 tons.

COKE PRODUCTION : AUSTRALIA.

(Tons.)

Industry.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Coke Works	1,515,782	1,636,982	1,858,428	2,010,404	2,046,790
Gas Works	1,111,854	1,203,602	1,071,106	943,344	1,099,859
Total	2,627,636	2,840,584	2,929,534	2,953,748	3,146,649

2. **Other By-products from Coal.**—In addition to coke, other products are obtained from the treatment of coal by coke and gas works. Details of some of these are given in the following table for the years 1950–51 to 1954–55.

OTHER BY-PRODUCTS FROM COAL : AUSTRALIA.

Commodity.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55:
Tar—Crude(a) '000 gals	41,239	42,886	44,408	46,517	46,609
Refined(a) "	12,449	12,514	15,699	17,725	17,120
Tar Oils (crude) "	3,960	4,101	3,674	3,799	4,631
Ammoniacal Liquor "	24,210	23,449	21,950	22,263	26,543
Ammonium Sulphate(a) tons	57,893	63,815	70,174	70,811	78,434

(a) Includes production in works other than coke and gas works.

§ 10 Mineral Oils.

1. **Australia.**—Natural oil has been proved to exist in Queensland and Victoria and also in Western Australia, where, in 1953, potential oil production was found at Rough Range. Many of the conditions favourable to the accumulation of oil in commercial quantities have been shown to be present in Queensland, Western Australia and New South Wales.

Reference is made in § 15 p. 1010, to the assistance afforded by the Commonwealth Government in the search for oil.

Structure control drilling has been carried out following the Rough Range discovery and field exploration increased enormously. The drilling of a number of wells has commenced at various places in all States of the Commonwealth except Tasmania and in the Northern Territory. Operations throughout the States and Territories of Australia during 1956 are briefly outlined below.

2. **New South Wales.**—Australian Oil & Gas Corporation Ltd. suspended the Kurralong well near Sydney and commenced drilling at Dural. Clarence River Basin Oil Exploration Co. N.L. completed operations on their Grafton well.

3. **Victoria.**—Woodside (Lakes Entrance) Oil Co. N.L. drilled 3 wells to 6,008 feet, 6,108 feet and 5,985 feet respectively. Evidence of oil was reported at several depths in these wells. A scout boring programme was initiated by Frome Lakes Pty. Ltd.

4. **Queensland.**—No drilling for oil was carried out in this State during the year.

5. **South Australia.**—Australian Oil & Gas Corporation Ltd. drilled near Loxton, South Australia and Murray Basin Oil Syndicate were drilling at Pinnaroo. Santos Ltd. have been engaged in an extensive shallow drilling campaign near Wilkatana, and have reported evidence of petroleum from a number of wells.

6. **Western Australia.**—West Australian Petroleum Pty. Ltd. drilled a number of structure holes in the Rough Range area in an attempt to solve the complicated geology of that area. Scout boring was also undertaken on the northerly plunge of the Rough Range structure and an extensive scout boring programme was carried out on Dirk Hartog Island. Cape Range 2 was completed as a dry hole at 15,170 feet and 2 further dry holes were drilled on this structure. Frazer River No. 1 was completed as a dry hole at 10,144 feet.

Associated Freney Oilfields N.L. abandoned their Myroodah No. 1 at 6,001 feet.

The Bureau of Mineral Resources, Geology and Geophysics undertook a scout boring programme in the Kimberley area of the Fitzroy Basin. Three bores were drilled for the purpose of obtaining geological information. West Australian Petroleum Pty. Ltd. also drilled one 4,000 foot bore for geological information at Roebuck Bay and a second was in progress at Dampier Downs at the end of the year.

7. **Northern Territory.**—A small flow of gas encountered at a shallow depth at Amaroo Station was found to contain hydrocarbons and geological surveys are now in progress.

8. **Papua.**—Australasian Petroleum Co. Pty. Ltd. and Island Exploration Co. Pty. Ltd. continued extensive geological and geophysical surveys over their permit areas in western Papua. Considerable trouble was experienced in Kuru No. 1 when high pressure gas was encountered at 998 feet, and a serious blow out occurred. A relief well had to be drilled before the blow-out was brought under control. Drilling was in progress at Kuru and Barikewa by Island Exploration Co. Pty. Ltd. and at Morehead by Australasian Petroleum Co. Pty. Ltd.

Papuan Apinaipi Petroleum Co. Ltd. and Enterprise of New Guinea Gold and Petroleum Development N.L. carried out geological surveys on their permits.

9. **General.**—During 1939, efforts were made to secure greater uniformity in State legislation governing the search for oil. A draft Bill based on modern legislation in other countries was prepared by the Commonwealth and submitted to the State Governments. As a result, amending legislation was passed in Victoria, Queensland, South Australia and Western Australia. In 1956, New South Wales also amended its petroleum legislation.

Further details of action taken by the Commonwealth Government in connexion with the search for oil will be found in § 15, Government Aid to Mining, and Mineral Control (p. 1010).

§ 11. Sulphur.

Sulphur, although produced in Australia as a content of certain metallic minerals, is itself non-metallic in character. Sulphides such as zinc concentrate and pyrite, which contain sulphur, are produced in appreciable quantities. There is no production of elemental sulphur (brimstone) in Australia. A large proportion of zinc concentrate produced is exported and therefore lost to Australia for utilization of the sulphur content.

The sulphur recovered in Australia is in the form of acid, most of which is used in the manufacture of fertilizers, mainly superphosphate. As this recovery does not at present satisfy local requirements, it is necessary to import elemental sulphur to meet the balance.

Production of pyrite concentrate at Nairne in South Australia commenced early in 1955. The output from this mine is supplied to the new sulphuric acid plant which was opened at Port Adelaide in August, 1955. This new plant has an annual capacity of 100,000 tons of sulphuric acid and will require 70,000 tons of pyrite concentrate from Nairne annually.

The following table shows for the years 1939 and 1951 to 1955 the sulphur content of sulphur-bearing minerals produced, quantities of sulphur recoverable therefrom, production of monohydrate acid (100 per cent. sulphuric acid), and sulphur content of monohydrate acid produced. Particulars regarding spent oxide roasted have been included to complete the statistics relating to recovery of sulphur and monohydrate acid production.

SULPHUR PRODUCTION : AUSTRALIA.
(Tons.)

Item.	1939.	1951.	1952.	1953.	1954.	1955.
<i>Sulphur contained in—</i>						
Zinc concentrate	123,968	113,964	119,515	141,954	152,074	155,836
Pyrite	27,040	65,962	93,516	77,811	97,649	105,836
Spent Oxide Roasted (a) ..	(b)	3,200	4,211	5,432	4,680	5,511
<i>Total Sulphur Content ..</i>	<i>151,008</i>	<i>183,126</i>	<i>217,242</i>	<i>225,197</i>	<i>254,403</i>	<i>267,183</i>
Recoverable Sulphur (a)	129,709	159,050	189,436	195,471	221,265	232,552
<i>Monohydrate Acid Produced ..</i>	<i>(c) 484,493</i>	<i>652,125</i>	<i>628,302</i>	<i>671,471</i>	<i>778,008</i>	<i>895,765</i>
<i>Quantity of Sulphur in Mono-</i>						
<i>hydrate Acid produced from—</i>						
Sulphur (Elemental) (d) ..	(a) 114,500	135,683	112,225	123,469	154,337	187,015
Zinc concentrate	25,300	32,850	33,115	31,270	33,564	30,412
Pyrite	27,040	50,300	57,891	60,811	62,533	71,179
Spent Oxide	(b)	2,230	3,231	3,973	3,973	4,295
<i>Total</i>	<i>166,840</i>	<i>221,063</i>	<i>206,462</i>	<i>219,523</i>	<i>254,407</i>	<i>292,901</i>

(a) Estimated.

(b) Not available.

(c) Year ended 30th June, 1939.

(d) All imported..

§ 12. Non-metallic Minerals.

1. *Asbestos.*—The production of asbestos in Australia at present is only sufficient to meet about one-sixth of domestic requirements. Production of asbestos in Australia in recent years has been of two types, chrysotile and crocidolite, the former being the most important type economically, but the deposits of chrysotile are relatively small and widely scattered. The principal deposits of asbestos are of crocidolite, and they occur in the Hammersley Ranges in Western Australia, about 200 miles south-east of Roebourne. Large scale operations were commenced there in 1943 at Wittenoom Gorge by Australian-Blue Asbestos Ltd. and reserves in seams over which the Company holds leases are estimated at two million tons. However, high costs of production due to heavy freight charges and the difficulty of retaining labour in an isolated community have prevented greater development of the project.

The production of chrysotile and crocidolite in Australia during the five years 1951 to 1955 is shown in the following table:—

PRODUCTION OF ASBESTOS : STATES.
(Tons.)

Year.	Chrysotile.			Crocidolite.		
	New South Wales.	Western Australia.	Australia.	South Australia.	Western Australia.	Australia.
1951 ..	432	727	1,159	6	1,393	1,399
1952 ..	466	652	1,118	..	2,940	2,940
1953 ..	569	606	1,175	..	3,795	3,795
1954 ..	616	303	919	..	3,794	3,794
1955 ..	590	275	865	..	4,487	4,487

2. Clays.—Statistics of clay production in Australia are not entirely satisfactory, mainly because of differences between States in the classification of the various types of clays. In the following table, the recorded production of the main types of clays produced in each State of Australia is shown for the year 1955.

PRODUCTION OF CLAYS : STATES, 1955.
(Tons.)

Type.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
Bentonite ..					647		647
Brick Clay and Shale ..	1,589,262	(a)889,000	264,711	306,215	(a)434,000	(a) 73,000	3,556,188
Cement Clay and Shale ..	114,483	..	..	17,465	34,924	..	166,872
Damourite ..	..	..	..	436	..	..	436
Fireclay ..	65,421	25,033	8,812	13,668	6,912	..	119,846
Fuller's Earth ..	60	..	..	..	11	..	71
Kaolin ..	27,352	2,945	220	4,721	76	9,740	45,054
Stoneware Clay ..	138,924	..	356	44,529	..	..	183,809
Tile Clay ..	142,945	..	..	..	..	..	142,945
Other Clays ..	9,040	108,764	..	..	..	..	117,804

(a) Estimated.

3. Gypsum.—There are very extensive deposits of gypsum in Australia, but only the more accessible and easily worked deposits have been exploited. These deposits lie in four main regions, (a) in New South Wales stretching from around Griffith to near Broken Hill, (b) the north-west corner of Victoria, the south-west corner of New South Wales and adjoining parts of South Australia, (c) in South Australia on both sides of Gulf St. Vincent and extending to Lake MacDonnell in the west, and (d) between Perth and Kalgoorlie in Western Australia. The South Australian deposits are the most important and about two-thirds of the total Australian production of gypsum to 1954 came from this State, where the main centres of production are Stenhouse Bay on Yorke Peninsula and Lake MacDonnell.

The building industry is the main user of the gypsum produced in Australia, principally in the manufacture of plaster and the remainder in cement manufacture. A small amount is also used as fertilizer. A considerable quantity is exported, mainly to New Zealand for use in the plaster industry, and to New Caledonia for use in nickel smelting operations.

The production of gypsum in Australia is set out in the following table for the five years 1951 to 1955.

PRODUCTION OF GYPSUM : STATES.
(Tons.)

Year.	New South Wales.	Victoria.	South Australia.	Western Australia.	Australia.
1951	104,697	41,126	147,701	70,823	364,347
1952	89,226	47,295	164,825	50,332	351,678
1953	71,819	36,286	181,640	40,247	329,992
1954	128,790	75,012	194,772	41,142	439,716
1955	136,356	89,190	204,522	39,946	470,014

4. Limestone.—Limestone is quarried in all States, but statistics of production are incomplete, none being collected in Western Australia, while in Queensland figures do not include limestone quarried for cement manufacture. Limestone is used mainly for the manufacture of cement, other uses being in the steel industry as a metallurgical flux, in the chemical industry, and in agriculture.

The recorded statistics of limestone production in each State of Australia during 1955 are shown in the following table:—

PRODUCTION OF LIMESTONE(a) : STATES, 1955.
(Tons.)

New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Total.
1,689,630	714,228	120,962	986,701	(b)280,000	206,138	37	3,997,696

(a) Includes shell and coral.

(b) Estimated.

5. **Magnesite.**—The major sources of magnesite at present are deposits at Fifield and Thuddungra in central New South Wales. Most of the output of magnesite in Australia is used for refractory purposes, particularly in the steel industry, and small amounts are used in chemical, paper, glass, rubber, and ceramic industries. Particulars of the production of magnesite in each State for the years 1951 to 1955, are set out in the table below.

PRODUCTION OF MAGNESITE : STATES.
(Tons.)

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Australia.
1951	35,963	398	13	998	762	38,134.
1952	40,333	164	13	572	1,055	42,137
1953	45,769	572	..	36	20	46,397
1954	42,825	..	..	235	92	43,152
1955	57,262	..	..	412	..	57,674

6. **Mica.**—Almost all Australian production of muscovite mica has come from the Northern Territory, though small quantities of inferior grades have been obtained from most of the States. The centre of mica production in the Northern Territory is the Harts Range area about 130 miles north-east of Alice Springs, where mining has been carried on intermittently since 1892, and the Plenty River field, 50 miles north-east of Harts Range.

The Commonwealth Mica Pool—details of which are given in § 15, Government Aid to Mining, on p. 1012—purchases all mica which is in accordance with certain specifications. The following table shows the quantity of muscovite mica produced in Australia during the five years 1951 to 1955.

MUSCOVITE MICA PRODUCTION.
(lbs.)

Particulars.	1951.	1952.	1953.	1954.	1955.			
New South Wales—								
Scrap .. ..	..	..	..	15,680	20,160
Northern Territory—								
Trimmed	48,034	} 71,929	{ 70,684	84,619	56,649			
Crude and Film	2,634					} 1,542
Scrap	82,880								..	65,184	..

7. **Salt.**—Salt is obtained in Australia from evaporation of saline lakes and clay pans. Production satisfies local requirements and provides a considerable surplus for export. Recorded production in South Australia (the chief producing State) is shown in the following table for the years 1951 to 1955. Available estimates of total Australian production are also shown.

SALT PRODUCTION.
(’000 Tons.)

Particulars.	1951.	1952.	1953.	1954.	1955.
South Australia	219	203	239	304	291
Estimated Australian Total ..	300	277	310	380	370

8. **Other Non-metallic Minerals.**—(i) *General.* Many other non-metallic minerals are produced in Australia in considerable quantities, and are listed separately in the following paragraphs.

(ii) *Barite.* The principal producing centre of barite is at Orparinna in the north Flinders Range in South Australia where the deposits are of first-grade quality. The production of barite in Australia during 1955 was 6,264 tons, of which 4,168 tons came from South Australia, 2,086 tons from New South Wales, and 10 tons from Western Australia.

(iii) *Cupreous Ore and Concentrate.* Cupreous ore is mined in Western Australia for mixing with superphosphate fertilizer. The quantity produced in 1955 was 7,731 tons with an average grade of 8.65 per cent.

(iv) *Diatomite.* Production of diatomite is carried on mainly in the eastern States of Australia. In 1955, 5,042 tons were produced in Australia, and of this total, New South Wales produced 3,629 tons.

(v) *Dolomite*. Up to 1950, New South Wales was the main producer of dolomite, but in that year the Broken Hill Pty. Co. Ltd. opened up a large deposit of dolomite at Ardrossan in South Australia which now produces about 90 per cent. of the total output. In 1955, New South Wales produced 6,354 tons; Queensland, 5,318 tons; South Australia, 97,398 tons; Western Australia, 81 tons; and Tasmania, 2,266 tons, making an Australian total of 111,417 tons.

(vi) *Felspar*. The main demand for felspar comes from the glass and ceramic industries. About half the Australian production of felspar comes from New South Wales which produced 11,608 tons of the Australian total of 20,833 tons in 1955. Of the remainder, 5,660 tons came from South Australia and 3,565 tons from Western Australia.

(vii) *Gemstones*. (a) *Diamonds*. Gem quality diamonds are not produced in Australia, but 731 carats of industrial diamonds valued at £7,081 were recovered during gold dredging operations on the Macquarie River in New South Wales.

(b) *Opals*. Most of the opals won in recent years came from the Coober Pedy and Andamooka fields in South Australia which produced opals worth £71,200 in 1955. Other production in 1955 was from the Quilpie district in Queensland valued at £1,350, and £1,000 from Lightning Ridge in New South Wales.

(c) *Sapphires*. The Anakie field in Central Queensland is the only Australian producer of sapphires. Output in 1955 was valued at £3,412.

(viii) *Silica*. The production of silica is not recorded in Victoria and Queensland. The output of silica, which includes glass sand, quartz, quartzite, sand, sandstone, and silicious abrasives, was 103,682 tons in New South Wales; 23,443 tons in South Australia; 6,759 tons in Western Australia; and 5,657 tons in Tasmania, giving a total of 139,541 tons for those States during 1955.

(ix) *Sillimanite*. In 1955, 2,679 tons of sillimanite were produced in Australia. New South Wales contributed 1,987 tons and the remaining 692 tons came from South Australia.

(x) *Talc*. The Australian output of talc (including steatite), was 12,567 tons in 1954. New South Wales produced 817 tons, South Australia 9,163 tons and Western Australia 2,587 tons.

(xi) *Other*. Other non-metallic minerals produced in Australia in small quantities during 1955 were corundum, emery, fluorite, garnet, graphite, glauconite, mineral pigments, pebbles for grinding, phosphate rock, pyrophyllite, serpentine, slate and spodumene.

§ 13. Persons Engaged, Wages Paid and Accidents in Mining.

1. **Total Employment in Mining.**—The number of persons engaged in the mining industry in Australia fluctuates according to economic conditions generally, the price of industrial metals, the state of the labour market, and according to the permanence of new finds and the development of the established mines. The following table shows the numbers engaged in the various mining industries in each State and Australia as a whole in 1955.

EMPLOYMENT IN MINING, 1955. (a)

Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Metal Mining—									
Gold Mining ..	119	418	114	10	5,822	..	270	..	6,753
Silver-Lead-Zinc Mining ..	6,710	..	(b)	(c)	(b)	727	..	..	10,078
Copper-Gold Mining ..	45	..	(b)	(c)	(b)	(b)	145	..	2,065
Tin Mining ..	132	..	250	..	106	438	11	..	937
Mineral Sands Mining ..	485	..	406	..	..	..	..	..	891
Other Metal Mining ..	66	6	(b)	377	311	(b)	51	..	1,268
Total, Metal Mining	7,557	424	4,570	387	6,326	2,251	477	..	21,992
Fuel Mining—									
Black Coal Mining—									
Underground ..	18,840	687	3,415	..	1,432	367	..	..	25,644
Open-cut ..	420	..	203	280	..	..	..	..	..
Total ..	19,260	687	3,618	280	1,432	367	..	..	25,644
Brown Coal Mining ..	..	1,502	..	..	..	..	..	..	1,502
Oil Mining ..	(d)	16	52	..	..	..	..	..	68
Total, Fuel Mining	19,260	2,205	3,670	280	1,432	367	..	..	27,214
Non-metal (excluding Fuel)									
Mining ..	1,145	292	236	707	323	148	24	(e)	2,875
Total, All Mining	27,962	2,921	8,476	1,374	8,081	2,766	501	(e)	52,081
Construction Material									
Quarrying ..	1,245	1,587	218	856	202	54	..	35	4,197
Total, All Mining and Quarrying ..	29,207	4,508	8,694	2,230	8,283	2,820	501	35	56,278

(a) Average employment during whole year. (b) Not available for publication. (c) Not available for publication; included with "Other Metal Mining". (d) Not available for publication; included with "Non-Metal Mining". (e) Not available for publication; included with "Construction Material Quarrying".

The following table shows particulars of mining employment in Australia for the years 1952 to 1955. The figures show for 1952 the average number of persons employed during the period worked by individual mines or quarries, and for 1953 and later years the average number of persons employed during the whole year.

EMPLOYMENT IN MINING : AUSTRALIA.

Industry.	1952.	1953.	1954.	1955.
<i>Metal Mining—</i>				
Gold Mining	6,583	7,050	7,192	6,753
Silver-Lead-Zinc Mining	9,497	9,686	9,397	10,078
Copper-Gold Mining	2,112	2,025	1,957	2,065
Tin Mining	999	1,063	969	937
Mineral Sands Mining	619	597	598	891
Other Metal Mining	1,601	1,601	1,253	1,268
<i>Total, Metal Mining</i>	<i>21,411</i>	<i>22,022</i>	<i>21,366</i>	<i>21,992</i>
<i>Fuel Mining—</i>				
Black Coal Mining	26,612	26,606	26,614	25,644
Brown Coal Mining	1,691	1,598	1,598	1,502
Oil Mining	112	(a)	56	68
<i>Total, Fuel Mining</i>	<i>28,415</i>	<i>28,204</i>	<i>28,268</i>	<i>27,214</i>
<i>Non-metal (excluding Fuel) Mining</i>	<i>3,070</i>	<i>(b) 2,946</i>	<i>2,858</i>	<i>2,875</i>
<i>Total, All Mining</i>	<i>52,896</i>	<i>53,172</i>	<i>52,492</i>	<i>52,081</i>
<i>Construction Material Quarrying</i>	<i>4,162</i>	<i>3,803</i>	<i>4,121</i>	<i>4,197</i>
<i>Total, All Mining and Quarrying</i>	<i>57,058</i>	<i>56,975</i>	<i>56,613</i>	<i>56,278</i>

(a) Not available separately; included with "Non-metal (excluding Fuel) Mining". (b) Includes "Oil Mining".

2. **Salaries and Wages Paid in Mining.**—Statistics of total salaries and wages paid in the mining and quarrying industry are now available from the annual industrial censuses of the industry taken from 1952 onwards. Salaries and wages paid in the mining industries and quarrying in Australia during each year 1952 to 1955, are shown in the following table. Information regarding rates of wages paid in the mining industry is shown in Chapter VI. —Labour, Wages and Prices (p. 159) and also in the *Labour Report*.

SALARIES AND WAGES PAID IN MINING : AUSTRALIA.
(£'000.)

Industry.	1952.	1953.	1954.	1955.
<i>Metal Mining—</i>				
Gold Mining	5,952	6,291	6,450	6,344
Silver-Lead-Zinc Mining	12,690	12,359	12,761	15,154
Copper-Gold Mining	1,655	1,608	1,786	1,867
Tin Mining	562	715	704	734
Mineral Sands Mining	481	362	412	819
Other Metal Mining	1,027	1,380	1,195	1,328
<i>Total, Metal Mining</i>	<i>22,367</i>	<i>22,715</i>	<i>23,308</i>	<i>26,246</i>
<i>Fuel Mining—</i>				
Black Coal Mining	23,565	24,171	25,988	26,065
Brown Coal Mining	1,450	1,483	1,557	1,761
Oil Mining	44	(a)	(a)	(a)
<i>Total, Fuel Mining</i>	<i>25,059</i>	<i>25,654</i>	<i>27,545</i>	<i>27,826</i>
<i>Non-metal (excluding Fuel) Mining</i>	<i>1,617</i>	<i>1,684</i>	<i>1,693</i>	<i>2,270</i>
<i>Total, All Mining</i>	<i>49,043</i>	<i>50,053</i>	<i>52,546</i>	<i>56,342</i>
<i>Construction Material Quarrying (b)</i>	<i>2,020</i>	<i>2,007</i>	<i>2,045</i>	<i>2,439</i>
<i>Total, All Mining and Quarrying</i>	<i>51,063</i>	<i>52,060</i>	<i>54,591</i>	<i>58,781</i>

(a) Not available for publication; included with "Non-metal Mining". (b) Incomplete.

3. **Accidents in Mining.**—Particulars of numbers of persons killed and injured in accidents in mines and associated treatment plants are recorded by State Mines Departments. Numbers injured are not reported on a uniform basis from State to State as varying criteria are used in determining what constitutes injury for the purpose of these

records. In 1955, 62 persons were recorded as having been killed and 1,788 as having been injured in mining and quarrying accidents. Of the total of 63 persons killed, 25 were in black coal mines, 11 in gold mines and 8 in silver-lead-zinc mines. Reported injuries were highest in black coal mines (552), gold mines (504), and silver-lead-zinc mines (398).

§ 14. Oversea Trade in Minerals and Metals.

Particulars of the quantity and value of imports and exports of the principal minerals and metals for Australia are shown in the following table for the years 1953-54, 1954-55 and 1955-56. In addition to the unfabricated metals shown, considerable quantities of partly fabricated metals (bars, rods, wire, etc.) enter into Australia's overseas trade.

IMPORTS AND EXPORTS OF PRINCIPAL MINERALS AND METALS : AUSTRALIA.

Item.	Unit of Quantity.	1953-54.		1954-55.		1955-56.	
		Quantity.	Value. (£A.f.o.b.)	Quantity.	Value. (£A.f.o.b.)	Quantity.	Value. (£A.f.o.b.)
IMPORTS.							
Minerals—							
Antimony ore and concentrate	cwt.	13,119	69,419	27,094	142,821	10,639	52,570
Asbestos	"	528,899	1,988,691	853,811	3,246,480	646,156	2,394,810
Chromium ore and concentrate	"	83,517	67,097	99,242	59,296	146,246	94,776
Coal	ton	2,051	9,816	4,994	26,185	4,117	29,973
Coke	"	10,981	144,566	5,900	71,114	3,444	53,191
Diatomite	cwt.	38,413	54,628	78,873	123,182	87,879	139,095
Industrial diamonds	carat	102,572	188,920	265,144	531,968	258,321	543,657
Mica	lb.	307,277	64,800	1,021,777	93,450	764,347	56,049
Sulphur	cwt.	3,836,254	2,644,504	3,851,674	2,720,089	4,117,595	2,740,044
Metals—							
Aluminium (pigs, ingots, etc.)	"	185,152	1,900,542	255,250	2,748,466	240,651	2,924,968
Copper—							
Blister	"	2,000	30,086	10,000	150,597	..	..
Pigs, ingots, powder, etc.	"	67,199	935,867	562,505	9,549,183	94,791	2,087,810
Gold bullion (ingots, bar, etc.)	fine oz.	189,628	2,955,517	175,166	2,720,834	175,649	2,745,143
Iron and Steel—							
Bar and rod	cwt.	133,198	1,166,863	1,198,833	3,935,534	2,040,376	6,734,571
Ingots, blooms, slabs, etc.	"	4,405	35,609	10,319	56,140	14,761	76,597
Nickel (pigs, ingots, etc.)	"	11,898	363,537	10,299	320,280	14,732	528,299
Tin	"	16,928	693,592	11,582	515,711	10,358	471,761
EXPORTS.							
Minerals—							
Asbestos	cwt.	46,743	376,315	66,013	380,383	138,958	693,521
Coal	ton	385,812	1,528,788	291,226	1,147,441	193,813	780,284
Coke	"	28,223	240,138	21,885	180,321	66,590	537,841
Copper—							
Ore and concentrate	cwt.	2,530	5,911	110,924	352,068	63,809	314,767
Copper-lead dross, etc.	"	68,012	303,942	163,349	902,594	152,130	1,174,004
Lead and silver-lead ore and concentrate	"	1,508,627	4,269,732	1,217,112	3,933,923	1,312,432	4,369,378
Rutile concentrates	"	626,499	1,365,836	1,116,966	2,375,165	1,394,970	4,627,553
Tungsten (scheelite and wolfram concentrates)	"	43,524	2,952,684	41,776	3,188,416	47,537	3,708,473
Zinc ore and concentrate	"	5,358,065	3,411,246	4,076,586	2,837,629	5,823,602	4,647,977
Zircon concentrates	"	566,517	278,312	931,104	518,150	1,094,007	596,022
Metals—							
Copper, blister	"	253,290	3,537,588	102,463	1,513,844	291,170	5,845,048
Gold bullion (ingot, bar, dust, sheet, etc.)	fine oz.	863,464	13,769,222	864,391	13,716,622	531,664	8,323,118
Iron and Steel—							
Bar and rod	cwt.	507,333	906,939	266,182	567,727	143,476	362,369
Ingots, blooms, slabs, etc.	"	2,121,216	2,990,038	156,131	228,149	19,742	22,587
Pig iron	"	2,326,220	2,053,886	1,205,561	1,021,107	291,659	324,051
Lead—							
Pig	"	3,404,226	18,550,238	2,805,126	17,182,339	2,922,883	19,560,181
Bullion	"	682,485	4,392,514	816,369	6,133,238	596,231	4,639,155
Silver bullion (ingot, bar, dust, sheet, etc.)	fine oz.	6,851,797	2,592,377	6,147,155	2,356,908	6,485,356	2,620,905
Zinc, ingots	cwt.	749,966	3,504,174	654,180	3,408,244	674,295	4,107,141

Considerable quantities of metallic ores, concentrates, slags and residues are exported from Australia for refining overseas. The following table shows the quantities of such items exported during 1955-56 and their principal metallic content as estimated by assay.

PRINCIPAL METALLIC CONTENT OF ORES AND CONCENTRATES EXPORTED FROM AUSTRALIA DURING 1955-56.

Ore, Concentrate, etc.	Quantity Ex-ported.	Estimated Metallic Contents.						
		Copper.	Gold.	Lead.	Silver.	Tin.	Tungstic Oxide.	Zinc.
	cwt.	cwt.	fine oz.	cwt.	fine oz.	cwt.	cwt.	cwt.
Copper Ore, Concentrate, Slag and Residues ..	83,290	15,974	894	4,312	23,912	99	..	..
Lead Bullion ..	596,231	..	..	592,057	2,683,035	..	..	..
Lead Ore, Concentrate, Slag and Residues(a) ..	1,445,081	63,000	12,533	881,514	1,756,009	424	..	..
Scheelite Ore and Concentrate ..	23,012	..	..	..	..	1	15,575	..
Tin Ore and Concentrate ..	2,623	..	..	..	..	1,923	..	..
Wolfram Ore and Concentrate ..	24,525	..	..	..	..	10	15,736	..
Zinc Ore, Concentrate, Slag and Residues ..	5,823,602	..	..	42,203	86,945	..	..	3,049,697

(a) Includes copper-lead dross and speiss.

§ 15. Government Aid to Mining, and Mineral Control.

1. **Aid to Mining.**—(i) *Commonwealth.* (a) *Assistance to marginal and sub-marginal gold mines.* Under the terms of the Gold-Mining Industry Assistance Act 1954, a large producer may receive a subsidy of up to three-quarters of that portion of the cost of production in excess of £13 10s. 0d. per fine oz.; the subsidy will not exceed £2 0s. 0d. per fine oz. A person producing less than 500 fine oz. per year receives a flat rate subsidy of £1 10s. 0d. per fine oz. regardless of the cost of production. The Act remained in force for two years from 1st July, 1954 and has since been extended for a further three years.

(b) *Rewards for Discovery of Uranium Ore.* To encourage the search for and discovery of deposits of uranium ore, the Commonwealth Government has approved the granting of monetary rewards up to a maximum of £25,000 for any one deposit.

(c) *Bureau of Mineral Resources, Geology and Geophysics.* The Bureau of Mineral Resources, Geology and Geophysics has sections dealing with geology, geophysics, mining engineering, petroleum technology and mineral economics. The geological section provides geologists to conduct all surveys required in Commonwealth Territories, makes detailed and regional surveys in conjunction with or by arrangement with the State Mines Departments, surveys of possible oil-fields in Australia and New Guinea, surveys of mines for which financial assistance is sought, and investigations of deposits of radio-active minerals. The geophysical section conducts investigations throughout Australia and New Guinea connected with the search for metalliferous, radio-active and other mineral deposits; investigations connected with exploration for coal, oil and water; regional magnetic and gravity surveys; engineering and military geophysics; and the operation of geophysical (magnetic and seismic) observatories. The Bureau works in close co-operation with the Mines Departments of the States. It has assumed full responsibility for geological and geophysical surveys in Commonwealth Territories, but suitable arrangements have been made to ensure that the local Administrations have the necessary technical advice directly available to them.

(d) *Diamond Drills.* The drilling plant operated by the Bureau of Mineral Resources consists of two heavy, two medium and five light prospecting drills. These drills are used mainly in connexion with the Bureau's comprehensive programme of prospecting by aerial, geological, geophysical and geochemical methods.

(e) *Search for Oil.* No variation has been made in the policy described in Official Year Book No. 37, p. 850, regarding the search for petroleum throughout Australia and its Territories. In addition to its activities set out in that Year Book, the Bureau of Mineral Resources, Geology and Geophysics in Melbourne test bore cores for porosity and permeability on behalf of companies engaged in drilling for oil. The Bureau also maintains two portable rotary plants for scout boring for geological information.

The Commonwealth Government has encouraged the search for oil in Australia, Papua and New Guinea; details of the efforts made are outlined in earlier issues of the Official Year Book and in § 10, Mineral Oils (p. 1003).

(f) *Survey of North Australia.* Reference to this survey which was completed at the end of 1940 appears in Official Year Book No. 35, p. 744.

(g) *Ore-dressing and Mineragraphic Investigations.* These investigations are conducted by the Commonwealth Scientific and Industrial Research Organization as required by the industry. Ore-dressing investigations are carried out conjointly with appropriate State institutions, the three laboratory centres being the School of Mines, Kalgoorlie, the School of Mines and Industries, Adelaide, and the University of Melbourne.

Since 1947, funds for these investigations have been included in the investigational vote approved annually for the Commonwealth Scientific and Industrial Research Organization; in 1955 the Commonwealth Government expended approximately £18,000 on ore-dressing and £10,500 on mineragraphic investigations.

(h) *Petroleum Legislation.* The petroleum ordinances of Papua and New Guinea, have been amended and combined in a single ordinance entitled Petroleum (Prospecting and Mining) Ordinance 1951. Further minor amendments were passed early in 1954. A new Petroleum Ordinance for the Northern Territory was brought into force on 27th May, 1954. New legislation covering petroleum was brought down in New South Wales under the Petroleum Act, 1955, and several amendments to the Petroleum Act, 1951, were passed in Western Australia.

(ii) *States. (a) General.* In addition to free assays and determinations of rocks and minerals carried out for prospectors by the Mines Departments of the States and Territories, technical officers of these departments provide advice to the mining and allied industries where required, carry out field examinations of mining prospects, advise on exploration and development, select sites for water supply, and in general give a free technical service to the mining industry.

(b) *New South Wales.* State aid to assist metalliferous mining consisted of grants to assist the prospecting and/or mining for gold and minerals and for the purchase, removal and installation of mining plant or equipment.

(c) *Victoria.* Loans may be granted to assist prospecting and development or the purchase of machinery. The Mines Department has stamp batteries in different parts of the State to crush ore for prospectors at nominal rates. Small mining companies may avail themselves of these facilities. Drilling with diamond, rotary and percussion drills is carried out by the Mines Department for mining companies and for general mineral exploration. A survey of the States' underground water reserves is in progress, in conjunction with the opening up of town water supplies from underground sources for which new deep drilling equipment is on order.

(d) *Queensland.* The Mines Department maintains a treatment works for tin ores, etc., at Irvinebank, an assay office at Cloncurry and diamond-drilling plants in several parts of the State. The Venus State Mill at Charters Towers is available for the treatment of gold-bearing ores. In addition, many departmental compressor plants, pumping plants and other mining equipment are provided and made available on hire on the principal mining fields.

(e) *South Australia.* The Department of Mines provides the following services and facilities to the mineral industry:—(i) Hire of boring plants and mining equipment; boring and testing of mineral deposits; financial subsidies in approved cases for prospecting and mining development; development of sub-surface water supplies for farming, pastoral, irrigation and mining purposes; purchase of basic metal ores from prospectors. (ii) Geological examination of mineral deposits, water supply, dam, foundation and drainage problems; guidance on mining legislation; publication and issue of geological bulletins and maps. (iii) Chemical and metallurgical analytical and assay investigation; testing and treatment of ores and minerals; petrographic, mineragraphic and radiometric determinations. Pilot scale metallurgical and chemical treatment plants are maintained and operated for the development of mineral extraction processes.

(f) *Western Australia.* Assistance is given to prospectors to the extent of £4 10s. 0d. per week south of the 28th parallel of latitude, and of £5 10s. 0d. per week north of that parallel; also provision is made of some tools required for prospecting.

There are eighteen State batteries operating throughout the gold-fields for the treatment of ore from prospectors and small mine-owners, at a nominal charge. A cartage subsidy is also granted to such operators sending ore to State batteries for treatment.

Provision is made for loans to mine-owners who require assistance to develop mines. The Government has a drilling scheme, financing mine-owners on a £1 for £1 basis.

(g) *Tasmania.* The Department of Mines provides financial assistance to mining lessees for the purchase of plant and machinery, for sinking, repairing or dewatering of shafts, for construction of dams and water races, for testing and proving a deposit of any mining product, for developmental work and for diamond and other types of drilling.

Other assistance is rendered to the industry by geological and engineering advice and through ore-dressing research into metallurgical recoveries and the selection and design of treatment plant.

(h) *Northern Territory.* In order to encourage the development of the mining industry, the Northern Territory Administration provided Government batteries at Tennant Creek, Hatches Creek, and Maranboy for the treatment of miners' ores. The Hatches Creek

battery is the only one in operation at the present time. Pending reconstruction, the Tennant Creek battery has been shut down for a short time, but the re-opening of the Maranboy battery will depend on a revival of tin mining at that centre. The crushing charges are subsidized by Government grants. In addition, the Administration provides cartage subsidies and financial advances to encourage miners to carry out development work. Roads and water supply services are provided and maintained for mines under active development throughout the Territory.

2. **Control of Minerals.**—(i) *Mica Production.* The Commonwealth Mica Pool purchases mica won in the Harts Range, Northern Territory, thus ensuring the miners a ready market for their output at fixed prices and also permitting an orderly distribution of mica to the trade. The Pool is controlled by a Committee of Management consisting of representatives of the Commonwealth Government, producers and consumers.

(ii) *Control of Exports of Metals and Minerals.* Certain metals and minerals produced in Australia are subject to export control for one or more of the following reasons:—

- (a) the necessity to conserve resources (e.g., iron ore and manganese);
- (b) inadequacy of local production to fulfil domestic demand (e.g., mica, manganese ore, copper, iron and steel);
- (c) the strategic importance of the minerals (e.g., beryllium ores, concentrates and metal; monazite; tantalite and tantalum products; uranium ore, concentrates, residues and metal; mica).

Mixed concentrates of beach sand minerals are prohibited exports, but rutile, zircon and ilmenite may be exported. Some non-ferrous scrap is also subject to control.

(iii) *Radio-active Minerals.* Since the discovery of the possibility of using atomic energy considerable attention has been paid to the occurrence of uranium in Australia. To encourage the search for and discovery of deposits of uranium ore, the Commonwealth Government has approved the granting of monetary rewards for such discoveries.

Up to the end of 1949, important deposits had been found only in the north-eastern part of South Australia where the Mt. Painter and Radium Hill fields had been investigated, largely by the South Australian Government, but in that year the presence of uranium was discovered in the Rum Jungle district of the Northern Territory, and investigations carried out by the Commonwealth Bureau of Mineral Resources, Geology and Geophysics in the years 1949–1952 proved that these deposits are of substantial importance.

Towards the end of 1952, the Commonwealth Government placed the Rum Jungle deposits under the control of Territory Enterprises Pty. Ltd., a subsidiary of Consolidated Zinc Corporation Limited, to carry on the investigations on its behalf and to mine and treat the ore. The treatment plant at Rum Jungle was officially opened by the Prime Minister on 17th September, 1954. Investigation of an area adjacent to Rum Jungle was carried out by the Bureau, using an airborne scintillometer. This survey indicated the presence of many radio-active anomalies, and demonstrated the effectiveness of this method of search. During 1952, arrangements were completed between the Governments of the United States of America, South Australia and the Australian Commonwealth, for the purchase of ores by the United States.

In South Australia, the South Australian Government extensively explored the Radium Hill deposit by underground development and diamond drilling. A primary treatment plant was erected at the mine and went into operation in November, 1954; the concentrate is transported to a plant at Port Pirie, completed in mid-1955, where it is further reduced.

During 1956, the construction of a plant for the extraction of uranium oxide at Mary Kathleen in north-west Queensland commenced. This deposit is being developed by private interests.

The Bureau of Mineral Resources is carrying out further airborne scintillometer surveys and extensive geological, geophysical and geochemical surveys and diamond drilling operations, with a view to discovering further deposits and to assessing the value of known deposits.

During 1953, Commonwealth Legislation was enacted to set up an Atomic Energy Commission which is responsible, in an overall sense, for the production and utilization of uranium in Australia. This Act, the Atomic Energy Act of 1953, supersedes the Atomic Energy (Control of Materials) Act of 1946, but contains a provision of that Act which provides for control of substances which could be used for production or use of atomic energy. It gives the Commonwealth power to acquire such substances in their natural state and in waste materials from mining operations, to carry on mining and other operations necessary for the recovery of such substances, and to pay compensation for such acquisition. It also gives the Commonwealth power to obtain possession of such substances held by any person.

Further reference to the Atomic Energy Commission appears in Chapter XXX.—Miscellaneous.

CHAPTER XXVIII.

DEFENCE.

§ 1. Department of Defence.

1. **Introduction.**—At the outbreak of the 1939–45 War, the Department of Defence comprised the three Fighting Services and a Central Secretariat. In November, 1939, separate Departments, each with its own Minister, were created for the control and administration of the Navy, Army and Air Force. The Defence Department as then reconstituted retained responsibility for over-all defence policy and for the conduct during the war of the business of the War Cabinet, set up in September, 1939, and the Advisory War Council, set up in October, 1940. These bodies ceased to function after the war.

2. **Functions and Organization.**—(i) *Functions.* Subject to the authority of Cabinet, the Minister and Department of Defence are responsible for:—

- (1) The formulation and general application of a unified defence policy relating to the Defence Forces and their requirements, including:—(a) co-operation in British Commonwealth and regional defence and the defence aspect of the Charter of the United Nations; (b) the supply aspect of defence policy, including the review of production programmes and capacity; (c) the scientific aspect of defence policy; and (d) the financial requirements of defence policy, and the allocation of funds made available.
- (2) The defence aspect of armistice and peace terms, control commissions, and forces of occupation.
- (3) Matters of policy or principle and important questions having a joint Service or inter-Departmental defence aspect.
- (4) The defence aspect of questions relating to the organization and machinery for:—(a) co-operation in British Commonwealth defence; (b) co-operation in regional security, including obligations under the United Nations Charter; (c) higher direction in war; and (d) higher direction of the Services.
- (5) The Commonwealth War Book, which is a summary of national plans for an emergency as developed in Departmental War Books.
- (6) The administration of inter-Service organizations, such as the joint intelligence machinery.
- (7) The defence aspect of:—the strength and organization of the forces, higher appointments in the Services, honours and awards.
- (8) Advice on the military aspect of civil defence.

(ii) *Organization, higher defence machinery, the control of the joint Service machinery and the Secretariat of the Council of Defence.* The joint Service and inter-Departmental advisory machinery of the Department, consists of various committees headed by the Defence Committee, the Chiefs of Staff Committee and the Joint War Production Committee.

The Defence Committee is a statutory body consisting of the Secretary, Department of Defence, who is Chairman, the Chiefs of Staff of the three Services, the Secretary, Prime Minister's Department, the Secretary, Department of External Affairs and the Secretary to the Treasury. Its function is to advise the Minister for Defence on:

- (a) The defence policy as a whole and also to co-ordinate military, strategic, economic, financial and external affairs aspects in framing defence programmes.
- (b) Matters of policy or principle and important questions having a joint Service or inter-Departmental defence aspect.
- (c) Such other matters having a defence aspect as are referred to the Committee by or on behalf of the Minister for Defence.

The main responsibility of the Chiefs of Staff Committee in peace is the preparation of strategic appreciations and military plans. The function of the Joint War Production Committee is, briefly, to examine the relation between strategic plans and their requirements to ensure that the war potential for them exists. The major committees subordinate to the Defence Committee and/or the Chiefs of Staff Committee comprise the Principal Administrative Officers Committee (Maintenance and *Matériel*), the Principal Administrative Officers Committee (Personnel), the Defence Research and Development Policy Committee, the Joint Planning Committee, the Joint Intelligence Committee and the Joint Administrative Planning Committee.

(iii) *Board of Business Administration.* In view of the heavy defence expenditure, the Government, in July, 1953, established the Board of Business Administration in the Department of Defence. The Board deals with joint Service matters of common interest to the three Services, or important subjects on which the collective advice of the Board is desired. The Board comprises businessmen who serve in a part-time honorary capacity and consists of an independent chairman and deputy chairman and the business advisers of the three Service Departments.

3. *Basis of Current Defence Policy.*—The main strategic factors affecting current defence policy may be summarized as follows:—

(i) *Likelihood of War.* Because of the nuclear deterrent, it is believed that global (or full scale) war is unlikely to occur as the result of deliberate planning, but could occur as the result of miscalculation. Limited war (or armed conflict short of global war) is always possible and could break out with little or no warning. Hostile powers will probably continue to seize every opportunity to attain their aims by cold war techniques, such as infiltration, subversion and armed insurrection.

(ii) *Area of Primary Strategic Interest.* South East Asia is of great strategic importance to Australia, whose primary effort will be directed to that area in cold, limited or global war.

(iii) *Reliance on Collective Defence.* The defence of South East Asia and Australia are to be sought through the concept of collective security. For this reason Australia is participating in regional arrangements such as SEATO, ANZUS and ANZAM. Such arrangements are entirely in accord with the United Nations Charter.

4. *The Defence Programme.*—(i) *Programme.* The level of national defences must be adequate to enable Australia to meet her regional and home defence responsibilities. The proportion of the national resources that can be allotted to defence is, however, affected by the concurrent demands of the programmes of national development, industrial expansion and migration, which add to our basic defence capacity. Current defence planning and preparations provide for the maintenance of an efficient Service organization including fighting forces, together with command, training and maintenance elements, capable of rapid expansion in time of war. The emphasis is no longer so much on numbers as on mobility, equipment and fire power. Equipment used by Australian forces will be standard or compatible as far as possible with that used by United States forces, with whom they are likely to be associated in war. The defence programme provides for the acceleration of the naval construction programme, designed to produce ships of the appropriate types, the building up of a regular army brigade group, highly trained, mobile, and equipped with the most modern weapons available, and the re-arming of certain squadrons of the R.A.A.F. with the latest fighter and transport aircraft. The first ground to air guided weapons unit will also be introduced into the R.A.A.F., and additional mobile control and reporting units will be established. The army brigade group will be additional to the infantry battalion in Malaya referred to below, and the Citizen Military Forces will be maintained at an adequate strength.

In the field of research and development, Australia is making its principal contribution through the Long Range Weapons Establishment which is a joint United Kingdom-Australian effort, for the testing of guided weapons. The executive authority for this project is the Department of Supply which is also responsible for design and inspection services and for the provision of the material requirements of the forces other than munitions.

The Department of Defence Production is responsible for the manufacture and supply of munitions and aircraft. The new filling factory at St. Mary's will be completed this year and the Small Arms Factory at Lithgow will shortly commence production of the new FN rifle for the Services.

The estimated cost of the defence programme for 1957-58 is £190 million.

(ii) *Financial.* Details of defence expenditure for 1955-56 and the allocation of the Defence Vote for 1956-57 are set out in the two tables which follow:—

ALLOCATION OF DEFENCE VOTE OF £190,000,000 FOR 1956-57.
(£'000.)

Service or Department.	Maintenance.	Capital Material Requirements, Machinery, Plant and Equipment.	Capital Buildings, Works and Acquisition of Sites.	Total Expenditure.
Defence	828	27	35	890
Navy	28,828	8,490	1,747	39,065
Army	49,192	6,780	4,312	60,284
Air	39,664	10,322	3,764	53,750
Defence Production	3,497	2,336	14,058	19,891
Supply	11,391	1,225	2,516	15,132
Other Services	803	15	170	988
Total	134,203	29,195	(a) 26,602	190,000

(a) Includes in Services' Votes a total amount of £1,194,000 for advances to States under the Commonwealth-State Housing Agreement.

DEFENCE EXPENDITURE, 1955-56.
(£'000.)

Service or Department.	Maintenance.	Capital Material Requirements, Machinery, Plant and Equipment.	Capital Buildings, Works and Acquisition of Sites.	Total Expenditure.
Defence	721	14	25	760
Navy	31,119	15,615	1,290	48,024
Army	48,980	9,000	3,466	61,446
Air	37,625	11,500	3,013	52,138
Defence Production	3,002	2,062	7,241	12,305
Supply	12,162	1,048	2,131	15,341
Other Services	646	6	50	702
Total	134,255	39,245	17,216	190,716

(iii) *Personnel Strengths.* The personnel strengths of the Services at 31st December, 1956 were:—

Category.	Navy.	Army.	Air Force.	Total.
Permanent Forces	(a) 12,238	22,409	14,570	49,217
Citizen Forces—				
Volunteers	6,094	14,599	1,760	22,453
National Service Personnel	5,074	(b) 69,024	(b) 656	(b) 74,754
Total Citizen Forces	11,168	83,623	2,416	97,207
Total Permanent and Citizen Forces	23,406	106,032	16,986	146,424

(a) Excludes 55 midshipmen not on pay. (b) Excludes 61,584 Army and 16,752 Air Force National Service personnel who have completed training and are on the reserve.

5. *Australian Forces Serving Overseas.* (i) *Malaya.* Australia participates with the United Kingdom and New Zealand in the Commonwealth Strategic Reserve in Malaya. In addition to its rôle as a strategic reserve, this force is being used in the campaign against the communist terrorists.

The Australian contribution comprises the following forces—

Navy—Two destroyers or frigates. An aircraft carrier also pays an annual visit, and additional ships would be provided in an emergency.

Army—An infantry battalion with supporting arms, and reinforcements in Australia.

Air Force—An airfield construction squadron, which is reconstructing the Butterworth airstrip, on completion of which it is planned to deploy two R.A.A.F. fighter squadrons, and a bomber squadron to replace the R.A.A.F. bomber squadron which has been engaged in operations against the terrorists in Malaya since 1950.

(ii) *Korea-Japan*. Forces from the three arms of the Australian Services were among the earliest to participate in United Nations action in Korea. An account of the Australian contribution is given in previous issues of the Official Year Book.

Australian forces in Korea were progressively reduced after the armistice in 1953. All air forces have been withdrawn and the final army forces, which comprised a signals unit of about 80 men at the beginning of 1957, will be withdrawn during the year. Australian ships will continue to serve in Korean waters during their regular tours of duty with the Far East Fleet.

The Commonwealth base in Japan was closed down and all Australian forces were withdrawn by the end of 1956.

6. **National Service Training.**—Under the National Service training scheme every male person, other than those mentioned below, ordinarily resident in Australia, who, on or after 1st November, 1950, attains the age of 18 years is required to register for National Service when called upon to do so by notice published in the Commonwealth *Gazette*. The first registration of male British subjects took place in May, 1951, and since then successive groups of eighteen-year-olds have been required to register, usually at six-month intervals. In May, 1954, the obligation to register was extended to New Australians.

Exemption from the liability to register is confined to certain diplomatic personnel and officials in the service of international bodies, members of the permanent forces and aboriginal natives of Australia. Exemption from the liability to undergo training may be granted to theological students, ministers of religion, members of religious orders, conscientious objectors and registrants suffering from certain prescribed physical or mental disabilities.

Registrants not exempted for service are liable to be called up for training provided they attain the requisite standard of medical fitness. Deferment may be granted for limited periods to students or apprentices so as to avoid undue interruption to their studies or trade training and to registrants who can establish before a court that their call-up would cause exceptional hardship to themselves, their parents or dependants. Early in 1955, provision was made to defer the call-up of registrants living outside approved C.M.F. training centres and to rural workers permanently engaged full-time on a rural holding in the production of food or raw materials.

Up to and including the intakes in January, 1957, training was carried out in all three Services and a total of 193,578 (6,967 Navy, 22,267 Air Force and 164,344 Army) had been called up for training.

Commencing with the second intake of 1957, which will take place in July, the total number to be trained each year is reduced from 34,000 to 12,000, all of whom will perform their training in the Army. There will be no further Navy or Air Force intakes. The total Army training liability is now 140 days consisting of an initial continuous training period of 77 days and 21 days part-time and camp training in each of the following three years. Trainees will remain on the Reserve of the Citizen Military Forces for five years from the date of call-up. The normal times for call-up will be in January, April and August of each year.

Provision is made to safeguard the rights of registrants called up for training, notably with regard to reinstatement in civilian employment. There is no statutory obligation on employers to make up any difference between the civil and service pay of employees who are undergoing training, but some employers, e.g., the Commonwealth Government and the Government of New South Wales, do so voluntarily.

In order to bring the numbers liable for service into line with the reduced intake figures, a new selection procedure has been introduced. This is in the form of a ballot conducted shortly after each new age group is called upon to register. Registrants included by ballot are regarded as available for call-up subject to the existing rules and procedures for exemption and deferment. Those excluded by ballot are granted deferment.

§ 2. Naval Defence.

1. **General.**—(i) *State Systems.* Information regarding naval defence systems prior to 1901 will be found in Official Year Book No. 2, p. 1084.

(ii) *Royal Australian Navy up to the end of 1939–45 War.* An outline of the development of Australian Naval policy was given in Official Year Book No. 3, p. 1060 and No. 12, p. 1012. Some account of the building of the Australian Navy, the proposed and modified cost thereof, the compact with the Imperial Government, etc., appears in Official Year Book No. 15, pp. 921–23. An account of the growth and activities of the Royal Australian Navy during the 1939–45 War is given in Official Year Book No. 36, pp. 1023–27.

2. **Naval Board.**—The Australian Navy is administered by a Board consisting of the Minister for the Navy with four Naval Members, and the Secretary, Department of the Navy; the seat of administration is at Melbourne.

3. **Strength of the Fleet.**—Ships in Commission: The Fleet consists of:—

Carrier Force: 1 Light Fleet Carrier, 3 Destroyers, 1 Daring Class Ship.

Escort Forces: 3 Frigates.

Surveying Duties: 1 Survey Ship and its tender.

Training Ships: 1 Frigate, 4 Ocean Minesweepers, 1 Light Fleet Carrier.

Auxiliary Vessels: 2 Boom Defence Vessels, 1 Ocean-going Tug, 1 Armament Store Carrier, 4 Search and Rescue Vessels.

In addition to the ships in Commission, a substantial reserve fleet is maintained in good condition against any future emergency.

4. **Personnel.**—The strength of the Royal Australian Navy has been pegged at 14,400, comprising 1,584 officers and 12,816 ratings.

5. **Womens' Royal Australian Naval Service.**—The strength of the W.R.A.N.S. remains pegged at 14 officers and 260 ratings. One Officers' Training Course was held from November, 1956 to February, 1957; all three cadets successfully passed the course. Ratings are serving at the following Establishments: H.M.A.S. *Cerberus*, where all training is also carried out, H.M.A.S. *Harman*, H.M.A.S. *Lonsdale* and H.M.A.S. *Melville* (Coonawarra W/T Station). The categories in which W.R.A.N.S. ratings are employed are: Telegraphists; Writers (General Duties), (Pay), and (Shorthand Typist); Stores Assistants (Stores) and (Victualling); Sick Berth Attendants; Cooks; Stewards and Regulating.

6. **Strength of Royal Australian Navy.**—The serving strength of the Royal Australian Naval Forces, both permanent and reserves, at 31st December, 1956, was 1,298 officers and 10,684 ratings including 60 native ratings of the Papua and New Guinea Division of the Royal Australian Navy. In addition, 11 officers and 196 ratings of the Women's Royal Australian Naval Service were serving and 104 cadet midshipmen were undergoing training, including 88 at the Naval College. Reserve strength comprised 1,494 officers and 9,357 ratings.

7. **Reserve and National Service Training.**—Reserve training was resumed as from 1st January, 1950, for members of the Royal Australian Naval Reserve. Training consists of 45 two-hour drill attendances at night or on Saturdays in naval training establishments in each of the capital cities, plus 13 days continuous training each year in H.M.A. ships or training establishments, including special schools. In addition, payment is made for further voluntary home training up to a maximum of 12 days. Selected members may undergo special courses up to a limit of six months during the whole of their service in the Reserve, whilst up to 12 months training or service may be performed in H.M.A. ships or establishments with similar qualifications. Engagements are for three years. Rates of pay have been aligned (with minor modifications) with those applicable to the Permanent Naval Forces. The training for members of the Royal Australian Naval Reserve (Sea-going) is normally 28 days every two years whilst members of the Royal Australian Naval Volunteer Reserve are under no training obligations.

Naval National Service personnel commenced training on 30th July, 1951. On completion of their 154 days initial training in naval establishments and H.M.A. ships, personnel have been attached to the Naval Reserve Training Establishment in their State until completion of their five-year liability for mobilization in war or emergency. After the intake in January, 1957, there have been no further intakes of National Service Trainees by the Navy.

Revised post-war conditions of service in the Royal Australian Fleet Reserve were introduced as from 13th December, 1950. This Reserve is comprised of two classes:— (a) former ratings who receive full benefits under the Defence Forces Benefits Act and are required to serve five years in the Royal Australian Fleet Reserve as a consideration for receipt of these benefits and (b) former ratings who have previously served in the Permanent Naval Forces of the Royal Australian Navy, Royal Navy, or a Dominion Navy subject to a minimum period of three years' service and an absence of not more than five years. No retainer is payable to members under (a) and no obligatory training is carried out but 14 days paid voluntary training can be undertaken. Members under (b) receive an annual retainer of £24 subject to completing annual training; if enrolled within 12 months of discharge from Permanent Naval Forces—7 days; if enrolled after a lapse of 12 months since discharge from Permanent Naval Forces—14 days; additional paid voluntary training up to 14 days may be carried out. Ratings receive pay applicable to Royal Australian Navy personnel whilst under training.

8. **Fleet Air Arm.**—The Fleet Air Arm of the Royal Australian Navy consists of five front line squadrons, one operational carrier, H.M.A.S. *Melbourne*, and one Naval Air Station, H.M.A.S. *Albatross* at Nowra, New South Wales. The aircraft carrier H.M.A.S. *Melbourne*, fitted with an angled deck and steam catapult, carries two squadrons of Gannet turbo-prop anti-submarine aircraft, and one squadron of jet Sea Venom all weather fighters and ground attack aircraft. The training ship, H.M.A.S. *Sydney*, is used periodically for deck landing training.

9. **Ship Construction and Repair.**—Provision is made for the maintenance in Australia of a nucleus ship construction and repair industry capable of rapid expansion in war. The present approved programme provides for the construction of three Daring Class Ships (one was completed in February, 1957), four anti-submarine frigates (under construction), one boom-working vessel (completed in 1956) and two inshore minesweepers (work not yet commenced); and the conversion of four "Q" class destroyers to fast anti-submarine frigates (three have been completed and work on one is in progress).

10. **The Relation of New Weapons.**—Careful consideration has been given to the implications of new weapons, and the decisions in regard to the Navy are based on the broad conclusions of great naval powers that these weapons should be introduced by the normal process of evolution, first into existing ships, and later perhaps into an entirely new form of fighting ship. The same authority supports the view that there will be no rapid development which will render vessels such as carriers, cruisers and destroyers obsolete in the near future.

11. **Naval College.**—Forty-two cadet midshipmen (including five from the Royal New Zealand Navy) entered the Naval College for training in the year commenced January, 1957. At that date, there were 104 cadet midshipmen undergoing training at the College.

12. **Training Establishments.**—Flinders Naval Depot, Victoria, remains the principal training establishment for ratings in the permanent forces, while several advanced training schools are established at Port Jackson, New South Wales. Air training is carried out at Nowra, New South Wales.

13. **The Australia Naval Station.**—Defined limits of the Australia Station are as follows:—

Eastern—

From 3° 30' North, 169° East, south to 1° South, thence east to 170° East, thence south along this meridian to 30° South, thence to 45° South, 160° East, thence south, along this meridian.

Northern—

From 3° 30' North, 169° East, west to 125° East, thence south to the Coast of Celebes, thence west along the Coast of Celebes to 120° East, thence south to 11° 30' South, thence west to 11° 30' South, 95° 15' East.

Western—

From 11° 30' South, 95° 15' East, south along this meridian to 30° South, thence west along this parallel to 80° East, thence south along this meridian.

14. **Foreign Service.**—The R.A.N. was represented in Japan by H.M.A.S. *Commonwealth* base establishment at Kure. This establishment closed down on 4th November, 1956. During the year ended June, 1956, H.M.A. Ships *Arunta*, *Warramunga*, *Tobruk* and *Anzac* served on the Far East Station as units of the Strategic Reserve. In addition, H.M.A. Ships *Queenborough*, *Quickmatch* and *Quadrant* were engaged in exercises on the Far East Station.

15. Papua and New Guinea Division of the Royal Australian Navy.—A Papua and New Guinea Division of the Royal Australian Navy, consisting of native ratings, was inaugurated in July, 1951 as a separate part of the Permanent Naval Forces for employment in Papua and New Guinea and waters adjacent thereto.

16. Ships of the Royal Australian Navy.—The following ships were in commission or in reserve in June, 1957:—

SHIPS OF THE ROYAL AUSTRALIAN NAVY, JUNE, 1957.

Vessel.	Description.	Displacement.
In Commission—		Tons.
<i>Melbourne</i>	Aircraft Carrier Operational	15,680
<i>Sydney</i>	Aircraft Carrier Training ..	15,740
<i>Voyager</i>	Daring Class Ship ..	2,801
<i>Anzac</i>	Destroyer	2,436
<i>Tobruk</i>	"	2,436
<i>Warramunga</i>	"	2,012
<i>Quadrant</i>	Frigate	1,897
<i>Queenborough</i>	"	2,020
<i>Quickmatch</i>	"	1,705
<i>Swan</i> (Training Ship)	"	1,060
<i>Warrego</i> (Surveying Ship)	"	1,060
<i>Cootamundra</i>	Ocean Minesweeper ..	768
<i>Fremantle</i>	"	768
<i>Junee</i>	"	768
<i>Wagga</i>	"	768
<i>Lachlan</i> (Surveying Ship), on loan to the Royal New Zealand Navy	Frigate	1,477
In Reserve—		
<i>Hobart</i>	Cruiser	7,100
<i>Arunta</i>	Destroyer	2,012
<i>Barcoo</i> (Surveying Ship)	Frigate	1,477
<i>Barwon</i>	"	1,489
<i>Burdekin</i>	"	1,489
<i>Condamine</i>	"	1,537
<i>Culgoa</i>	"	1,537
<i>Diamantina</i>	"	1,489
<i>Gascoyne</i>	"	1,489
<i>Hawkesbury</i>	"	1,489
<i>Macquarie</i>	"	1,553
<i>Murchison</i>	"	1,537
<i>Shoalhaven</i>	"	1,537
<i>Ararat</i>	Ocean Minesweeper ..	768
<i>Bunbury</i>	"	768
<i>Bundaberg</i>	"	797
<i>Castlemaine</i>	"	863
<i>Colac</i>	"	768
<i>Cowra</i>	"	768
<i>Gympie</i>	"	789
<i>Kapunda</i>	"	768
<i>Mildura</i>	"	815

SHIPS OF THE ROYAL AUSTRALIAN NAVY, JUNE, 1957—*continued.*

Vessel.	Description.	Displacement.
In Reserve— <i>continued.</i>		Tons.
<i>Rockhampton</i>	Ocean Minesweeper ..	768
<i>Strahan</i>	" " ..	768
Under Dockyard Control—		
<i>Quiberon</i>	Destroyer	1,760
<i>Vampire</i>	Daring Class Ship (Building)	2,789
<i>Vendetta</i>	" " "	2,789
Demilitarized—held for disposal—		
<i>Bataan</i>	Destroyer	2,071
<i>Quality</i>	"	1,760
<i>Benalla</i>	Ocean Minesweeper ..	844
<i>Dubbo</i>	" "	768
<i>Shepparton</i>	" "	782
<i>Platypus</i>	Depot Ship	3,455
Miscellaneous vessels in commission and in reserve—fifty-five		

§ 3. Military Defence.

1. *State Systems.*—A detailed historical account of the Australian defence forces prior to Federation will be found in Official Year Book No. 2, pp. 1075–1080. *See also* Official Year Book No. 12, p. 999.

The strength of the military forces of the States on 31st December, 1900 (the eve of Federation) was:—New South Wales, 9,338; Victoria, 6,335; Queensland, 4,028; South Australia, 2,932; Western Australia, 2,696; Tasmania, 2,024; total for Australia, 27,353. This total is exclusive of cadets, reservists and rifle club members.

2. *Commonwealth Systems.*—(i) *General.* Under the terms of the Constitution Act 1900, the Commonwealth took over control of defence matters in March, 1901. The growth of the Commonwealth Military Forces may be considered to have taken place in sixteen phases. For particulars of the phases which cover the period from the welding together of the military forces of the States into one homogeneous army in 1902 up to the decision to increase the training strength of the militia to 70,000 in the year before the 1939–45 War (phases 1–7), *see* Official Year Book No. 36 and earlier issues.

Phases 8–10, covering the period immediately prior to, and just following, the outbreak of the 1939–45 War, relate to the initial steps necessary to put the Australian Military Forces on a war-time basis, and to its organization into commands.

The eleventh phase, in January, 1942, was the division of Northern, Eastern and Southern Commands into separate commands and base headquarters to handle operational and administrative matters respectively, and the twelfth phase was the revision of the machinery for command administration of lines of communication areas. The thirteenth phase was the appointment of Lieutenant-General Sir Iven Mackay as G.O.C.-in-C. Home Forces commanding the forces in Northern, Eastern and Southern Commands. The fourteenth phase covered the period following the outbreak of war with Japan and the entry of United States of America Forces into the South-West Pacific Area, and related to the appointment of General Sir Thomas Blamey as Commander-in-Chief, Australian Military Forces, the cessation of the Military Board, and the replacement of the system of commands and bases by the field army and lines of communication areas. In March, 1943, First and Second Armies took over from Queensland, New South Wales and Victoria Lines of Communication Areas the command of all coast and static anti-aircraft artillery defences and training

establishments. On 16th June, 1944, Western Command was re-established and took over the combined responsibilities of Third Australian Corps and Western Australia Line of Communication Area.

The fifteenth phase was the re-introduction in March, 1946, of the Military Board and the organization of commands and military districts, and the sixteenth phase was the commencement of the National Service Training Scheme in August, 1951 (see § 1, para. 6 above and sub-para. (iv) (c) following).

For greater detail on phases 8–14, see *Official Year Book No. 38* and earlier issues.

(ii) *Population of Military Age, 30th June, 1956.* The following particulars show the estimated numbers of males of military age in the population of Australia as at 30th June, 1956. The total number of cadet age, 14 and under 18, was 272,823; of citizen soldier age, 18 and under 26, 511,498; and 26 and under 35, 683,237; making a total of 1,194,735, 18 and under 35, which is considered the best period for military service. In addition to the above-mentioned, there were 1,442,190 males 35 and under 60, in Australia at 30th June, 1956.

(iii) *Allotment of Units.* Under the Command Organization (see above), units are raised on a territorial basis, each State supplying its proportion of the personnel required for the fighting services, the organization at 30th June, 1956, being as follows:—

COMMAND ORGANIZATION.

Army Headquarters.

Northern Command	Eastern Command	Southern Command	Central Command	Western Command	Tasmania Command	Northern Territory Command
All forma- tions and units in 1st Military District and New Guinea.	All forma- tions and units in 2nd Military District.	All forma- tions and units in 3rd Military District.	All forma- tions and units in 4th Military District.	All forma- tions and units in 5th Military District.	All forma- tions and units in 6th Military District.	All forma- tions and units in 7th Military District.

Commands conform generally to State boundaries as follows:—Northern Command, Queensland; Eastern Command, New South Wales; Southern Command, Victoria; Central Command, South Australia; Western Command, Western Australia; Tasmania Command and Northern Territory Command. New Guinea is the responsibility of Northern Command.

(iv) *Military Training Systems.* (a) *General.* Particulars of the military training systems in operation prior to the 1939–45 War, first on a compulsory basis and later voluntary, will be found in *Official Year Book No. 38* and earlier issues.

The current plan (1956–57) for the Australian Regular Army is based on an average strength of 28,000 full time duty personnel (including 4,600 civilians) and a Citizen Military Force of 80,000 including National Servicemen.

(b) *The Australian Cadet Corps.* The Australian Cadet Corps is a voluntary organization comprised of School Cadet units and Regimental Cadet units. It serves as a training ground to provide, to some extent, the future officers and non-commissioned officers of the Australian Military Forces, and, as such, occupies an important position in the scheme of national defence. School Cadet units are raised at educational establishments in all States of the Commonwealth. The minimum age for enrolment is the year in which the applicant reaches the age of 14 years, and cadets, who in the large majority of schools receive a free issue of A.M.F. pattern uniform, may remain in the Cadet Corps until they cease to be pupils of the educational establishments concerned. A few units retain their own pattern school uniform and are not issued with A.M.F. pattern uniforms. Provision is made for the appointment of officers, warrant and non-commissioned officers on an authorized establishment scale from within school units. School cadet units are not affiliated with Citizen Military Force Units.

Regimental Cadet units have been raised in close affiliation with Citizen Military Force units, whose uniform they wear with the addition of the word "Cadets" directly under

the title of the parent unit. These units are manned by boys who either have left school or are students at schools where no School Cadet unit has been raised. Regimental Cadet units are now being disbanded.

The establishment of the whole Corps is 35,000 all ranks, and at 31st December, 1956, comprised 265 School Cadet units with a posted strength of 30,500 all ranks and 382 Regimental Cadets posted to Citizen Military Force units.

(c) *National Service Training Scheme.* Under the National Service Training Scheme (see § 1, para. 6 above) the Army is required to train 29,250 trainees per year, effected by three intakes each of 9,750 trainees in January, April and August each year. The first intake commenced training in August, 1951. As from the second intake of 1957, the annual intake has been reduced to 12,000.

(v) *Women's Services.* In November, 1950, approval was given for the enlistment of women into the Australian Regular Army, on a limited scale. Enlistment commenced immediately into the Australian Women's Army Corps. During June, 1951, the Australian Women's Army Corps was re-designated the Women's Royal Australian Army Corps (W.R.A.A.C.). Members are employed in establishments in direct substitution for male soldiers. The Women's Services in the Australian Regular Army now comprise two Corps only:—(a) Royal Australian Army Nursing Corps; (b) Women's Royal Australian Army Corps.

Women's Services have been incorporated in the Citizen Military Forces; it is proposed to raise sixteen companies of the Women's Royal Australian Army Corps and twelve companies of the Royal Australian Army Nursing Corps, a total of 3,900 all ranks, within the C.M.F.

At December, 1956, seven companies of the Women's Royal Australian Army Corps and nine companies of the Royal Australian Army Nursing Corps, a total of 2,250 all ranks, had been raised within the C.M.F.

(vi) *Korea.* On 2nd August, 1950, the Commonwealth Government announced its decision to raise and dispatch to Korea one infantry battalion as part of Australia's contribution of military assistance to the United Nations. 3rd Battalion, The Royal Australian Regiment, stationed in Japan, brought up to strength by special enlistments flown to Japan from Australia, became the Special Korean Force, and on 27th September, 1950, sailed from Japan for Korea where it joined 27th British Brigade. For its gallantry on 24th and 25th April, 1951, 3rd Battalion was awarded the United States Presidential Citation by the United States of America. On 4th October, 1951, the Commonwealth Government announced that a second infantry battalion would be sent to Korea to join 3rd Battalion. On 3rd March, 1952, 1st Battalion, The Royal Australian Regiment, which had been brought up to strength at Ingleburn, New South Wales, embarked for Japan where it was equipped before moving to Korea. 1st Battalion joined 3rd Battalion, under operational control of 28th British Brigade, 1st Commonwealth Division, on 1st June, 1952. 2nd Battalion, The Royal Australian Regiment, after training at Puckapunyal, Victoria, relieved 1st Battalion in Korea on 21st March, 1953, the latter battalion returning to Australia. 2nd Battalion was relieved by 1st Battalion and returned to Australia in April, 1954, while 3rd Battalion returned to Australia in November, 1954.

(vii) *Malaya.* On 1st April, 1955, the Commonwealth Government announced its decision to dispatch troops to Malaya as an Australian component of the British Commonwealth Far East Strategic Reserve. 2nd Battalion, The Royal Australian Regiment and 105th Field Battery; Royal Australian Artillery and other minor units embarked from Australia on 6th October, 1955 and disembarked at Penang on 20th October, 1955.

(viii) *The Staff College.* Until 1938, the training of staff officers was carried out in the various Military Districts throughout Australia, except in cases where officers were selected from time to time to attend courses abroad. In 1938, an Australian Command and Staff School, located in the original Officers' Mess at Victoria Barracks, Sydney, was established. Between 1939 and 1945, the training of staff officers was carried out under varying conditions by different schools in accordance with the changing needs of the war.

Early in 1946, the Staff School (Australia) was established at Seymour in Victoria and re-designated the Staff College in conformity with other Empire training establishments for training officers for command and staff appointments. The College was later moved to Queenscliffe, Victoria, where it is at present situated. The courses are of ten months' duration and are held from January to November each year. The normal intake is 30 students and, on successfully completing the course, an officer is awarded the symbol "psc".

The course is designed to train selected officers for war, and in so doing to fit them for Command or Grade II. staff appointments. Each course includes, among the students, Army representatives of the United Kingdom and other Dominions and countries. Included in the 1957 course are students from the United Kingdom, Canada, New Zealand, India, Pakistan, the United States of America, the Philippines and Burma. Vacancies on each course are reserved also for officers who may be nominated by the Royal Australian Navy, the Royal Australian Air Force and the Commonwealth Public Service.

In order to ensure common standards in tactical doctrine and staff and command training throughout the Empire, liaison is maintained with other Staff Colleges; and to this end, there is also a reciprocal exchange of instructors. To this extent, it may be said that the Staff College is imperial in character.

(ix) *The Royal Military College.* The Royal Military College was established in 1911 at Duntroon in the Australian Capital Territory for the purpose of providing trained officers for the Army. The conditions of entry are laid down in the Royal Military College Regulations and provide for admission by "normal", "service", and "special" entries. The length of the normal course is four years; "service" entry cadets attend for three years; and "special" entries for one year.

While at the College, cadets receive pay and allowance of 15s. per day in their first year, rising to 24s. 1d. per day in their fourth. Uniform maintenance allowance of 1s. 9d. per day is additional, and a further 6d. per day is paid to cadets on attaining the age of 18 years. The course of instruction is organized into military and civil departments and the instructional staff comprises officers of the Army and civilian professors. On graduation, cadets are appointed lieutenants in the Australian Regular Army. The College also trains New Zealand cadets for commissions in the New Zealand Permanent Forces under an agreement made with the Government of that Dominion.

(x) *The Officer Cadet School.* The Officer Cadet School was established in 1951 at Portsea, Victoria, for the purpose of speeding up the supply of junior regimental officers for the Australian Regular Army. Serving members of the Australian Regular Army, the Citizen Military Forces, National Servicemen, and civilians between the ages of 18 and 23 years, are eligible to apply for entrance. The course is of eleven months' duration, and on graduation, cadets are appointed second-lieutenants in the Australian Regular Army. They then normally proceed to further training at the Army School of the Arm or Service to which they have been allotted before being posted to regimental duties.

(xi) *The Women's Royal Australian Army Corps School.* The W.R.A.A.C. School was established in 1952 at Mildura, Victoria. It has two wings, one whose primary task is the training of officer cadets for the W.R.A.A.C., the other being for the training of non-commissioned officers at all levels and for other special courses. The officer cadets are selected from eligible applicants, who may be serving members between 21 and 32 years of age, or civilians between 21 and 30 years of age. The course is of six months' duration and, on graduation, cadets are appointed lieutenants in the Women's Royal Australian Army Corps.

(xii) *The Army Apprentices' School.* The Army Apprentices' School was opened in 1948 at Balcombe, Victoria, with the aim of training youths as skilled tradesmen for the Australian Regular Army, and to form a background for an Army career with prospects of promotion. The course is open to boys between the ages of 15 and 17 years and provides training in a number of highly skilled trades. A three-year course of intensive theoretical and practical work at the Apprentices' School is followed by one year in an appropriate Army workshop or technical unit. At the end of their third year, boys are given their Army trade test and also take the Victorian Apprenticeship Commission final grade public examinations, which ensures that they will be accepted as qualified tradesmen in civil life when they eventually leave the Army. In addition to trade training, the Apprentices' School provides general educational facilities up to the school leaving standard.

(xiii) *Army Schools.* Schools have been established for the major Arms and Services for the purpose of training officers and other ranks in the up-to-date techniques of their own Arm or Service, to qualify them for promotion requirements, and to produce trained instructors. In addition, a School of Tactics and Administration which has been established at Seymour, Victoria, provides qualifying and instructional courses in current tactical and administrative doctrine for members of all Arms and Services. Courses at Army Schools are conducted for members of both the Australian Regular Army and the Citizen Military Forces.

The following Schools have been established:—School of Tactics and Administration; Jungle Training Centre; Armoured School; School of Artillery; School of Military Engineering; School of Survey; School of Signals; School of Military Intelligence; School of Infantry; Royal Australian Army Medical Corps School of Army Health; Royal Australian Army Service Corps School; Royal Australian Army Ordnance Corps School; Royal Australian Electrical and Mechanical Engineers Training Centre; Transportation Training Centre; School of Music; Women's Royal Australian Army Corps School; Land/Air Warfare (Joint Services) School.

(xiv) *Rifle Clubs*. The Australian Rifle Club movement, which had its origin in 1888, is provided for in the Defence Act and comprises an Australian Council of State Rifle Associations (which functions in an advisory capacity to the Minister and in the promotion of intra-empire and interstate rifle competitions), State Rifle Associations, District Rifle Club Unions and Rifle Clubs. When placed in recess, the efficient strength of the rifle club movement was 1,018 clubs and 36,478 members. Approximately 20 per cent. of this number served overseas and a further 60 per cent. performed home service duties during the 1939–45 War. Rifle shooting activities were resumed in 1946 and the strength of the movement as at 31st December, 1956, was 1,033 clubs and 44,940 members.

(xv) *The Australian Battles Nomenclature Committee*. The Minister for the Army gave approval on 25th July, 1947, for the formation of the Australian Battles Nomenclature Committee to tabulate and classify the operations fought in the Pacific Zones in the 1939–45 War which involved the Australian Military Forces, to define their geographical and chronological limits and to advise the United Kingdom Battles Nomenclature Committee regarding operations in zones other than the Pacific Zone in which the Australian Military Forces participated. Sub-committees were later appointed to study the various campaigns in order to classify the operations into battles, actions and engagements. In 1956, the terms of reference of the Australian Battles Nomenclature Committee were extended to cover the operations in Korea 1950–53.

3. Strength of Australian Military Forces.—The effective strength of the Australian Military Forces at 31st December, 1956, was as follows:—Australian Regular Army, 19,184; Regular Army Special Reserve, 3,225; Citizen Military Force (including National Service Trainees), 83,623; Australian Cadet Corps, 29,152.

§ 4. Air Defence.

1. General.—A statement respecting the preliminary steps taken in connexion with the development of air defence will be found in Official Year Book No. 18, p. 610, and one on the expansion and development and zones and operations of the Royal Australian Air Force during the 1939–45 War appears in Official Year Book No. 36, p. 1027.

2. Operations in Korea and Malaya.—Reference to R.A.A.F. participation in operations in Korea is contained in Official Year Book No. 40, pp. 1112–13.

Australian assistance in the form of one transport squadron provided to the Malayan authorities is detailed in Official Year Book No. 40, p. 1113.

One bomber squadron was also provided for operations in Malaya. The Lincolns of No. 1 Squadron arrived in July, 1950, and were soon in action. Up till 1st February, 1957, No. 1 Squadron had dropped 31,211,850 lb. of bombs during operations against communist bandits. This bombing, which calls for extreme accuracy, was mainly on jungle hideouts frequented by the insurgents and was carried out in close co-operation with the ground forces.

3. Administration and Organization.—The Department of Air is responsible for policy for the organization and control of the Royal Australian Air Force. The Air Board is responsible, subject to approved policy, for the control and administration of the Royal Australian Air Force, and is constituted as follows:—Chief of the Air Staff, Air Member for Personnel, Air Member for Technical Services, Air Member for Supply and Equipment, Citizen Air Force Member and the Secretary, Department of Air.

Headquarters of the Royal Australian Air Force is located at Melbourne. An Oversea Headquarters is located at London and an Air Attaché at Washington.

The units of the Royal Australian Air Force are organized in three functional Commands throughout Australia and its Territories.

The Commands are:—

Home Command.—Home Command is responsible for the command of operational units and the conduct of their operations within Australia and its Territories.

Training Command.—Training Command is responsible for the command of training units, recruitment and individual training in the R.A.A.F.

Maintenance Command.—Maintenance Command is responsible for the command of supply and servicing units, and supply and servicing, including technical services, of the R.A.A.F. in Australia.

The organization of the Royal Australian Air Force includes the following types of formations and units:—

- (a) *Sub-formations*, comprising a headquarters unit to control the activities of a number of units at one location. Each formation has a base squadron which provides common services to all units at the location.
- (b) *Flying Squadrons*. These bomber, fighter, transport, target-towing and maritime reconnaissance squadrons undertake the operational and operational training flying commitments of the R.A.A.F.
- (c) *Aircraft Depots*. These units specialize in major overhauls, etc., of aircraft and equipment and relieve flying unit ground staff of these commitments.
- (d) *Stores Depots*. Stores and equipment ordered by the R.A.A.F. are delivered to these centrally located depots for distribution to units.
- (e) *Flying Training, Ground Training, Navigation, Radio and Air Armament Training Units*, which specialize in the aircrew and ground staff training required by the R.A.A.F.
- (f) *Airfield Construction Squadrons*. These units specialize in the construction of R.A.A.F. aerodromes and associated buildings and works services.
- (g) *Royal Australian Air Force College*. This unit is the training college for officer cadet entrants to the R.A.A.F.
- (h) *Telecommunications Units*. These units are responsible for the communications services of the R.A.A.F.
- (i) *R.A.A.F. Staff College*. This college trains specially selected R.A.A.F. officers for higher staff and command posts.

4. **Aircraft.**—Some of the aircraft which are at present being used in the Royal Australian Air Force are: bomber squadrons—Lincoln and Canberra; fighter squadrons—Mustang, Vampire, Meteor and Avon Sabre; transport squadrons—Dakota; maritime reconnaissance squadrons—Lincoln and Neptune; air observation post—Auster; training—Tiger Moth, Wirraway, Mustang, Dakota, Metropolitan, Lincoln, Winjeel, Vampire and Meteor.

5. **Establishment.**—The Royal Australian Air Force establishment, as proposed, comprises—(a) a Home Defence Organization, (b) Task Force elements and (c) a Training Organization, consisting in all of approximately 16,680 personnel.

6. **Strength of Royal Australian Air Force.**—At 1st February, 1957, the strength of the Royal Australian Air Force was as follows:—Permanent Air Force, 14,608; Active Citizen Air Force, 520; Active Reserve, 1,142 and General Reserve, 27,892. In addition 3,330 National Service Trainees were transferred to the Reserve each year up to 1957 after they had completed their 154 days training. After the intake in January, 1957, there have been no further intakes by the Air Force (see p. 1016).

7. **Women's Royal Australian Air Force.**—At 1st February, 1957, the Women's Royal Australian Air Force had an establishment of 841, with an enlisted strength of 724. There are 27 musterings, excluding members of the W.R.A.A.F. in training. The entry age is 18 to 34 years inclusive. Parental consent must also accompany applications for those between the ages of 18 and 21 years. A good education is necessary and applicants must be of British nationality, single, or a widow without dependants, and must be physically fit. Engagement period is four years with the option of re-enlistment for further periods of four years.

All W.R.A.A.F. trainees undergo a month's initial training course at Point Cook, Victoria. On graduating they are posted for duty to R.A.A.F. units anywhere in Australia. Wherever possible, the Air Force endeavours to post members of the W.R.A.A.F. to R.A.A.F. units within their home State. This rule applies for those who wish to serve in their home State, but members of the W.R.A.A.F. who wish to travel may indicate their preference and be posted to whichever State they desire.

§ 5. War Gratuities.

Reference is made in earlier issues of the Official Year Book to the payments made under the provisions of the War Gratuity Acts 1920 (*see* No. 15, p. 930) and the War Gratuity Act 1945–1947 (*see* No. 41, p. 999).

§ 6. Department of Defence Production.

1. **General.**—On 11th May, 1951, a Department of Defence Production and a Department of Supply were established by a decision of the Commonwealth Government. These Departments took over the functions previously undertaken by a joint Supply Department. The Department of Defence Production is responsible broadly for the production in government-operated factories and in industry under contract to the Government of munitions (including aircraft) required by the Services. It is also responsible for all those matters incidental to production, including planning production capacity to meet expected future Service requirements. References to previous operations of the various sections and establishments of the Department are given in Official Year Book No. 38, pp. 1200–9.

2. **Functions of the Department and Act Administered.**—The functions of the Department of Defence Production, as defined in the Administrative Arrangements approved by the Governor-General, are:—

- (i) Manufacture, acquisition, provision and supply of munitions for the defence forces, that is to say, armaments, aircraft, arms, ammunition, weapons, machine tools, war chemicals, radar and such other items as may be mutually agreed with the Department of Supply as falling within the definition of munitions, including the materials and plant necessary for the production of those things and all matters incidental thereto, including:—

The receipt from the Service Departments and other authorities or Departments of orders and forecasts of requirements of munitions; appropriate liaison with the Higher Defence Machinery, Service Departments and the Department of Supply to deal with Service munitions programmes; operation and management of factories, workshops and undertakings concerned in the production of munitions; arrangements and all action necessary to secure the manufacture, processing and delivery of munitions; investigations and development of Australian sources of munitions production, including the establishment of annexes or special capacity in industry for that purpose; acquisition by the Commonwealth and the establishment of factories and workshops for the purpose of producing munitions; provision and maintenance of stocks of materials and goods for the purpose of producing munitions.

- (ii) Employment and training of technicians, workmen and others for the purpose of producing munitions.
- (iii) Formation of Industry Advisory Committees to advise the Minister for Defence Production regarding:—

The allocation to industry of production programmes of munitions; the establishing of additional munitions production facilities, including annexes and undertakings; the obtaining of appropriate details of Australian industrial capacity required by the Department of Defence Production in allocating munitions production to industry; any other matters associated with munitions production as specified by the Minister.

- (iv) Provision and control of stores, magazine and similar undertakings required in connexion with production of munitions and for other purposes as required.
- (v) Arrangements for ascertaining costs and the control and limitation of profits in connexion with the production of munitions.
- (vi) Development of inventions originating in government factories in the interests of defence production.

The Act administered by the Department is the Supply and Development Act 1939–1948.

3. **Production.**—(i) *Munitions.* The Department is responsible for the production in Australia of the munitions (other than specialized Navy requirements) for the Armed Services. The production is undertaken in government-operated factories and industry. Broadly their roles are:—

- (a) Some processes are entirely undertaken by the government factories in peace and war because of special requirements.
- (b) Some classes of equipment and components are produced entirely by industry in peace and war.

- (c) Production techniques of advanced equipment and components of which industry may undertake mass production in war, are developed in the government factories in peace.
- (d) Limited requirements of standard equipment and components produced in peace by the government factories are in war produced on a mass production basis in industry.

The following factories are currently in operation:—Ammunition—Footscray, Victoria; Explosives and Filling—Albion and Maribyrnong, Victoria; Mulwala and St. Mary's, New South Wales; Ordnance—Maribyrnong, Bendigo, Echuca, Port Melbourne, all in Victoria; Small Arms—Lithgow, New South Wales; and certain annexes established in industry. Other government-owned factories and annexes are held on a care and maintenance basis against an emergency.

These factories are complementary to each other in the manufacture of a range of basic munitions. The Ammunition Factory makes the brass and non-ferrous components of gun ammunition, including melting and rolling and these components are then passed to the Explosives Factory for filling with explosives. In the case of small arms ammunition, however, the factory makes the complete round, receiving the propellant from the Explosives Factory. The Ordnance Factories principally make guns, and in addition make the steel shell bodies which are passed to the Explosives Factory to be filled with explosives and assembled with the brass and other components received from the Ammunition Factory. The Explosives Factories make the propellant and high explosives for the brass components made at the Ammunition Factory and the steel components made at the Ordnance Factory. The Explosives Factory also assembles the gun ammunition. The Small Arms Factory is equipped to make the rifles and other small arms for which the Ammunition Factory makes the ammunition.

Production of munitions is also a joint effort between the Government factories and private contractors in industry. In peace, industry produces many components for ammunition and other stores plus complete units such as electronic equipment and motor vehicles for the Services. In war, industry would provide the major capacity not only for mass production of these and many other new items, but also for the mass production of equipment and components using engineering techniques developed in peacetime in the Government factories.

(ii) *Aircraft.* (a) *General.* Matters relating to the production in Australia of military types of aircraft and aero engines and of other aircraft components required by the Royal Australian Air Force and the Royal Australian Navy are administered by the Department of Defence Production. Aircraft repair and overhaul activities carried out for those Services in civilian establishments, as distinct from Service workshops, are also the function of the Department, together with the responsibility of supplying aircraft and engine spare parts and airborne equipment generally.

(b) *Aircraft, Engine and Other Production.* The approved production programmes for the major aircraft manufacturing organizations in Australia comprised Canberra jet-engined bombers and Jindivik radio-controlled jet-propelled target aircraft at the Government Aircraft Factory, Melbourne; Avon Sabre jet-engined fighters, Winiel basic trainers and Rolls-Royce Avon turbo-jet engines at Commonwealth Aircraft Corporation Pty. Ltd., Melbourne, and Vampire jet-trainers at De Havilland Aircraft Pty. Ltd., Sydney.

Associated concurrent production activities included the manufacture of parts of aero engines and of undercarriages at the Aircraft Engine Factory, Sydney, production of heavy forgings at the Heavy Forge Annexe, Sydney, and the manufacture of aircraft pressed metal parts at Chrysler Australia Ltd., Adelaide.

(c) *Repair and Overhaul.* During the year, the broad policy was continued by the R.A.A.F. of returning to the factories in which they were produced all Australian-made aircraft and aero engines requiring major overhaul and the incorporation of modifications. Repair and overhaul of R.A.A.F. aircraft of certain other types and of carrier-based aircraft operated by the R.A.N. were undertaken by civilian personnel in the aircraft factories or in the works of contractors specially equipped to handle this type of work.

Lincoln and Canberra bomber aircraft were repaired and extensively modified at the Government Aircraft Factory, together with Jindivik target aircraft. Avon Sabre fighter aircraft were repaired and modified and Rolls-Royce Nene and Avon turbo-jet engines were overhauled by Commonwealth Aircraft Corporation Pty. Ltd., Melbourne. Rolls-Royce Merlin and Pratt and Whitney Twin Row Wasp engines from the R.A.A.F., Rolls-Royce Griffon, Bristol Centaurus and Armstrong-Siddeley Double Mamba turbo-propeller engines from the R.A.N., and Rover Meteor engines from the Department of the Army for Centurian tanks were overhauled at the Aircraft Engine Factory, Sydney. Wright turbo-compound engines from R.A.A.F. Neptune aircraft were overhauled by Qantas Empire Airways Ltd., Sydney.

Carrier-based Sea Venom aircraft, Vampire fighters and trainers and Tiger Moth trainers together with Goblin turbo-jet engines from Vampire trainers and Gipsy Major

piston engines were repaired and overhauled at De Havilland Aircraft Pty. Ltd. Dakota transport and other miscellaneous aircraft were reconditioned and serviced at the Government workshops at Parafield, South Australia.

The repair and overhaul of carrier-based Fairey "Firefly", Hawker "Sea Fury" and Fairey "Gannet" aircraft were handled by the Fairey Aviation Company of Australasia Ltd. Sydney.

Sycamore helicopter aircraft built by the Bristol Aeroplane Company and Bristol freighter aircraft and Alvis Leonides and Bristol Hercules engines from those aircraft were repaired and overhauled by Bristol Aviation Services, also in Sydney.

Repair and overhaul work on propellers was undertaken at the Propellor Annexe, Sydney, managed for the Commonwealth by De Havilland Aircraft Pty. Ltd., Sydney.

The reconditioning and servicing of aircraft instruments, ancillary equipment and air-frame components were carried out by a large number of sundry contractors.

(d) *Avalon Test Field.* During the year, the aircraft flight test field at Avalon, near Geelong (Victoria), was further developed for the final assembly, fitting out and testing in flight of the Canberra bomber and Avon Sabre fighter aircraft built at the aircraft factories near Melbourne.

4. **Defence Production Planning.**—The Defence Production Planning Branch is the central planning authority of the Department and is the executive instrument of a Committee of the same name. The three Defence Services and the Departments of Defence, Defence Production, Supply and Trade are represented on the Committee and this enables a close liaison to be maintained with the Departments concerned directly and indirectly with defence in the formation of defence production planning policy.

Broadly, the functions of the Branch are:—(i) to plan for and undertake the development of additional production capacity to meet Service munition requirements for mobilization and war; (ii) to arrange production in industry of current munitions requirements for the Defence Services; (iii) to develop production techniques and, where necessary, capacity to produce such requirements.

These functions are performed by the following production and related sections which exist within the Branch:—(a) Ammunition; (b) Telecommunications; (c) Ordnance and Engineering Equipment (including optics, machine tools, mobile and electrical equipment and small craft); (d) Materials and Chemical Engineering; (e) Technical Services; (f) Planning.

In order to advise the Minister of the Department in the development of industrial mobilization plans to meet the requirements of war related to particular industries, the following Industry Advisory Committees have been created:—Ammunition; Electrical; Explosives and Chemicals; Materials; Radar and Telecommunications; Weapons and their equipment; and Military Vehicles.

5. **Finance and Accounts.**—The expenditure on munitions, munitions factories, aircraft production, etc., during 1954-55 and 1955-56 is shown in the following table:—

DEFENCE PRODUCTION: TOTAL EXPENDITURE.
(£'000.)

Particulars.	Expenditure.	
	1954-55.	1955-56.
Parliamentary Appropriations	(a) 5,280	(b) 12,334
Trust Fund Accounts—		
Government Factories and Establishments	14,564	16,781
Manufacture of Munitions	12,007	13,541
Munitions Materials	129	22
Defence Production Materials	570	349
Aircraft Production	15,944	18,417
Strategic Stores and Equipment .. .. .	..	239
<i>Total Trust Fund Accounts</i>	<i>43,214</i>	<i>49,349</i>
Total Expenditure	48,494	61,683

(a) Includes contribution under Superannuation Act and Audit.
contribution under Superannuation Act.

(b) Includes Audit; excludes

§ 8. Department of Supply.

1. **General.**—Reference to the creation of the Department of Supply is contained in Official Year Book No. 39, p. 1257.

2. **Functions of the Department.**—The functions of the Department include (a) the manufacture, acquisition, provision and supply of services and goods other than "munitions" (that is to say foodstuffs, textiles, clothing, fibres, canvas goods, woodwork, hardware, boots, leatherware and other like supplies) required by Services and other authorities; (b) research and scientific development in relation to war *matériel*, including the operation of the Joint United Kingdom-Australia Long Range Weapons Project, and Australian research and development through the Weapons Research Establishment, the Aeronautical Research Laboratories, Defence Standards Laboratories and associated establishments; (c) design and associated technical development and inspection of war *matériel*; (d) planning for and procurement of strategic materials; (e) planning and establishment of manufacturing facilities for the production of goods other than munitions; (f) formation of industry advisory committees in respect of production and procurement matters; (g) arranging contracts for supply of goods and performance of services; (h) operation and management of Government Clothing Factories; (i) acquisition, maintenance and disposal of stocks; (j) sale or disposal of surplus or unserviceable Commonwealth property (except buildings or land); (k) provision of Commonwealth transport facilities; (l) security service for Supply and Defence Production Departments; (m) arrangements for ascertaining costs and control and limitation of profits on production contracts; (n) co-ordinating estimates, allocation and commitment of resources for Defence Supply needs (including munitions) and liaison with the National Security Resources Board; (o) provision and control of stores required for or in connexion with matters administered by the Department of Supply; general storage for other Departments as required.

3. **Acts Administered.**—Acts administered by the Minister for Supply are the Aluminium Industry Act 1944-1954, Atomic Energy Act 1953 and Supply and Development Act 1939-1948.

4. **Research and Development Branch.**—(i) *General.* The Research and Development Branch, which is under the control of the Chief Scientist, is responsible for research and scientific development in relation to war *matériel* including the operation of the joint United Kingdom-Australia Long Range Weapons Organization. The Chief Scientist is also the Chairman of the Board of Management for Research and Development, which is responsible for the efficient and economical conduct of research and development undertakings. The headquarters of the Branch is situated at 339 Swanston Street, Melbourne, and the following establishments are included in the Branch:—Weapons Research Establishment, Salisbury, South Australia; Defence Standards Laboratories, Maribyrnong, Victoria; Aeronautical Research Laboratories, Fishermen's Bend, Victoria.

(ii) *Weapons Research Establishment, Salisbury, South Australia.* This Establishment has two main sections, namely, the Trials and Instrumentation Wing and the Weapons Research and Development Wing.

The Trials and Instrumentation Wing is concerned with the Joint United Kingdom-Australia Long Range Weapons Project and is responsible for the testing of guided missiles developed in the United Kingdom. The Weapons Research and Development Wing is engaged chiefly on Australian-initiated research but also provides a supporting research service for the Joint Project.

The headquarters of Weapons Research Establishment consisting of the main laboratory, workshop and administrative services, is located at Salisbury.

Accommodation has been provided in the area for a number of United Kingdom firms which are developing guided weapons under contract to the British Ministry of Supply.

A modern airfield (Edinburgh Field) has been established adjacent to the Headquarters at Salisbury to meet the flying requirements of the establishment, the flying effort being provided by the R.A.A.F.

Testing ranges have been provided at Woomera, which is approximately 280 miles north-west of Salisbury and 9 miles north of Pimba, which is on the trans-continental railway line. A number of these testing ranges are now in operation. A modern township of 500 houses and extensive barracks accommodation has been built, complete with community store, hospital, school and all amenities usually found in an Australian country town.

(iii) *Aeronautical Research Laboratories.* The Aeronautical Research Laboratories at Fishermen's Bend have continued investigations in aerodynamics, structures, aircraft materials and general aeronautical engineering according to their approved programme with particular attention to defence problems. These laboratories also collaborate with the United Kingdom on aeronautical matters of mutual interest.

(iv) *Defence Standards Laboratories.* The Defence Standards Laboratories at Maribyrnong continue to give comprehensive service to industry, the armed services and to other Commonwealth and State Departments.

The broad function of these laboratories is the application of scientific knowledge and research to the problems arising in design, development, manufacture, inspection, storage, and use of war *matériel*. Research is also carried out in connexion with the development of new and improved materials, methods and equipment of known or potential interest.

5. *Design and Inspection Branch.*—(i) *General.* The prime functions of the Branch are to design and test equipment to meet the Army's special requirements, and to inspect stores equipment for adherence to standards before acceptance on behalf of the Army.

(ii) *Design.* Comparatively little of the Army's equipment is identical with commercial patterns. In many cases, these can be used as the basis, minor modifications being made to suit Service needs. In other cases, there is no commercial equivalent and a completely new equipment must be developed. Hence there is need for a design authority:—(a) to investigate, evaluate and recommend commercial types of equipment for adoption by the Army; (b) to devise modifications to bring commercial products, or oversea Service equipment, into line with Australian Army requirements; and (c) to design and develop completely new patterns of equipment for the Army.

The Design Establishment at Maribyrnong is equipped for these tasks. Its three design sections handle respectively armaments, vehicles, and general engineering and telecommunications. It has common facilities for dealing with defects, standards, rationalization and standardization, production drawings, specifications, publications, testing of components and complete electrical and mechanical units, and the construction of mock-ups and models. The establishment makes the maximum use of extra-mural facilities (universities, other government departments, and industrial firms) and itself undertakes equipment development only when this is clearly the best way of doing it.

A small amount of work is done for Services other than the Army, for non-service Departments and for industry.

(iii) *Inspection.* The Inspection Service is primarily intended for the inspection of supplies for the Army, but undertakes inspection on behalf of certain other Departments, and all proof of armament stores for the three Armed Services.

The Inspection Service is divided into four groups—Engineering, Ammunition and Small Arms, General Stores and Clothing, and Proof and Experimental. The headquarters of the service is predominantly technical. The size of elements in the States varies with the volume of production to be inspected.

The Proof and Experimental Group conducts a number of proof ranges, the chief of which are at Port Wakefield, South Australia, and Compton Vale, Victoria.

The General Stores and Clothing Group, in addition to its inspection function, is responsible for the design of general stores and clothing.

In addition, there is an Equipment Inspection Section which holds and issues a complete range of drawings and specifications for Army equipment, including United Kingdom and Australian Joint Service specifications. This Section provides the data on which production is based.

6. *Contract Board.*—(i) *General.* Under the Supply and Development Act 1939–1948, the Contract Board is the authority responsible for purchasing supplies and arranging services for the Military, Naval and Air Forces of the Commonwealth, as well as for the Departments of Supply and Defence Production. Under this Act and Regulations, it is charged also with the responsibility of arranging for the sale or disposal on behalf of Commonwealth Departments of all surplus or unserviceable war *matériel*, goods and services approved for disposal. In addition to its statutory responsibilities, the Board makes purchases and arranges disposals on behalf of numerous Commonwealth Government Departments and Authorities who have no public contracting organization of their own, e.g., Immigration, National Development and External Affairs (Colombo Plan supplies).

(ii) *The Board and its Administrative Organization.* The Contract Board meets in Melbourne, and comprises representatives of the Departments of Supply, Defence Production, Navy, Army and Air. The Board's administrative organization is the Directorate of Contracts. In each State other than Victoria, there is a District Contract Board with an administrative organization similar to the Directorate of Contracts. The table following shows, in respect of the Contract Board Organization, the purchases and realizations from disposals for the years 1954–55 and 1955–56.

CONTRACT BOARD ORGANIZATION : PURCHASES AND REALIZATIONS FROM DISPOSALS.

(£.)

State.	Purchases.		Realizations from Disposals.	
	1954-55.	1955-56.	1954-55.	1955-56.
Contract Board, Victoria	22,992,424	31,299,167	1,273,584	1,965,434
District Contract Board—				
New South Wales	6,824,197	5,950,805	1,324,574	1,113,615
Queensland	1,454,911	1,771,071	496,618	424,641
South Australia	909,723	1,136,241	355,185	321,958
Western Australia	485,597	592,163	143,134	114,195
Tasmania	162,494	113,172	23,463	32,641
Total	32,829,346	40,862,619	3,616,558	3,972,484

7. **Tinplate.**—Despite substantial losses of stoned fruits in Victoria as the result of floods, consumption of tinplate in 1956 was 126,865 tons or only 600 tons below the 1955 record.

Supplies were freely available from the United Kingdom and the United States of America, although some delays were caused by industrial disturbances.

Production of tinplate in Australia is expected to commence in 1957.

8. **Stores and Transport Branch.**—This Branch, administered by a Board of Management and working under the direction of a General Manager, functions as the central authority for meeting the storage and transport requirements of Commonwealth Departments and Authorities. It is the authority for the arrangement of furniture removals, at Departmental expense, in all States with the exception of the Australian Capital Territory and the Northern Territory. It has agents in Canberra and Darwin.

At 30th June, 1956, it had under its control, land, buildings, plant and machinery valued at over £5,707,805 and 2,315,000 square feet of storage space, of which 1,936,830 square feet was Government-owned and the balance held under tenancy.

9. **Finance Branch.**—The expenditure for Department of Supply activities during the years 1954-55 and 1955-56 are shown in the following table.

SUPPLY : TOTAL EXPENDITURE.

(£'000.)

Particulars.	Expenditure.	
	1954-55.	1955-56.
Parliamentary Appropriations	(a) 13,745	(a) 15,363
Trust Fund Accounts—		
Dorset Tin Dredge .. ..	..	34
Mica	444	72
Minerals Production	154	36
Government Factory (Clothing)	2,089	2,198
Stores and Transport	3,969	4,633
Strategic Stores and Equipment Reserve	Cr. 7	..
<i>Total Trust Fund Accounts</i>	<i>6,649</i>	<i>6,973</i>
Total Expenditure	20,394	22,336

(a) Includes amount appropriated for audit charges.

10. **Australian Aluminium Production Commission.**—Basic plans for the manufacture of aluminium ingot in Australia were approved by the Commonwealth Government in April, 1941, as a defence measure designed to make this country independent of oversea supplies. In April, 1944, an agreement was made between the Commonwealth and Tasmanian Governments for the establishment of the industry in Tasmania. The Australian Aluminium Production Commission, consisting of representatives of each of the two Governments, was constituted on 1st May, 1945. By legislation passed in 1952 and 1954, the original fund of £3,000,000 to finance the undertaking was increased to £10,500,000, of which the Commonwealth Government will contribute £9,000,000 and the Tasmanian Government £1,500,000. At the same time, the Commission was reconstituted to consist of five members of whom four represent the Commonwealth and one the State of Tasmania.

Workable deposits of bauxite (aluminium ore) have been proved in Tasmania, Victoria, New South Wales and the Northern Territory. The largest deposits are located in the Wessel Islands, Northern Territory, where nearly 10,000,000 tons of good grade ore have been proved, and also in the Inverell district of northern New South Wales, where reserves exceeding 8,000,000 tons have been brought under the Commission's control. In the Wessel deposits alone, there is a sufficient supply to maintain aluminium production in Australia for over 100 years, based on the present planned production of 13,000 tons of aluminium ingot annually.

The combined Bayer-Hall alumina and reduction plant erected at Bell Bay, northern Tasmania, is now in production of aluminium ingot and was expected to reach full production by the middle of 1957.

CHAPTER XXIX.

REPATRIATION.

§ 1. General.

An outline of the activities leading up to the formation of the Commonwealth Repatriation Commission was given in Official Year Book No. 15, p. 931. Also in the Official Year Book referred to, and in subsequent issues, some account was given of the policy and general activities of the Department, while detailed information was incorporated in regard to such matters as sustenance rates and pensions to members of the Forces and dependants. (*See Official Year Book No. 17, pp. 598-601.*) In 1943, the Australian Soldiers' Repatriation Act was amended by the incorporation of the recommendations of the Parliamentary Committee appointed to inquire into pensions and repatriation benefits. A general increase was made of approximately 20 per cent. in the rates of war pensions and increases were also made in other repatriation benefits.

Under the Australian Soldiers' Repatriation Act 1950, rates of pension and medical sustenance were increased, and pensions and benefits under the Act were extended to those members of the Forces (and their dependants) engaged in operations in Korea and Malaya. Provision was also made for payment to a war widow, on re-marriage, of a gratuity equal to one year's war pension. In addition, an important amendment was a change in the basis of war pensioning. Previously, the basis was the daily rate of service pay, but under this legislation the rank, not the pay, of the service man or woman became the basis. This change was brought about as the result of the increased rates of pay of members of the Forces under the new pay code from 1st July, 1947, and the further increases since then. The constantly rising rates of pay made it evident that the basis of pensioning on the daily rate of pay would be unworkable; for example, the rates of pay of more or less senior officers of the 1914-18 War, and of the 1939-45 War discharged before 1st July, 1947, were less than the new rates of pay for present day lower ranks, with a consequent disparity in the rates of pension. To avoid this disparity, the daily rate of pay basis—which had been in operation since the original war pension legislation of 1914—was abandoned in favour of the basis of pensioning according to the rank of the member, the basis adopted by other countries.

Amendments to the Act in 1951-52, 1953-54 and 1954-55 made provision for general increases in the rate of certain types of war pension. Other payments were accordingly affected, and additional benefits were provided.

The main activities of the Repatriation Commission at 30th June, 1956, were the grant, review and assessment of war and service pensions, the provision of medical treatment, vocational training, the renewal and repair of artificial replacements and surgical appliances, the grant and review of sustenance and living allowances, and the administration of the Soldiers' Children Education Scheme.

§ 2. War Pensions.

1. **General.**—The first provision for the payment of war pensions to members of the Forces and their dependants was made by the Commonwealth Parliament in the War Pensions Act 1914, which came into operation on 21st December, 1914. This Act was repealed in 1920 by the Australian Soldiers' Repatriation Act (amended from 31st December, 1950 to the Repatriation Act). Owing to limitations of space, only some of the main features relating to war pensions under the Repatriation Act 1920–1955 are shown in the following paragraphs:—

(i) *Eligibility for Pension.* There has been a considerable widening of the provision in this respect, to the benefit, mainly, of members of the Citizen Military Forces who have not served outside Australia. These provisions are summarized as follows:—

- (a) A member of the Forces who served (1) outside Australia, (2) in the Territories of Australia, such as Papua and New Guinea, or (3) within Australia in circumstances which can be regarded as actual combat against the enemy, is covered for war pension purposes in respect of incapacity or death which may result from any occurrence that happened during the period from the date of his enlistment to the date of the termination of his service in respect of that enlistment.
- (b) In other cases where a member served only in Australia, incapacity or death to be pensionable must have been attributable to service.
- (c) There is a third ground applicable to all in (a) and (b) who have had at least six months' camp service. This provides that, where a condition existed at enlistment, a pension may accrue if it is considered that such condition was aggravated by service.

(ii) *Pensions for Incapacity.* From 7th October, 1954, the 100 per cent. pension rate for a member's incapacity was increased from £8 5s. to £9 per fortnight (higher rates were payable in respect of certain commissioned ranks). The rates for wives and children of such members are £3 11s. and £1 7s. 6d. per fortnight respectively. From 20th October, 1955, the member's 100 per cent. incapacity rate was increased from £9 to £9 10s. per fortnight.

(iii) *Supplementation of Pension.* Where a member in receipt of a pension at the maximum rate is, because of his war disability, temporarily (for at least three months) precluded from earning, an additional pension may be granted to bring the total pension to the member up to £19 10s. per fortnight from 20th October, 1955.

(iv) *Women's Nursing and Auxiliary Services.* Members of Women's Services are entitled to pensions and other benefits as prescribed in the Act on the same basis as male members of the Forces.

(v) *Tuberculosis.* In the case of a member of the Forces who served in a theatre of war, and, at any time after discharge became or becomes incapacitated, or died or dies, from pulmonary tuberculosis, war pension is payable, and medical treatment is provided on application as if the incapacity or death resulted from an occurrence on service. (*See also* § 3. Service Pensions.)

(vi) *Special Rates.* Those who have been totally blinded as the result of war service and those who are permanently and totally incapacitated receive as from 5th November, 1953, special pensions of £18 10s. per fortnight. The rate for Tuberculars, Class "B" (fit for light employment) was increased from £12 to £13 per fortnight. The rates were further increased to £19 10s. and to £14 per fortnight respectively from 20th October, 1955. In addition to the special pension, an attendant's allowance of £3 10s. per fortnight is granted to the war-blinded and to certain others who are deemed to be in need of an attendant. A war-blinded member who is also affected with total loss of speech or total deafness was entitled from 2nd October, 1952, to an attendant's allowance of £7 per fortnight in lieu of that referred to above. Attendant's allowance rates were further increased from 20th October, 1955, to £5 10s. and to £9 per fortnight respectively. The wife and any children under 16 years of age receive the same rates as shown in sub-para. (ii).

(vii) *Specified Disabilities.* Where the disability is amputation of a limb or limbs or total loss of vision in one eye, amounts ranging from 17s. to £10 per fortnight in addition to the statutory rate of pension are payable as from 20th October, 1955. In addition, allowances of either £5 10s. or £9 per fortnight are payable in certain double amputation cases.

(viii) *Time Limit for Wives and Children Removed.* Prior to the 1950 amending Act wives who were married and children who were born after 1st July, 1938, were ineligible to receive a war pension. This time limit was removed as from 2nd November, 1950.

(ix) *Rates of Pensions for Death. (a) Widows.* As already indicated, rates of pension, which were previously based on the daily rate of pay of the member, are now based on the rank of the member. From 20th October, 1955, the rates were increased by £1 per fortnight, the minimum rate being increased from £8 to £9 per fortnight. In addition to the pension, the widow, if she has dependent children, receives an allowance if she is permanently unemployable, or if she is over 50 years of age; this allowance is £3 9s. per fortnight. The allowance may also be paid to a widow under 50 years of age, in certain cases, so long as the child (or one of the children if more than one child) over the age of sixteen, is undergoing education or training but has not qualified for (or is not receiving) the adult wage in the trade, occupation or calling for which the child is training.

(b) *Children.* From 2nd October, 1952, the rate of pension for the eldest child (under 16 years of age) was increased to £2 13s. per fortnight, and that of each younger child to £1 17s. Additional pension of 12s. per fortnight may be paid in certain circumstances. Where both parents are dead each child is pensioned at the rate of £4 16s. per fortnight.

(x) *Widowed Mother on Death of Member.* A pension ranging from £4 10s. to £8 6s. per fortnight, according to the rank of the member, may be granted to a widowed mother of a deceased unmarried son, provided widowhood occurred either prior to or within three years after the death of the member. The pension may be supplemented by payment to a prescribed person of an additional amount not exceeding £8 per fortnight according to the extent of other income of the pensioner; this operated from 20th October, 1955. The value of property possessed does not affect the issue.

2. *Appeals Tribunals.*—The principal Act was amended as from 1st June, 1929, to create tribunals to hear appeals in regard to war pensions. The War Pensions Entitlement Appeal Tribunal is empowered to hear and decide any appeal by or on behalf of ex-members of the Forces or their dependants against a decision of the Repatriation Commission that an incapacity or the death of an ex-member did not arise out of war service. Assessment Appeal Tribunals were created to hear and decide any appeal against a current assessment or a "Nil" assessment of war pension made by the Repatriation Commission in respect of an incapacity of an ex-member of the Forces which had been accepted as arising out of war service. Provision was made by subsequent legislation to enable the Tribunals to hear appeals by certain members for service pensions.

3. *Summary of War Pensions, 1955–56.*—At 30th June, 1956, the number of war pensions for the 1914–18 War was 136,113, for the 1939–45 War 460,854, and for the Korea and Malaya Operations 2,647, making a total of 599,614 with a liability of £43,644,987 per annum. The amount paid in war and service pensions during the year 1954–55 was £47,307,315. The outstanding features for 1955–56 for each war are listed in the following table:—

WAR PENSIONS : SUMMARY, AUSTRALIA, 1955–56.

Particulars.	1914–18 War.	1939–45 War.	Korea and Malaya Operations.	Total.
New claims granted	2,337	30,098	676	33,111
Restorations	434	1,453	4	1,891
Claims rejected (gross)	1,488	13,756	305	15,549
Pensions reviewed	12,713	58,798	437	71,948
Pensions cancelled or discontinued	1,282	11,591	58	12,931
Deaths of pensioners	4,017	1,968	9	5,994
Number of pensions in force at 30th June, 1956	136,113	460,854	2,647	599,614
Annual pension liability at 30th June, 1956 £	18,939,411	24,548,421	157,155	43,644,987
Amount paid in pensions during the year 1955–56 £	(a)	(a)	(a)	43,165,677

(a) Not available.

4. Classes of War Pensions, Australia, 1955-56.—(a) *New Claims Granted.* The following is an analysis of the total number of new claims granted during 1955-56:—

WAR PENSIONS : NEW CLAIMS GRANTED, AUSTRALIA, 1955-56.

Class.	1914-18 War.	1939-45 War.	Korea and Malaya Operations.	Total.
Members	795	5,815	203	6,813
Wives of Members	1,085	6,014	185	7,284
Children	337	17,610	277	18,224
Other dependants	120	659	11	790
Total	2,337	30,098	676	33,111

(b) *Pensions in Force.* The following table shows the number of pensions in force at 30th June, 1956 for each war and for each class of pensioner:—

WAR PENSIONS IN FORCE, AUSTRALIA, 30th JUNE, 1956.

Class.	Number of Pensioners at 30th June, 1956.			
	1914-18 War.	1939-45 War.	Korea and Malaya Operations.	Total.
Children of deceased members	587	8,522	81	9,190
Orphans	47	133	..	180
War widows	18,893	10,409	52	29,354
Members	58,984	139,249	1,057	199,290
Children	4,379	181,826	784	186,989
Wives	50,879	113,769	595	165,243
Parents	2,055	6,738	73	8,866
Brothers and sisters	81	108	5	194
Others	208	100	..	308
Total	136,113	460,854	2,647	599,614

(c) *Special Rate Pensions.* At 30th June, 1956, special rate pensions of £19 10s. per fortnight were being paid to the following classes of members of the Forces:—

WAR PENSIONS: MEMBERS ON SPECIAL RATES, AUSTRALIA, 30th JUNE, 1956.

Class.	1914-18 War.	1939-45 War.	Korea and Malaya Operations.	Total.
Blinded members	212	203	4	419
Tubercular members	759	997	10	1,766
Totally and permanently incapacitated members	10,316	3,547	8	13,871
Tuberculars, Class " B " (a)	156	323	1	480

(a) Rate £14 per fortnight.

5. *Number of War Pensioners and Annual Liability, States, etc., 30th June, 1956.*—The following table shows the number of pensions in force and annual liability for each war at 30th June, 1956, according to place of payment. (The amount paid is shown on p. 1039.)

WAR PENSIONS : NUMBER OF PENSIONERS AND ANNUAL LIABILITY, 30th JUNE, 1956.

Where Paid.	Number of War Pensions in Force at 30th June, 1956.				Annual Pension Liability. (£.)
	Incapacitated Members of the Forces.	Dependants of Incapacitated Members.	Dependants of Deceased Members.	Total.	
1914-18 WAR.					
New South Wales(a)	19,029	17,908	7,296	44,233	6,226,813
Victoria	19,900	18,182	7,128	45,210	6,218,070
Queensland	7,015	6,525	1,922	15,462	2,241,893
South Australia(b)	4,384	4,319	1,735	10,438	1,550,954
Western Australia	4,781	4,802	1,542	11,125	1,328,827
Tasmania	2,620	2,676	855	6,151	941,009
<i>Total, Australia</i>	<i>57,729</i>	<i>54,412</i>	<i>20,478</i>	<i>132,619</i>	<i>18,507,566</i>
Overseas	1,255	1,308	931	3,494	431,845
Total	58,984	55,720	21,409	136,113	18,939,411
1939-45 WAR.					
New South Wales(a)	48,971	97,882	9,618	156,471	8,462,387
Victoria	37,279	78,877	6,801	122,957	6,551,336
Queensland	18,636	41,904	3,279	63,819	3,513,017
South Australia(b)	15,187	35,202	2,283	52,672	2,662,809
Western Australia	13,109	27,700	2,250	43,059	2,148,006
Tasmania	5,559	13,878	784	20,221	1,073,049
<i>Total, Australia</i>	<i>138,741</i>	<i>295,443</i>	<i>25,015</i>	<i>459,199</i>	<i>24,410,604</i>
Overseas	508	771	376	1,655	137,817
Total	139,249	296,214	25,391	460,854	24,548,421
KOREA AND MALAYA OPERATIONS.					
New South Wales(a)	403	523	81	1,007	57,547
Victoria	273	343	45	661	35,354
Queensland	161	204	28	393	25,560
South Australia(b)	68	112	4	184	12,719
Western Australia	96	128	19	243	14,844
Tasmania	40	60	11	111	5,923
<i>Total, Australia</i>	<i>1,041</i>	<i>1,370</i>	<i>188</i>	<i>2,599</i>	<i>151,947</i>
Overseas	16	12	20	48	5,208
Total	1,057	1,382	208	2,647	157,155

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

6. **Summary of War Pensions.**—(i) *Number.* The following table shows, for each war, the number of pensions granted, claims rejected, pensions in force, and the annual liability for pensions in each of the years ended 30th June, 1947 to 1956 and the total for all war pensions for each of the years ended 30th June, 1931, 1939 and 1947 to 1956:—

WAR PENSIONS : SUMMARY, AUSTRALIA.

Year ended 30th June—	Pensions Granted.	Claims Rejected.	Number of War Pensions in Force at 30th June.				Annual Pension Liability at 30th June. (£.)
			Incapaci- tated Members of the Forces.	Depend- ants of Incapaci- tated Members.	Depend- ants of Deceased Members.	Total.	
1914-18 WAR.							
1947	811	572	68,375	73,825	19,759	161,959	8,163,025
1948	1,378	717	67,116	68,323	19,863	155,302	8,475,915
1949	1,902	768	66,264	63,937	20,137	150,338	9,654,011
1950	2,547	1,201	65,622	60,141	20,509	146,272	10,103,752
1951	8,567	1,480	64,889	62,918	20,709	148,516	13,271,144
1952	4,090	1,386	63,800	61,775	20,684	146,259	14,447,983
1953	3,090	1,136	62,703	60,000	20,793	143,496	15,674,373
1954	3,063	1,559	61,634	58,390	20,980	141,004	16,574,412
1955	2,758	2,031	60,398	57,045	21,198	138,641	17,673,142
1956	2,337	1,488	58,984	55,720	21,409	136,113	18,939,411

1939-45 WAR.

1947	51,019	31,266	83,995	122,205	26,478	232,678	6,841,567
1948	39,188	13,614	91,657	142,112	26,530	260,299	7,759,793
1949	39,016	8,192	99,852	163,504	26,421	289,777	9,522,250
1950	44,392	7,312	108,922	189,413	26,649	324,984	10,638,011
1951	39,866	8,387	115,942	211,735	26,434	354,111	14,483,436
1952	36,259	8,864	120,889	231,068	26,232	378,189	15,862,473
1953	33,944	8,034	125,366	248,483	25,885	399,734	18,502,675
1954	33,370	13,733	129,926	265,552	25,773	421,251	20,211,273
1955	33,748	18,380	134,979	282,367	25,516	442,862	22,424,840
1956	30,098	13,756	139,249	296,214	25,391	460,854	24,548,421

KOREA AND MALAYA OPERATIONS.

1951	48	..	5	1	42	48	6,265
1952	312	153	159	109	99	367	30,873
1953	399	241	326	274	144	744	53,519
1954	698	450	643	572	196	1,411	92,652
1955	642	507	878	949	207	2,034	125,738
1956	676	305	1,057	1,382	208	2,647	157,155

TOTAL.

1931	11,555	920	75,316	172,389	35,617	283,322	7,774,806
1939	6,794	7,541	77,151	144,571	27,571	249,293	7,681,095
1947	51,830	31,838	152,370	196,030	46,237	394,637	15,004,592
1948	40,566	14,331	158,773	210,435	46,393	415,601	16,235,708
1949	40,918	8,960	166,116	227,441	46,558	440,115	19,176,261
1950	46,939	8,513	174,544	249,554	47,158	471,256	20,741,763
1951	48,481	9,867	180,836	274,654	47,185	502,675	27,760,845
1952	40,661	10,403	184,848	292,952	47,015	524,815	30,341,329
1953	37,433	9,411	188,395	308,757	46,822	543,974	34,230,567
1954	37,131	15,742	192,203	324,514	46,949	563,666	36,878,337
1955	37,148	20,918	196,255	340,361	46,921	583,537	40,223,720
1956	33,111	15,549	199,290	353,316	47,008	599,614	43,644,987

(ii) *Amount Paid and Place of Payment.* The following table shows for the years 1950-51 to 1955-56 the amounts paid in pensions and place where paid:—

WAR PENSIONS: AMOUNT PAID.

(£.)

Place of Payment.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
New South Wales(a)	9,446,734	11,046,938	11,769,571	12,578,067	14,100,305	14,501,426
Victoria	7,303,282	9,184,196	9,918,742	10,600,721	11,975,025	12,718,047
Queensland	3,016,499	3,777,019	4,109,763	4,591,219	5,385,216	5,763,319
South Australia(b)	2,452,245	3,046,575	3,349,467	3,583,510	4,101,624	4,135,874
Western Australia	2,272,533	2,714,606	2,921,367	3,086,783	3,438,517	3,450,830
Tasmania	1,297,490	1,560,560	1,714,609	1,820,440	1,933,349	2,017,289
Overseas	402,935	515,119	572,276	536,304	514,575	578,892
Total	26,191,718	31,845,013	34,355,795	36,797,044	41,448,611	43,165,677

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

§ 3. Service Pensions.

1. *General.*—The payment of service pensions is provided for in the Repatriation Act 1920-1955 and has operated since 1st January, 1936.

Originally fixed on a lower scale, the maximum rate of service pension for a member of the Forces now conforms to the rate of the age or invalid pension, which was increased from £7 to £8 per fortnight from 20th October, 1955. Since the 18th October, 1956, a member service pensioner with two or more children under the age of 16 years can receive a further £1 per fortnight in respect of each child (except the first) providing the member is permanently incapacitated for work and has the custody, care and control of the children. The maximum rate for the wife of a member is £3 10s. per fortnight; the rate for the first child under 16 years of age is 23s. per fortnight and 5s. per fortnight is payable for each of the younger children up to three in number. The actual rate payable in any case is determined after taking into consideration all other income, except income derived from property, and property (apart from the home and certain other exemptions) owned by the pensioner, and no service pension can be paid where the other income and/or property exceeds certain specified limits. From 7th October, 1954 the allowed income was £364 per annum for a single man and £728 per annum in the case of a member and wife. The amounts were raised to £390 and £780 operative from 20th October, 1955 in conformity with the member's rate increase. If a member has property (apart from the home and certain other exemptions) exceeding in value £1,750 (£3,500 for a member and wife), that alone precludes payment of a pension. Pension is assessed according to the amount of income; if the income is less than the amount shown above, service pension is assessed at such rate as will, with that other income, bring the total income (including service pension) of the pensioner up to the allowed income provided that the pension cannot exceed the maximum rate specified for the particular class of case. If assessable property is held, then a deduction is made from the pension assessed according to income only, the deductions being made at 9d. per fortnight for each complete £10 of property in excess of £200 (or £400 in the case of member and wife). Half the combined income received and property possessed by man and wife is deemed to be income received and property possessed by each for service pension purposes.

In 1936, female members of the Forces were made eligible for consideration for service pensions if they embarked for service abroad; previously they must have served in a theatre of war. In the same year, an institutional rate of service pension not exceeding 12s. per fortnight was made available. This pension rate, which benefits particularly inmates of mental hospitals, was £2 9s. per fortnight from 5th November, 1953, but was increased to £2 16s. per fortnight from 20th October, 1955.

Eligibility for service pensions may be established on any one of the following grounds:—

- (a) Sixty years of age or more, provided the member served in a theatre of war, but eligibility on this ground applies only to the member and not to his wife or children. In the case of a female member of the forces, the qualifying age is 55 years, and service abroad, not necessarily in a theatre of war, is sufficient.

- (b) Permanently unemployable, provided the member served in a theatre of war (or, in the case of a female member, served abroad). Under this class pensions may be paid to the member, his wife and children up to four in number.
- (c) Pulmonary tuberculosis, whether the member served in a theatre of war or not. Under this class also, pensions are payable to the wife and children up to four in number.

Only those members who qualify under Class (c) are entitled to receive both service and invalid pensions at the same time.

From 1st November, 1941, service pensions were extended to veterans of the South African War 1899–1902, and in 1943 to members of the Forces of the 1939–45 War, and now also apply to members who served in the Korea and Malaya operations.

2. Operations, 1955–56.—The following table gives a summary relating to service pensions during 1955–56:—

Claims granted during year—						
Members of the Forces	..	..	..	..	..	7,414
Wives	..	..	..	..	..	5,072
Children	..	..	..	..	..	1,748
Total	..	..	..	..	..	14,234
Claims rejected during year—						
Members of the Forces	..	..	..	..	..	1,362
Wives	..	..	..	..	..	824
Children	..	..	..	..	..	486
Total	..	..	..	..	..	2,672
Service pensions cancelled or discontinued during year	..	..	..	..	..	2,268
Deaths of pensioners during year	..	..	..	..	..	1,402
Pensions in force at 30th June, 1956	..	..	..	..	..	34,775
Annual pension liability on 30th June, 1956	..	..	..	..	..	£4,694,822

3. Number of Service Pensioners and Amount Paid.—(i) *Summary, Australia.* The following table shows the number of service pensions in force and the amount paid in pensions for the ten years 1946–47 to 1955–56.

SERVICE PENSIONS: SUMMARY, AUSTRALIA.

Year.	Number of Service Pensions in Force at 30th June—						Total.	Amount Paid in Pensions during year ended 30th June.
	Age.	Permanently Unemployable.			Suffering from Pulmonary Tuberculosis.			
	Members of Forces.	Members of Forces.	Dependants.	Members of Forces.	Dependants.			
1947	..	5,894	4,312	3,657	254	358	14,475	£ 904,120
1948	..	6,610	4,660	3,791	271	358	15,690	1,238,112
1949	..	7,070	4,613	3,699	271	365	16,018	1,328,955
1950	..	7,448	4,608	3,598	299	385	16,338	1,431,687
1951	..	7,456	4,492	3,911	279	374	16,512	1,507,258
1952	..	7,587	4,561	4,270	269	389	17,076	1,778,380
1953	..	8,703	4,971	4,780	291	432	19,177	2,225,044
1954	..	9,648	5,294	5,092	321	451	20,806	2,694,522
1955	..	10,566	5,555	5,286	379	530	22,316	3,011,861
1956	..	11,881	9,733	10,001	1,266	1,894	34,775	4,140,488

(ii) *Amount Paid and State where Paid.* The following table shows for the years 1951–52 to 1955–56 the amounts paid in pensions and the State where paid:—

SERVICE PENSIONS : AMOUNT PAID.

(£.)

State where Paid.	1951–52.	1952–53.	1953–54.	1954–55.	1955–56.
New South Wales(a)	609,432	764,803	977,815	1,050,593	1,472,949
Victoria	382,584	503,946	601,579	684,636	958,825
Queensland	325,546	396,090	467,038	528,571	679,181
South Australia(b)	174,303	215,626	259,438	287,624	401,159
Western Australia	224,558	278,115	302,617	361,294	482,021
Tasmania	61,957	66,464	86,035	99,143	146,353
Australia	1,778,380	2,225,044	2,694,522	3,011,861	4,140,488

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

§ 4. Medical Treatment of Returned Soldiers Suffering from War Service Disabilities.

At 30th June, 1956, there were 4,586 in-patients in Repatriation medical institutions and State mental hospitals, including a number whose care was undertaken by the Repatriation Commission on behalf of other countries or Commonwealth Departments. There were 377,641 out-patient attendances for treatment during the year, excluding approximately 964,000 treatments by the 3,805 local medical officers resident in metropolitan and country areas and New Guinea. The expenditure for the year ended 30th June, 1956 was £9,559,880.

§ 5. General Benefits and Miscellaneous.

1. *Other Departmental Activities.*—(i) *General.* During the 1939–45 War, the ordinary activities of the Department in the way of general benefits for the welfare of members and dependants were carried on without interruption. They were mainly education and training of children under the Soldiers' Children Education Scheme, medical benefits for widows and children of deceased members and for widowed mothers of deceased unmarried members, funeral expenses for certain classes of members and dependants, and allowances to certain classes of dependants in lieu of pension.

By legislation passed in June, 1940, these benefits were extended to members engaged in the 1939–45 War and in November, 1950, to those engaged in the Korea and Malaya Operations and new benefits designed for the re-establishment of members after discharge from the Forces were made available. The re-establishment benefits administered by the Repatriation Commission are:—payment of re-employment allowance while awaiting employment; provision of tools of trade and equipment where such are necessary to the member's employment; transportation expenses to meet the cost of fares and removal of household belongings, where a member, or member and family, takes up training, employment, or a business, or settles on the land; supplementation of wages of apprentices whose apprenticeships were interrupted by war service; re-establishment loans to enable members and widows to establish themselves in business, practices or other occupations,

including (until the Division of War Service Land Settlement began operations early in 1946) agricultural occupations; payment of re-establishment allowance during the early stages of establishment in business; gifts up to £75 for furniture to members who are blind or totally and permanently incapacitated, also to widows with children under 16 years of age; and free passages to Australia for wives, widows and children of members who married abroad (and passages outward from Australia in certain cases of members and dependants).

In 1949, the Commission took over the functions of the Re-establishment Division of the former Department of Post-war Reconstruction, and is responsible for the co-ordination of all matters relating to training under the Commonwealth Reconstruction Training Scheme. Re-establishment of the more seriously disabled, where ordinary training is not sufficient, continues to be a function of the Commission, and special means have to be found to overcome each problem.

(ii) *General Repatriation Benefits.* The following table gives a summary of expenditure during 1955–56 on the more important general repatriation benefits for all wars.

GENERAL REPATRIATION BENEFITS, 1955–56.

Benefit.	Expenditure, 1955–56.	
	£	£
<i>Medical Treatment of Members—</i>		
Maintenance of Institutions	5,516,934	
Dispensing of Prescriptions	925,855	
Fees to Consultants, etc.	793,239	
“ Diagnosis and Report ” Cases Investigated	431,980	
Maintenance of Patients in other than Repatriation Institutions	555,644	
Sustenance Allowance	600,245	
Other Treatment (Surgical Aids, Dental Treatment, etc.)	359,065	
		9,182,962
<i>Medical Treatment of Dependants</i>	..	376,918
<i>Employment and Vocational Training—</i>		
Re-employment Allowance	34	
Tools of Trade (gift)	3,132	
Tools of Trade (loan)	1,192	
Members in Training (a)	213,188	
Supplementation of Apprentices’ Wages	101	
Fares and Removal Expenses	4,064	
		221,711
<i>Business Loans</i>	..	145,149
<i>Furniture Grants—</i>		
Widows	238	
Members	66	
		304
<i>Soldiers’ Children Education Scheme</i>	..	348,282
<i>Living Allowances</i>	..	2,357,660
<i>Other Benefits</i>	..	206,615
Total .. .. .	..	12,839,601

(a) Expenditure by the Department of Labour and National Service and the Universities Commission.

The following table gives a summary of expenditure during the ten years 1946–47 to 1955–56 on the more important general repatriation benefits for all wars.

EXPENDITURE ON GENERAL REPATRIATION BENEFITS, SUMMARY
1946-47 TO 1955-56.

Year ended 30th June.	Medical Treatment.	Employment and Vocational Training.	Business Loans and Furniture.	Living Allowances.	Soldiers' Children Education Scheme.	Other Benefits.	Total.
1947 ..	2,829,807	12,089,063	2,031,099	12,584	130,872	258,938	17,352,363
1948 ..	4,215,895	14,607,238	1,589,975	71,341	152,952	169,967	20,807,368
1949 ..	4,718,517	11,212,507	1,107,330	110,823	160,400	187,447	17,497,024
1950 ..	5,232,826	7,152,451	803,646	105,803	192,734	201,218	13,688,678
1951 ..	6,644,382	4,095,684	596,420	283,228	184,226	210,159	12,014,099
1952 ..	7,849,876	1,778,679	283,087	1,399,057	208,789	193,001	11,712,489
1953 ..	8,444,886	967,473	270,755	1,863,490	287,283	225,261	12,059,148
1954 ..	8,906,189	505,944	227,679	2,128,052	340,496	223,781	12,332,141
1955 ..	8,969,116	313,242	178,060	2,334,047	368,876	229,591	12,392,932
1956 ..	9,559,880	221,711	145,453	2,357,660	348,282	206,615	12,839,601

2. *Expenditure by the Repatriation Commission, 1955-56.*—The total net expenditure by the Repatriation Commission for the year ended 30th June, 1956, was £64,099,557, distributed as follows:—

<i>Repatriation Benefits—</i>	£	£
War and Service Pensions	47,307,315	
Maintenance of Medical Institutions, Medical Treatment, etc.	12,388,527	
Soldiers' Children Education Scheme	348,282	
	<hr/>	60,044,124
<i>Administration</i>		3,157,799
<i>Capital Works and Services</i>		897,634
		<hr/>
		64,099,557

3. *Settlement of Returned Service Personnel on the Land.*—Reference to the settlement on the land of returned service personnel will be found in Chapter IV.—*Land Tenure and Settlement.*

4. *The Services Canteens Trust Fund.*—(i) *Introduction.* The Services Canteens Trust Fund was established under the Services Trust Funds Act 1947. This act transferred to the fund the profits and assets of the Army, Navy and Air Force canteens, the mess and regimental funds of disbanded wartime units, money derived from the sale of amenities supplied to the defence forces between the 3rd September, 1939, and the 30th June, 1947, and funds held by the A.M.F. Special Benefits Committee, the trustees of the R.A.N. Relief Fund and the trustees of the R.A.A.F. Welfare Fund.

(ii) *Establishment and Administration of the Fund.* The total amount transferred to the fund to the 31st December, 1956, was £5,505,775. The act prescribed that of this, £2,500,000, and such further amounts as the trustees of the fund may from time to time decide, should be devoted to the provision of education facilities for the children of eligible ex-servicemen and women, and that the balance of the fund should be used to provide relief for ex-servicemen and women and their dependants who are in necessitous circumstances.

The fund is administered by ten trustees, consisting of a chairman, a businessman selected by the government, and nominees of the Navy, Army, Air Force, Women's services, the Disabled Soldiers' Council, the Ex-naval Men's Association, the Air Force Association and the Returned Sailors', Soldiers' and Airmen's Imperial League of Australia. These

trustees all serve in an honorary capacity. They have power to determine the persons or groups of persons to benefit from the fund and the extent of benefits to be granted within the provisions of the act, and to appoint regional committees to assist with the administration.

Regional committees have been established in all Australian States, the Australian Capital Territory, the Northern Territory, New Zealand and London. All Australian diplomatic and consular posts also act as local representatives of the trustees. They have delegated to them by the trustees specific powers to deal with applications for assistance from the fund.

Members of regional committees are all persons who served in the 1939–45 War or are widows of men who served during the war, and, with the exception of regional chairmen and deputy chairmen, have been selected by the trustees from nominees of the major ex-service organizations. They also serve in an honorary capacity.

(iii) *Assistance from the Fund.* Persons eligible for assistance from the fund are those who between the 30th September, 1939 and the 30th June, 1947 served in the Australian Naval, Military or Air Forces (including members of the Canteens Staff of any ship of the Royal Australian Navy), persons duly accredited to any part of the Defence Force who served in an official capacity on full-time paid duty, and their dependants.

The trustees are charged under the Services Trust Funds Act with:—

- (a) providing educational assistance including professional and trade training—
 - (i) for the children of deceased or incapacitated eligible servicemen or of eligible servicemen who are in needy circumstances; and
 - (ii) for the children of other eligible servicemen which children are in the opinion of the trustees particularly deserving of assistance by reason of exceptional circumstances;
- (b) providing benefits for—
 - (i) eligible servicemen in necessitous or deserving circumstances;
 - (ii) the dependants of deceased or totally or partially incapacitated eligible servicemen or of eligible servicemen in necessitous or deserving circumstances;
 - (iii) the dependants of eligible servicemen other than those mentioned in paragraph (ii) above, which dependants are, in the opinion of the trustees, in necessitous circumstances or particularly deserving of assistance;
 - (iv) the provision of relief or benefit for eligible servicemen and their dependants in such other cases as the trustees think fit.

The trustees have introduced schemes for providing—

- (a) welfare relief for ex-service men and women who are eligible for benefits and their dependants;
- (b) benefits for children of eligible ex-service men and women who are suffering from serious and incapacitating afflictions; and
- (c) education benefits for the children of eligible ex-service men and women.

Because over 1,000,000 men and women and all their dependants are eligible for benefits, the assistance that can be provided in individual cases is limited and the trustees have prescribed a policy for welfare relief which makes assistance available only to those who are in genuine distress from which they cannot with their own efforts extricate themselves. In determining the nature or amount of relief to be granted, care is taken wherever possible to use the fund constructively with the object of assisting the applicant to achieve independence, and of discouraging any tendency towards increasing dependence on social welfare organizations. For example, the regular supplementation of pension or low income for an indefinite period is contrary to the policy of the trustees, as it is quite impossible for the fund to assume a general responsibility of that nature. Instead every effort is made to assist the applicant to adjust his mode of living or to increase his income himself so that he may live within it. Either the applicant, or his dependants, should be deserving of assistance. Though the fund is not used in such a way as to encourage improvidence, even the complete worthlessness of the eligible person will not debar deserving dependants.

The fund is to be available for 40 years from its inauguration in 1947 for welfare relief, and for 30 years for education.

Applications are carefully investigated to determine the bona fides of the applicant and the case presented, and to help regional committees in deciding the kind of assistance, if any, to be given. Where possible, investigations are made by trained social workers either on the staff of the fund or of recognized agencies.

The following amounts of welfare relief have been granted from the fund:—

	For the Year 1956.	Total to 31st December, 1956.
	£	£
To ex-service men and women	52,436	542,445
To widows and orphans	30,265	239,147
Total	82,701	781,592

A total of 20,498 ex-service men and women and 7,299 widows and orphans were granted welfare assistance from the Fund to the 31st December, 1956.

Of all persons eligible for assistance from the fund, widows and orphans are likely to be in greatest need, especially in the period immediately following the death of an ex-serviceman. Consequently a special effort is made to locate these widows and orphans and their degree of need is interpreted more leniently than is that of ex-servicemen.

Also particularly deserving of assistance are dependant children suffering from afflictions which permanently disable or seriously retard their progress or prevent the enjoyment of normal health and strength and present a prospect of complete or partial dependence on others for all or part of their lives. The trustees introduced a plan to ensure that any eligible child suffering from a serious affliction may be assisted as necessary and may have access to whatever treatment or facilities are available to help the child be as normal, self-reliant, self-supporting, socially acceptable, mobile, and happy as possible, despite his or her handicap. The extent to which assistance will be granted in a particular case depends largely on the nature of the child's affliction, the facilities available, the family circumstances, and the funds that can be made available.

Up to 31st December, 1956, 1,236 afflicted children had been assisted under the Afflicted Children's Scheme involving an expenditure of £53,849.

Educational assistance is restricted to children who are 14 years of age and over, except in the case of orphans, when assistance commences at the age of 12 years, or in the case of orphans eligible for education allowances from the Repatriation Department, where education assistance is granted from the age of 13. The object of the trustees is to assist eligible children to obtain the highest education within their capacity.

Educational assistance from the fund is in the form of education awards ranging from £5 to £200 a year depending on the cost of the course undertaken and the family circumstances.

These awards are granted for practically every type of course of education including secondary and tertiary education and business courses. They are designed to cover, or contribute towards, the cost of essential books, fees in cases where government school courses are not available, fares between the child's home and school, essential equipment and material, a uniform allowance in certain years and a maintenance allowance for the child whilst at school.

The education scheme also provides for post-graduate courses. Two post-graduate scholarships are awarded each year. One scholarship valued at £800 per annum for three years is provided for study overseas and one scholarship valued at £600 per annum for three years is available for post-graduate study in Australia.

Two post-graduate nursing awards are tenable in Australia each year. They cover fees, fares, books and a maintenance allowance at the rate of £6 per week for the duration of the course. In addition, post-graduate nursing awards are granted for post-graduate nursing training overseas in courses which are not available in Australia.

The number of children assisted under the education scheme to 31st December, 1956 was 19,996, and the expenditure on education awards, post-graduate scholarships and post-graduate nursing awards to 31st December, 1956 was £815,288.

CHAPTER XXX.

MISCELLANEOUS.

This chapter comprises miscellaneous statistics and other descriptive information not directly related to the subjects of the preceding chapters, arranged in sections as follows:—

1. Valuation of Australian Production; 2. Indexes of Production; 3. Consumption of Foodstuffs and Beverages; 4. Patents, Trade Marks and Designs; 5. Copyright; 6. Australian Shipbuilding Board; 7. Commonwealth Scientific and Industrial Research Organization; 8. Mount Stromlo Observatory; 9. Standards Association of Australia; 10. Film Censorship Board; 11. Australian National Film Board and the Film Division; 12. National Safety Council of Australia; 13. Australian Road Safety Council; 14. Australian Atomic Energy Commission; 15. The United Nations; 16. Australian Representation Abroad: Oversea Representation in Australia; 17. Retail Trade.

§ 1. Valuation of Australian Production.

1. **General.**—The value of production for Australia is computed in accordance with the decisions reached at the Conferences of Australian Statisticians and principally at the Conference held in 1935. The figures published below have been compiled by the State Statisticians from the best data available, and relate to 1954–55 and 1955–56. The adoption of substantially uniform methods of valuing production and of estimating elements of costs of production and marketing renders the results comparable as between States.

Attention is directed to the fact that the values shown in the tables herein refer only to production of primary industries and factories and exclude the building and construction industry, those industrial establishments not classified as factories, and certain agricultural and farmyard produce obtained from areas of less than one acre.

The following is a brief explanation of the terms used:—

- (a) *Gross Value of Production* is the value placed on recorded production at the wholesale price realized in the principal markets. In cases where primary products are consumed at the place of production or where they become raw material for a secondary industry, these points of consumption are presumed to be the principal markets.
- (b) *Local Value* (i.e., the gross production valued at the place of production) is ascertained by deducting marketing costs from the gross value. Marketing costs include freight, costs of containers, commission and other charges incidental thereto.
- (c) *Net Value of Production* represents local value less value of materials used in the process of production. Materials used in the process of production include seed, power, power kerosene, petrol and other oils, fodder consumed by farm stock, manures, dips, sprays and other costs. No deductions have been made for depreciation or certain maintenance costs as particulars are not available for all States. The *Net Value of Production* is the only satisfactory measure to use when comparing or combining the value of primary industries with those of other industries.

Power costs (power, power kerosene, petrol and other oils) have not been deducted in New South Wales since 1940–41 when they amounted to £1,892,000 and in Tasmania since 1941–42, when they amounted to £86,510. Consequently net values of production for later years in these two States are overstated. Costs of materials used in the process of production are not available for all States in respect of Bee-farming, Trapping, Forestry and Fisheries, and local values have been used for these industries with consequent overstatement in net values.

2. Value of Production, Australia, 1954-55 and 1955-56.—The following table shows particulars of the gross, local and net values of production in Australia by industries during the years 1954-55 and 1955-56:—

GROSS, LOCAL AND NET VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES : AUSTRALIA, 1954-55 AND 1955-56.
(£'000.)

Industry.	1954-55.			1955-56.		
	Gross Production Valued at Principal Markets.	Local Value—Gross Production Valued at Place of Production.	Net Value of Production (without deduction of depreciation or maintenance).	Gross Production Valued at Principal Markets.	Local Value—Gross Production Valued at Place of Production.	Net Value of Production (without deduction of depreciation or maintenance).
Agriculture	339,635	287,603	243,919	386,313	322,171	279,157
Pastoral	529,368	492,422	461,464	519,425	480,193	448,566
Dairying	181,929	170,681	135,798	196,975	185,165	152,383
Poultry	51,485	46,008	29,787	54,067	48,883	31,677
Bee-farming	1,598	1,398	(a) 1,398	1,992	1,751	(a) 1,751
<i>Total, Rural</i>	<i>1,104,015</i>	<i>998,112</i>	<i>872,366</i>	<i>1,158,772</i>	<i>1,038,163</i>	<i>913,534</i>
Trapping	5,613	4,961	(a) 4,961	6,271	5,550	(a) 5,550
Forestry	47,016	44,047	(a) 44,047	50,402	47,387	(a) 47,387
Fishing and Whaling ..	9,745	8,727	(a) 8,727	9,817	8,900	(a) 8,900
Mines and Quarries ..	(a) 149,376	149,376	118,060	(a) 174,186	174,186	141,877
<i>Total, Non-rural</i>	<i>211,750</i>	<i>207,111</i>	<i>175,795</i>	<i>240,676</i>	<i>236,023</i>	<i>203,714</i>
<i>Total, All Primary</i>	<i>1,315,765</i>	<i>1,205,223</i>	<i>1,048,161</i>	<i>1,399,448</i>	<i>1,274,186</i>	<i>1,117,248</i>
Factories	b 1,365,509	b 1,365,509	1,365,509	b 1,494,790	b 1,494,790	1,494,790
Total, All Industries	2,681,274	2,570,732	2,413,670	2,894,238	2,768,976	2,612,038

(a) Local value.

(b) Net value.

3. Net Value of Production, States, 1955-56.—The following tables show the total net value of production, and the net value per head of population, for each industry and State during the year 1955-56:—

NET(a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES, 1955-56.
(£'000.)

Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
Agriculture	62,303	67,951	57,047	40,540	35,969	15,169	29	149	279,157
Pastoral	163,287	107,607	85,312	44,625	36,615	7,282	3,028	810	448,566
Dairying	49,478	52,705	26,093	13,405	3,867	6,647	20	168	152,383
Poultry	12,760	14,100	1,119	1,800	816	934	45	103	31,677
Bee-farming(b)	771	410	103	246	202	18	..	1	1,751
<i>Total, Rural</i>	<i>288,599</i>	<i>242,773</i>	<i>169,674</i>	<i>100,616</i>	<i>77,469</i>	<i>30,050</i>	<i>3,122</i>	<i>1,231</i>	<i>913,534</i>
Trapping(b)	1,822	2,700	152	485	156	215	20	..	5,550
Forestry(b)	15,343	10,200	8,140	4,596	4,348	4,591	40	129	47,387
Fishing and Whalingb	2,684	750	1,471	995	2,406	505	89	..	8,900
Mines and Quarries	69,262	8,200	21,731	18,509	14,123	8,612	1,377	63	141,877
<i>Total, Non-rural</i>	<i>89,111</i>	<i>21,850</i>	<i>31,494</i>	<i>24,585</i>	<i>21,033</i>	<i>13,923</i>	<i>1,526</i>	<i>192</i>	<i>203,714</i>
<i>Total, All Primary</i>	<i>377,710</i>	<i>264,623</i>	<i>201,168</i>	<i>125,201</i>	<i>98,502</i>	<i>43,973</i>	<i>4,648</i>	<i>1,423</i>	<i>1,117,248</i>
Factories	641,796	491,948	124,867	120,936	69,312	45,931	..	..	1,494,790
Total, All Industries	1,019,506	756,571	326,035	246,137	167,814	89,904	4,648	1,423	2,612,038

(a) See letterpress on p. 1047.

(b) Local value.

**NET(a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND FACTORIES
PER HEAD OF POPULATION, 1955-56.**
(£ s. d.)

Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia. (b)
Agriculture ..	18 1 7	25 19 2	40 18 7	49 7 10	55 16 6	47 10 6	30 0 3
Pastoral ..	46 6 7	41 19 1	62 6 11	53 9 6	54 13 6	22 16 3	48 0 10
Dairying ..	14 0 9	20 11 0	20 5 6	15 18 1	5 15 7	21 1 0	16 9 10
Poultry ..	3 12 5	5 9 11	0 16 4	2 3 2	1 4 5	2 18 6	3 8 0
Bee-farming(c) ..	0 4 5	0 3 2	0 1 6	0 5 11	0 6 0	0 1 2	0 3 9
<i>Total, Rural</i> ..	<i>82 5 9</i>	<i>94 2 4</i>	<i>124 8 10</i>	<i>121 4 6</i>	<i>117 16 0</i>	<i>94 7 5</i>	<i>98 2 8</i>
Trapping(c) ..	0 10 4	1 1 1	0 2 3	0 11 8	0 4 8	0 13 6	0 11 11
Forestry(c) ..	4 7 1	3 19 6	6 0 7	5 10 2	6 10 0	14 7 8	5 1 9
Fishing and Whaling(c)	0 15 3	0 5 10	1 1 9	1 3 10	3 11 11	1 11 8	0 19 1
Mines and Quarries ..	19 13 0	3 4 0	16 1 4	22 3 7	21 2 4	26 19 7	15 4 8
<i>Total, Non-rural.</i> ..	<i>25 5 8</i>	<i>8 10 5</i>	<i>23 5 11</i>	<i>29 9 3</i>	<i>31 8 11</i>	<i>43 12 5</i>	<i>21 17 5</i>
<i>Total, All Primary Factories.</i> ..	<i>107 11 5</i>	<i>102 12 9</i>	<i>147 14 9</i>	<i>150 13 9</i>	<i>149 4 11</i>	<i>137 19 10</i>	<i>120 0 1</i>
<i>Total, All Industries</i>	<i>289 13 5</i>	<i>294 8 10</i>	<i>240 1 0</i>	<i>295 12 3</i>	<i>252 16 11</i>	<i>281 17 9</i>	<i>280 9 3</i>

(a) See letterpress on p. 1047.
Territory.

(b) Includes the Northern Territory and the Australian Capital Territory.

(c) Local value.

4. Net Value of Production, Australia, 1950-51 to 1955-56.—The following table shows the net value of production for Australia during the years 1950-51 to 1955-56.

**NET(a) VALUE OF PRODUCTION OF PRIMARY INDUSTRIES AND
FACTORIES : AUSTRALIA.**
(£'000.)

Industry.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Agriculture ..	208,130	246,685	276,398	268,460	243,919	279,157
Pastoral ..	704,809	400,493	493,745	491,716	461,464	448,566
Dairying ..	89,352	103,776	135,745	136,956	135,798	152,383
Poultry ..	24,614	31,554	35,213	34,782	29,787	31,674
Bee-farming(b) ..	831	774	1,066	1,426	1,398	1,751
<i>Total, Rural</i> ..	<i>1,027,736</i>	<i>783,282</i>	<i>942,167</i>	<i>933,340</i>	<i>872,366</i>	<i>913,534</i>
Trapping(b) ..	6,629	6,713	5,595	5,074	4,961	5,550
Forestry(b) ..	28,428	37,905	41,864	41,720	44,047	47,387
Fishing and Whaling(b)	4,869	5,729	6,897	7,741	8,727	8,900
Mines and Quarries ..	71,150	97,199	109,671	104,875	118,060	141,877
<i>Total, Non-rural.</i> ..	<i>111,076</i>	<i>147,546</i>	<i>164,027</i>	<i>150,410</i>	<i>175,795</i>	<i>203,714</i>
<i>Total, All Primary Factories</i> ..	<i>1,138,812</i>	<i>930,828</i>	<i>1,106,194</i>	<i>1,092,750</i>	<i>1,048,161</i>	<i>1,117,248</i>
<i>Total, All Industries</i>	<i>1,843,872</i>	<i>1,024,867</i>	<i>1,082,862</i>	<i>1,227,045</i>	<i>1,365,509</i>	<i>1,494,790</i>
<i>Total, All Industries</i>	<i>1,982,684</i>	<i>1,955,695</i>	<i>2,189,056</i>	<i>2,319,795</i>	<i>2,413,670</i>	<i>2,612,038</i>

(a) See letterpress on p. 1047.

(b) Local value.

In the chapters dealing with the respective industries (except trapping and mines and quarries) tables will be found showing the total and per head values of production for the industry by States for a series of years up to 1955-56.

§ 2. Indexes of Production.

In the first two tables below, indexes of price and quantum (i.e. value at constant prices) of production are given for the following industrial groups, namely:—Agriculture, Pastoral, Farmyard and Dairying, and All Farming combined (including separate indexes for Wool and Products other than Wool). In the third table, indexes of quantum (i.e. value at constant prices) of production, exports and consumption of farm products for food use are shown. Indexes previously published in respect of Gold and Other Minerals, and All Mining combined, are under review and pending completion of investigations the publication of these results has been temporarily discontinued.

1. **Farm Production Price Indexes.**—The Farm Production Price Indexes shown in the following table relate to average "prices" of agriculture, pastoral, farmyard and dairying products realized in the principal markets of Australia. The "price" data used are average unit values for the total quantities of the relevant commodities produced or marketed in each year and the index numbers therefore measure both the effects of changes in prices (as such) and of variations in the quality, type, usage, etc. of products marketed. The index numbers for any year relate to the average values of products produced or marketed in that year, irrespective of the periods in which payment is received by producers.

The indexes have been calculated by the fixed-base weighted aggregative method. "Prices" for each commodity in any year are obtained by dividing gross value of production by the quantity produced in that year. In the original published series of Production Price Index Numbers, the average quantities of the relevant commodities produced in the period 1923-24 to 1927-28 were used as fixed weights. This series has been retained for years up to 1935-36, but re-computed to the base, average 1936-37 to 1938-39 = 100. For 1936-37 and later years, the original series was replaced in December, 1952, by a revised series in which average quantities of each product marketed during the period 1946-47 to 1950-51 are used as fixed weights. In the revised series, the regimen was extended and modified to include farm products (as defined by Australian Statisticians) in all cases. Certain other refinements were also incorporated in the revised indexes, the principal of which was the omission from the weights used for the All Farming Index of quantities of crops marketed for livestock feeding in Australia.

FARM PRODUCTION: INDEXES OF PRICES AT PRINCIPAL MARKETS,
AUSTRALIA.

(Base: Average 1936-37 to 1938-39 = 100.)

Year.	Agri- culture.	Pastoral.	Farm- yard and Dairying.	All Farming.	Wool (Shorn and Dead).	Products other than Wool.
1911-12	92	66	70	76	..	..
1912-13	86	77	78	81	..	..
1913-14	85	76	74	79	..	..
1914-15	143	85	80	105	..	..
1915-16	100	113	98	106	..	..
1916-17	96	127	103	112	..	..
1917-18	112	139	101	123	..	..
1918-19	133	139	111	132	..	..
1919-20	197	146	134	161	..	..
1920-21	170	137	170	155	..	..
1921-22	130	96	118	112	..	..
1922-23	136	127	125	130	..	..
1923-24	119	161	120	139	..	..
1924-25	139	159	105	142	(a) 206	..
1925-26	145	130	120	133	126	..
1926-27	129	125	120	125	129	..
1927-28	129	146	120	136	148	..
1928-29	117	129	122	123	125	..
1929-30	110	104	116	108	78	..
1930-31	76	82	93	82	65	..
1931-32	84	71	83	78	64	..
1932-33	79	69	74	74	66	..
1933-34	79	103	73	89	120	..
1934-35	88	77	79	81	74	..
1935-36(b)	94	99	87	95	107	..
1936-37	114	115	93	109	126	(a) 104
1937-38	98	98	102	99	95	100
1938-39	88	87	105	92	79	96
1939-40	100	105	105	104	102	105
1940-41	106	107	105	107	102	108
1941-42	111	108	107	110	102	113
1942-43	131	123	130	128	118	132
1943-44	149	128	147	139	118	146
1944-45	151	128	152	142	118	150
1945-46	174	133	159	157	118	169
1946-47	194	182	157	185	187	185
1947-48	267	263	183	247	301	230
1948-49	234	313	197	260	366	225
1949-50	272	396	228	316	483	261
1950-51	291	818	258	505	1,098	308
1951-52	355	501	332	410	552	363
1952-53	364	531	387	440	623	379
1953-54	324	534	395	429	621	365
1954-55(c)	316	489	371	401	540	355
1955-56(d)	322	442	385	388	468	362

(a) Not available for previous years.
(d) Subject to revision.

(b) See letterpress preceding table.

(c) Revised.

2. Indexes of Quantum (i.e. Value at Constant Prices) of Farm Production.—The indexes shown in the following table relate to gross output of farm products valued at constant prices. They have been calculated by revaluing quantities of each farm product included in the indexes at the average unit gross value of each product for the base years.

In the original published series, the period 1923–24 to 1927–28 was adopted as the base for revaluing each farm product. This series has been retained for years up to 1935–36, but the index numbers have been re-computed to the base, average 1936–37 to 1938–39 = 100. For 1936–37 and later years, the original series was replaced in December, 1952 by a revised series in which average unit values for the period 1936–37 to 1938–39 are used. The regimen used for the revised series was extended and modified to include farm products (as defined by Australian Statisticians) in all cases. Certain other refinements were incorporated in the revised indexes, the principal of which was the omission, in calculating the Ail Farming Index, of quantities of crops fed to livestock in Australia.

INDEXES OF QUANTUM(a) OF FARM PRODUCTION, AUSTRALIA.

(Base: Average 1936–37 to 1938–39 = 100.)

Year.	Agri- culture.	Pastoral.	Farm- yard and Dairying.	All Farming.	Wool (Shorn and Dead).	Products other than Wool.
1911–12	51	76	52	63	71	..
1912–13	64	70	50	64	62	..
1913–14	67	79	52	70	68	..
1914–15	30	77	50	57	62	..
1915–16	99	63	40	71	53	..
1916–17	80	61	49	65	54	..
1917–18	67	61	57	62	58	..
1918–19	53	69	56	61	73	..
1919–20	44	77	52	61	73	..
1920–21	87	62	57	69	62	..
1921–22	78	72	67	73	71	..
1922–23	74	76	61	73	71	..
1923–24	80	68	62	71	67	..
1924–25	95	80	76	84	81	..
1925–26	73	84	71	78	86	..
1926–27	90	89	68	86	95	..
1927–28	75	86	73	80	90	..
1928–29	91	92	75	89	99	..
1929–30	79	87	75	82	95	..
1930–31	111	84	82	93	92	..
1931–32	100	92	89	94	102	..
1932–33	110	99	94	102	106	..
1933–34	102	95	100	98	98	..
1934–35	88	98	104	96	102	..
1935–36(b)	91	95	99	94	98	..
1936–37	97	98	97	97	99	(c) 96
1937–38	107	103	101	104	103	105
1938–39	96	99	102	99	98	99
1939–40	120	107	108	107	115	105
1940–41	74	109	107	97	115	91
1941–42	104	112	104	104	118	99
1942–43	97	114	103	102	116	98
1943–44	86	115	100	100	119	94
1944–45	68	101	99	88	101	84
1945–46	100	86	103	92	92	92
1946–47	84	92	103	91	95	90
1947–48	122	98	107	109	101	111
1948–49	108	105	111	109	108	109
1949–50	117	112	111	115	115	115
1950–51	108	109	106	109	116	107
1951–52	103	105	97	103	112	100
1952–53	121	126	108	121	131	118
1953–54	129	123	107	122	128	120
1954–55(d)	120	127	117	123	132	120
1955–56(e)	134	136	120	131	146	127

(a) Indexes of value at constant prices, i.e., quantities revalued at average unit values for the base years (see text preceding table). (b) See letterpress preceding table. (c) Not available for previous years. (d) Revised. (e) Subject to revision.

3. **Farm Products for Food Use; Indexes of Quantum (i.e. Value at Constant Prices) of Production, Exports and Consumption.** The indexes shown in the following table have been calculated by revaluing quantities of each farm product included in the indexes at the average unit gross value of each product for the years 1936-37 to 1938-39. The items included comprise products in the form in which they are sold from farms in all cases except live-stock sold for slaughter for meat, which are included in terms of dressed carcass weight of meat. Quantity data relating to exports include exports of processed food in terms of farm product equivalent. The indexes of production relate basically to gross output of farm products for food use, including crops exported for stock-feeding overseas. Particulars are not available prior to 1946-47 except for the base years.

FARM PRODUCTS FOR FOOD USE: INDEXES OF QUANTUM^(a) OF PRODUCTION, EXPORTS AND CONSUMPTION.

(Base: Average 1936-37 to 1938-39 = 100.)

Year.	Production.		Exports.		Consumption in Australia.	
	Total.	Per Head of Total Population.	Total.	Per Head of Total Population.	Total.	Per Head of Total Population.
1946-47.. ..	90	82	73	66	107	98
1947-48.. ..	113	102	113	102	110	99
1948-49.. ..	110	97	112	99	111	98
1949-50.. ..	116	99	116	99	114	98
1950-51.. ..	109	90	104	86	120	99
1951-52.. ..	100	81	70	57	119	96
1952-53.. ..	118	93	113	89	119	94
1953-54.. ..	122	94	102	79	124	96
1954-55.. ..	121	91	117	89	127	96
1955-56 ^(b) ..	128	95	131	96	130	96
1956-57 ^(c) ..	119	86	120	86	131	95

(a) Indexes of value at constant prices, i.e., quantities revalued at average unit values for the base years (1936-37 to 1938-39). (b) Subject to revision. (c) Estimated.

§ 3. Consumption of Foodstuffs and Beverages.

1. **Quantities Consumed.**—Previous issues of the Official Year Book up to No. 36 included a statistical survey of the movement in the consumption in Australia, in total and per head of population, of a selected number of commodities over a period of years up to 1940-41 (see Official Year Book No. 36, pp. 1098-1100). In issue No. 37, these long-term comparisons were replaced by more detailed information covering consumption of the principal foodstuffs and beverages in annual periods since 1944 in comparison with average annual consumption during the three years ended 1938-39. In this issue, the annual periods extend from 1951-52 to 1955-56.

The estimates of total consumption and consumption per head of population in Australia in the two tables following have been compiled by deducting net exports from production and allowing for recorded movements in stocks of the respective commodities. While the estimates may generally be accepted as reasonably accurate, there are some deficiencies to which attention should be directed. These relate chiefly to the quantities of poultry, game and fish (fresh and shell) and the quantities of visible oils and other fats entering consumption. In addition, little information is available on the quantities of vegetables, fruit, eggs, etc., which householders produce for their own requirements and the extent of wastage occurring in the marketing of foodstuffs. In all these cases, careful estimates have been compiled from the best available data, and the quantities shown as entering consumption in Australia have been adjusted to allow for these circumstances. The absence of particulars of stocks for certain commodities has resulted in some inaccuracies in the estimates of annual consumption. Consumption of foodstuffs is measured in general "at producer" level. As a result no allowance is made for wastage before the foodstuffs are consumed. In recent years, wastage of foodstuffs has possibly been less than hitherto because of more efficient distribution and storage methods. In addition, it is likely that the

quantities of foodstuffs shown in the following pages as available for consumption have been supplemented by increased "back-yard" production. Neither of these factors has been taken into account, and it is possible that, as a result, some understatement has occurred in the following consumption estimates. Except in a few special cases no adjustment has been made for changes in stocks held by wholesalers and retailers. Where no allowance is made it is considered unlikely that these stocks would make any appreciable difference to consumption estimates. Allowance has not been made for the purchase of foodstuffs for despatch overseas as gifts in bulk and by parcel post. These deficiencies, however, do not seriously impair the accuracy of the estimates compiled.

The estimates of consumption per head of population shown in the second table following have been checked, wherever possible, with data from other sources (principally from the Food Consumption Survey conducted in 1944 by the Nutrition Committee of the National Health and Medical Research Council) which confirm the reliability of the methods used.

More detailed information on the consumption of foodstuffs and beverages is contained in the Statistical Bulletin: *Food Production and the Consumption of Foodstuffs and Nutrients in Australia*, issued by this Bureau.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY : AUSTRALIA.

Commodity.	Unit of Quantity.	Average 1936-37 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56. (a)
Milk and Milk Products—							
Fluid Whole Milk	Mil. gals.	161	240	243	253	258	263
Fresh Cream	'000 tons	19.7	7.6	7.8	8.0	8.1	8.2
Condensed Milk (Sweetened and Unsweetened)	"	9.9	21.4	13.1	15.7	16.7	18.8
Concentrated Whole Milk	"	3.4	16.8	14.5	19.5	10.1	14.8
Powdered Milk—							
Full Cream	"	8.1	10.8	9.7	10.4	10.6	10.0
Skim .. ..	"							2.9	2.4	3.9	5.7	8.2
Infants' and Invalids' Foods (including Malted Milk)	"	3.0	6.6	5.7	7.6	5.6	8.0
Cheese	"	13.4	22.8	23.0	26.2	23.8	22.9
<i>Total (in terms of Milk Solids)</i>	"	120.5	179.8	177.0	189.5	188.8	196.3
Meat—							
Beef (bone-in-weight)	"	442.0	452.8	466.7	455.2	472.0	482.1
Mutton (bone-in-weight)	"	183.4	155.6	193.0	204.4	211.9	201.3
Lamb (bone-in-weight)	"	46.1	91.6	112.4	106.8	105.6	107.8
Pork (bone-in weight)	"	31.8	27.6	22.7	30.5	41.4	40.1
Offal	"	25.7	34.7	40.4	41.9	43.5	41.8
Canned Meat (canned weight)	"	(b)	9.5	7.8	7.9	9.9	10.4
Bacon and Ham (cured weight)	"	31.4	27.5	28.3	28.5	32.2	31.0
<i>Total (in terms of carcass weight)</i>	"	776.1	817.9	888.3	887.8	928.4	949.5
Poultry, Game and Fish—							
Poultry and Rabbits (carcass weight)	"	29.8	57.7	59.1	60.2	61.4	63.0
Fish(c)—							
Fresh	"	19.7	21.0	20.2	22.5	22.2	21.2
Cured (including Smoked and Salted)	"	(d)	3.5	3.3	3.2	4.0	4.3
Crustaceans and Molluscs	"	2.1	2.5	2.6	3.3	4.6	3.9
Canned—Australian origin	"	12.4	2.7	2.7	3.1	2.5	2.5
Imported .. ..	"							10.0	2.5	6.8	8.8	10.3
<i>Total(c)</i>	"	51.5	73.0	65.4	73.7	77.5	78.6
Eggs and Egg Products—							
Shell Eggs	"	78.7	82.4	80.4	82.8	85.9	87.0
Liquid Whole Egg(e)	"	2.9	8.2	6.4	5.4	6.5	5.8
Egg Powder(e)	"	..	0.3	0.2	0.2	0.1	0.2
<i>Total (Shell Egg equivalent)</i>	Mil. Doz.	81.6	90.9	87.0	88.4	92.5	93.0
		139.3	155.1	148.5	150.9	157.9	158.7
Fats and Oils—							
Butter	'000 tons	101.0	118.9	114.5	121.6	122.5	121.7
Margarine—							
Table	"	2.8	4.7	6.2	8.5	9.1	12.3
Other	"	12.2	24.9	21.8	22.3	22.0	19.2
Lard	"	5.2	3.9	3.9	3.9	5.1	4.8
Vegetable Oils and Other Fats	"	14.4	15.2	15.6	15.9	16.2	16.6
<i>Total (Fat Content)</i>	"	115.5	142.4	137.8	146.3	148.8	148.6

See next page for notes.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY: AUSTRALIA—*continued.*

Commodity.	Unit of Quantity.	Average 1936-37 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56. (a)
Sugar and Syrups—							
Refined Sugar—							
As Sugar	'000 tons	216.5	244.4	250.9	258.4	257.0	261.5
In manufactured products ..	"	110.1	203.2	174.2	187.9	205.9	219.4
Honey, Glucose and Syrups ..	"	21.9	21.4	21.7	25.1	22.3	21.1
<i>Total (Sugar Content) ..</i>	"	<i>343.9</i>	<i>464.5</i>	<i>442.4</i>	<i>466.4</i>	<i>480.6</i>	<i>497.6</i>
Potatoes—							
White	"	318.5	412.9	376.1	485.4	417.1	373.4
Sweet	"	7.4	5.3	5.5	5.6	5.7	5.8
<i>Total</i>	"	<i>325.9</i>	<i>418.2</i>	<i>381.6</i>	<i>491.0</i>	<i>422.8</i>	<i>379.2</i>
Pulse and Nuts—							
Dried Pulse	"	4.5	12.4	8.9	14.9	11.5	10.3
Peanuts (weight without shell) ..	"	2.8	5.5	5.3	7.5	10.8	8.2
Edible Tree Nuts (weight without shell) ..	"	2.6	5.1	5.6	6.8	7.7	6.6
Cocoa (Raw Beans)	"	6.3	11.2	9.6	11.3	9.8	9.3
<i>Total</i>	"	<i>16.2</i>	<i>34.2</i>	<i>29.4</i>	<i>40.5</i>	<i>39.8</i>	<i>34.4</i>
Tomatoes and Fruit—							
Tomatoes(f)	"	(g) 48.0	82.7	84.1	73.0	100.3	104.1
Citrus Fruit(f)	"	97.8	117.5	113.7	150.7	143.6	167.9
Other Fresh Fruit	"	288.2	286.8	253.5	316.3	306.7	376.3
Jams	"	35.1	37.8	33.7	36.1	37.5	39.5
Dried Fruit	"	24.8	30.6	28.0	29.3	32.0	32.5
Canned Fruit	"	31.9	54.6	47.9	48.3	56.3	55.9
<i>Total (Fresh Fruit equivalent)</i>	"	<i>580.3</i>	<i>687.0</i>	<i>630.6</i>	<i>730.5</i>	<i>762.4</i>	<i>827.2</i>
Vegetables—							
Leafy, Green and Yellow Vegetables ..	"	(h)	175.4	173.0	166.5	162.3	168.4
Other Fresh Vegetables	"	(h)	273.5	249.5	245.9	237.4	235.3
Canned Vegetables	"	(h)	20.3	13.1	18.2	20.1	21.3
<i>Total</i>	"	(h)	<i>469.2</i>	<i>435.6</i>	<i>430.6</i>	<i>419.8</i>	<i>425.0</i>
Grain Products—							
Flour—							
White	"	} 574.0	719.2	720.4	721.2	721.8	727.9
Sharps	"		2.8	1.5	2.1	1.6	1.9
Wheatmeal for baking	"		32.5	31.4	31.4	29.4	28.1
Breakfast Foods(i)	"		46.2	51.3	51.7	53.1	51.4
Rice (Milled)	"		12.2	17.9	14.7	14.2	15.4
Tapioca, Sago, etc.	"		3.7	2.3	1.9	1.6	1.6
Pearl Barley	"		3.0	2.4	2.1	2.2	2.1
Barley Meal and Polished	"						
Wheat (Rice substitute)	"		0.8	0.8	0.8	0.8	0.5
Edible Starch (Cornflour)	"		4.3	3.5	3.9	3.4	4.0
<i>Total</i>	"	<i>629.7</i>	<i>827.8</i>	<i>827.7</i>	<i>829.5</i>	<i>827.9</i>	<i>832.9</i>
Beverages—							
Tea	"	21.1	24.8	25.3	27.0	24.3	24.5
Coffee	"	2.0	3.2	2.6	4.3	4.5	5.5
Beer	Mil. gals.	80.1	181.0	190.7	205.2	220.5	225.1
Wine	"	4.2	15.3	11.9	12.4	10.1	10.9

(a) Subject to revision. (b) Included with fresh meat at its carcass weight. (c) Edible weight. (d) Included with fresh. (e) In terms of weight of shell eggs. (f) Includes fresh equivalent of manufactured products. (g) Probably understated owing to lack of complete data. (h) Not available. (i) Excludes invalid and health foods, semolina and wheat germ prior to 1951-52.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE FOR CONSUMPTION ANNUALLY PER HEAD OF POPULATION : AUSTRALIA.

Commodity.	Unit of Quantity.	Average 1936-37 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56. (a)
Milk and Milk Products—							
Fluid Whole Milk	Gallon	23.4	28.1	27.8	28.4	28.4	28.3
Fresh Cream	lb.	6.4	2.0	2.0	2.0	2.0	2.0
Condensed Milk (Sweetened and Unsweetened)	"	3.2	5.6	3.4	3.9	4.1	4.5
Concentrated Whole Milk	"	1.1	4.4	3.7	4.9	2.5	3.6
Powdered Milk—							
Full Cream	"	2.6	2.8	2.5	2.6	2.4	2.4
Skim .. ..	"							0.8	0.6	1.0	1.4	2.0
Infants' and Invalids' Foods (including Malted Milk)	"	1.0	1.7	1.4	1.9	1.4	1.9
Cheese	"	4.4	6.0	5.9	6.6	5.9	5.5
<i>Total (in terms of Milk Solids)</i>	"	39.3	47.2	45.3	47.8	46.6	47.4
Meat—							
Beef (bone-in-weight)	"	144.1	118.9	119.7	114.6	116.3	116.0
Mutton (bone-in-weight)	"	59.8	40.9	49.5	51.4	52.2	48.4
Lamb (bone-in-weight)	"	15.0	24.0	28.8	26.9	26.0	25.9
Pork (bone-in-weight)	"	10.4	7.3	5.8	7.7	10.2	9.6
Offal	"	8.4	9.1	10.3	10.6	10.7	10.1
Canned Meat (canned weight)	"	(b)	2.5	2.0	2.0	2.4	2.5
Bacon and Ham (cured weight)	"	10.2	7.2	7.3	7.2	7.9	7.5
<i>Total (in terms of carcass weight)</i>	"	253.0	214.8	227.7	223.5	228.7	228.4
Poultry, Game and Fish—							
Poultry and Rabbits (carcass weight)	"	9.7	15.1	15.1	15.1	15.1	15.1
Fish(c)—							
Fresh	"	6.4	5.5	5.2	5.7	5.5	5.1
Cured (including Smoked and Salted)	"	(d)	0.9	0.9	0.8	1.0	1.0
Crustaceans and Molluscs	"	0.7	0.7	0.7	0.8	1.1	1.0
Canned—							
Australian origin	"	4.1	0.7	0.7	0.8	0.6	0.6
Imported .. ..	"							2.6	0.6	1.7	2.2	2.5
<i>Total(c)</i>	"	16.8	19.1	16.8	18.6	19.2	19.1
Eggs and Egg Products—							
Shell Eggs	"	25.7	21.6	20.6	20.8	21.2	20.9
Liquid Whole Egg(e)	"	0.9	2.2	1.6	1.4	1.6	1.4
Egg Powder(e)	"	..	0.1	0.1	0.1	0.0	0.1
<i>Total (Shell Egg equivalent)</i>	{ No.	26.6 243	23.9 219	22.3 204	22.3 204	22.8 209	22.4 205
Fats and Oils—							
Butter	lb.	32.9	31.2	29.4	30.6	30.2	29.3
Margarine—							
Table	"	0.9	1.2	1.6	2.1	2.3	3.0
Other	"	4.0	6.5	5.6	5.6	5.4	4.6
Lard	"	1.7	1.0	1.0	1.0	1.3	1.2
Vegetable Oils and other Fats	"	4.7	4.0	4.0	4.0	4.0	4.0
<i>Total (Fat Content)</i>	"	37.6	37.3	35.4	36.8	36.8	35.8
Sugar and Syrups—							
Refined Sugar—							
As Sugar	"	70.6	64.2	64.3	65.0	63.3	62.9
In manufactured products	"	35.9	53.4	44.7	47.3	50.7	52.8
Honey, Glucose and Syrups	"	7.1	5.6	5.6	6.3	5.5	5.1
<i>Total (Sugar Content)</i>	"	112.0	122.0	113.5	117.3	118.4	119.7

See next page for notes.

ESTIMATED QUANTITY OF FOODSTUFFS AND BEVERAGES AVAILABLE
FOR CONSUMPTION ANNUALLY PER HEAD OF POPULATION:
AUSTRALIA—*continued.*

Commodity.	Unit of Quantity.	Average 1936-37 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56. (a)					
Potatoes—												
White	lb.	103.8	108.3	96.4	122.2	102.8	89.8					
Sweet	"	2.4	1.4	1.4	1.4	1.4	1.4					
<i>Total</i>	"	<i>106.2</i>	<i>109.7</i>	<i>97.8</i>	<i>123.6</i>	<i>104.2</i>	<i>91.2</i>					
Pulse and Nuts—												
Dried Pulse	"	1.5	3.3	2.3	3.7	2.8	2.4					
Peanuts (weight without shell)	"	0.9	1.4	1.3	1.9	2.7	2.0					
Edible Tree Nuts (weight without shell)	"	0.8	1.3	1.4	1.7	1.9	1.6					
Cocoa (Raw Beans)	"	2.1	2.9	2.5	2.8	2.4	2.2					
<i>Total</i>	"	<i>5.3</i>	<i>8.9</i>	<i>7.5</i>	<i>10.1</i>	<i>9.8</i>	<i>8.2</i>					
Tomatoes and Fruit—												
Tomatoes(f)	"	(g) 15.7	21.7	21.6	18.4	24.7	25.0					
Citrus Fruit(f)	"	31.9	30.8	29.2	37.9	35.4	40.4					
Other Fresh Fruit	"	94.0	75.3	65.0	79.6	75.6	90.5					
Jams	"	11.4	9.9	8.6	9.1	9.2	9.5					
Dried Fruit	"	8.1	8.0	7.1	7.3	7.9	5.4					
Canned Fruit	"	10.7	14.4	12.3	12.2	13.9	13.4					
<i>Total (Fresh Fruit equivalent)</i>	"	<i>189.2</i>	<i>180.0</i>	<i>161.7</i>	<i>183.8</i>	<i>187.9</i>	<i>198.9</i>					
Vegetables—												
Leafy, Green and Yellow Vegetables	"	(h)	46.1	44.3	42.0	40.0	40.5					
Other Fresh Vegetables	"	(h)	71.8	63.9	61.9	58.6	54.7					
Canned Vegetables	"	(h)	5.3	3.4	4.6	4.9	5.1					
<i>Total</i>	"	<i>(h)</i>	<i>123.2</i>	<i>111.6</i>	<i>108.5</i>	<i>103.5</i>	<i>100.3</i>					
Grain Products—												
Flour—												
White	"	187.1	188.9	184.8	181.5	177.9	175.0					
Sharps	"							0.7	0.4	0.5	0.4	0.5
Wheatmeal for baking	"							8.6	8.0	7.9	7.2	6.8
Breakfast Foods(i)	"	10.6	12.1	13.2	13.0	13.1	12.4					
Rice (milled)	"	4.0	4.7	3.9	3.7	3.5	3.7					
Tapioca, Sago, etc.	"	1.2	0.6	0.5	0.4	0.3	0.4					
Pearl Barley	"	1.0	0.6	0.6	0.5	0.5	0.5					
Barley Meal and Polished												
Wheat (Rice substitute)	"	..	0.2	0.2	0.2	0.2	0.1					
Edible Starch (Cornflour)	"	1.4	0.9	0.8	1.0	0.9	1.0					
<i>Total</i>	"	<i>205.3</i>	<i>217.3</i>	<i>212.4</i>	<i>208.7</i>	<i>204.0</i>	<i>200.4</i>					
Beverages—												
Tea	"	6.9	6.5	6.5	6.8	6.0	5.9					
Coffee	"	0.6	0.8	0.7	1.1	1.1	1.3					
Beer	Gallon	11.7	21.2	21.8	23.1	24.3	24.2					
Wine	"	0.6	1.8	1.4	1.4	1.1	1.2					

(a) Subject to revision. (b) Included with fresh meat at its carcass weight. (c) Edible weight. (d) Included with fresh. (e) In terms of weight of shell eggs. (f) Includes fresh equivalent of manufactured products. (g) Probably understated owing to lack of complete data. (h) Not available. (i) Excludes invalid and health foods, semolina and wheat germ prior to 1951-52.

2. **Level of Nutrient Intake.**—The table below shows details of the estimated supplies of nutrients available for consumption in Australia during annual periods since 1951-52 in comparison with the annual average for the three years 1936-37 to 1938-39. The table has been compiled by the Nutrition Section of the Commonwealth Department of Health and is based on the estimates of the quantity of foodstuffs consumed per head of population shown in the preceding table.

ESTIMATED SUPPLIES OF NUTRIENTS AVAILABLE FOR CONSUMPTION :
AUSTRALIA.

(Per Head per Day.)

Nutrient.	Unit.	Average 1936-37 to 1938-39.	1951-52.	1952-53.	1953-54.	1954-55. (a)	1955-56. (a)
Calories	No.	3,117	3,240	3,261	3,338	3,296	3,276
Protein—							
Animal	gm.	58.7	57.6	56.5	57.3	56.8	56.8
Vegetable ..	..	30.9	34.2	33.0	33.8	33.1	31.3
Total .. ..	..	89.6	91.8	89.5	91.1	89.9	88.1
Fat .. ..	..	133.5	125.6	129.5	132.5	133.1	131.4
Carbohydrate ..	..	377.4	414.5	421.1	426.8	416.1	413.9
Calcium	mgm.	642	784	758	800	758	782
Iron .. ..	..	15.4	14.9	14.0	14.2	13.9	13.2
Vitamin A	I.U.	8,457	8,083	7,200	7,254	7,084	7,047
Ascorbic Acid ..	mgm.	86	83	80	90	83	83
Thiamin .. ..	..	1.4	1.4	1.3	1.3	1.3	1.2
Riboflavin .. ..	..	1.7	2.0	1.7	1.8	1.7	1.7
Niacin .. ..	..	18.7	19.9	18.1	18.6	18.5	17.6

(a) Subject to revision.

NOTE.—For the years 1952-53 to 1955-56, new conversion factors have been used based on factors contained in the "Table of Composition of Australian Foods" (Anita Osmond and Winifred Wilson, Canberra, 1954), but the comparison with previous years has not been significantly affected. Vitamin A is on a revised basis for all years shown.

§ 4. Patents, Trade Marks and Designs.

1. Patents.—(i) *General.* Patents for inventions are granted under the Patents Act 1952-1955, which applies to the Commonwealth of Australia and the Territories of Norfolk Island, Papua and New Guinea. The Act is administered by a Commissioner of Patents. The principal fees payable up to and including the grant of a patent amount to £17 10s. Renewal fees are payable as follows:—£5 before the expiration of the fourth year, and an amount progressively increasing by £1 before the expiration of each succeeding year up to the final fee of £16, payable before the expiration of the fifteenth year. An extension of time for six months for payment of a renewal fee may be obtained. Patents granted under the repealed Acts (Patents Act 1903-1950) are subject to the renewal fees under those Acts.

(ii) *Summary.* The number of separate inventions in respect of which applications were filed and the number of letters patent sealed during the years 1939 and 1952 to 1956 are shown in the following table.

PATENTS : AUSTRALIA.

Particulars.	1939.	1952.	1953.	1954.	1955.	1956.
Applications	5,740	8,073	8,917	9,073	8,869	9,396
Applications accompanied by provisional specifications	3,161	3,406	3,973	3,590	3,220	3,465
Letters patent sealed	3,141	5,248	5,181	5,464	5,931	6,056

2. **Trade Marks and Designs.**—(i) *Trade Marks.* Under the Trade Marks Act 1905–1948, the Commissioner of Patents is also Registrar of Trade Marks. This Act has been amended from time to time, the last amendment having been made in 1948. Special provisions for the registration of a “Commonwealth Trade Mark” are contained in the Act of 1905, and are applicable to all goods included in or specified by a resolution passed by both Houses of Parliament that the conditions as to remuneration of labour in connexion with the manufacture of such goods are fair and reasonable. The Act of 1948 provides for the registration of users of trade marks, and also for assignment of trade marks with or without the goodwill of the business concerned.

(ii) *Designs.* Under the Designs Act 1906–1950, the Commissioner of Patents is also Registrar of Designs.

(iii) *Summary.* The following table shows the applications for trade marks and designs received and registered during the years 1939 and 1952 to 1956.

TRADE MARKS AND DESIGNS : AUSTRALIA.

Particulars.	1939.	1952.	1953.	1954.	1955.	1956.
Trade Marks—						
Received	1,992	3,988	4,305	4,730	4,630	4,402
Registered	1,580	4,044	1,469	1,400	1,848	5,360
Designs—						
Received	865	1,186	1,504	1,373	1,330	1,130
Registered	736	1,388	802	900	819	458

3. **Revenue.**—The following table shows the revenue of the Commonwealth Patent Office, Trade Marks and Designs Office, and revenue obtained from Copyright for the years 1939, 1952 and 1953. From 1st July, 1954, a system of payment of fees by “fee stamps” was introduced and fees have since been collected under one head of revenue. Consequently separate figures are not available for the years 1954 to 1956.

**PATENTS, TRADE MARKS AND DESIGNS AND COPYRIGHT, REVENUE :
AUSTRALIA.
(£.)**

Particulars.	1939.	1952.	1953.	1954.	1955.	1956.
Patents	47,409	126,288	130,292	} 202,290	234,125	293,918
Trade Marks and Designs	17,052	49,538	45,113			
Copyright	411	577	1,156			
Total	64,872	176,403	176,561	202,290	234,125	293,918

§ 5. Copyright.

1. **Legislation.**—Copyright is regulated by the Commonwealth Copyright Act 1912–1950 wherein, subject to modifications relating to procedure and remedies, the British Copyright Act of 1911 has been adopted and scheduled to the Australian law.

Reciprocal protection of unpublished works was extended in 1918 to citizens of Australia and of the United States of America, under which copyright may be secured in the latter country by registration at the Library of Congress, Washington. The Commonwealth Government promulgated a further Order in Council which came into operation on 1st February, 1923, and extended the provisions of the Copyright Act to the foreign countries of the Copyright Union, subject to the observance of the conditions contained therein.

2. Applications and Registrations.—The following table shows under the various headings the number of applications for copyright received and registered for the years 1939 and 1952 to 1956.

COPYRIGHT : AUSTRALIA.

Particulars.	1939.	1952.	1953.	1954.	1955.	1956.
Applications received—						
Literary	1,438	1,434	1,134	1,044	1,005	1,059
Artistic	53	34	21	25	17	22
International ..	3	..	..	..	..	..
Applications registered—						
Literary	1,359	1,337	1,411	943	869	521
Artistic	38	36	15	20	12	17
International ..	1	..	..	..	..	..

3. Revenue.—Revenue obtained from copyright during the years 1939, 1952 and 1953 is shown in § 4, para. 3, above.

§ 6. Australian Shipbuilding Board.

1. Constitution.—Originally established in 1941 under National Security Regulations, the Board has been reconstituted a number of times since its inception and in 1948 was constituted on a permanent basis under the Supply and Development Act. At present it operates under the control of the Minister for Shipping and Transport. In order to link the activities of the Board more closely with the Department of Shipping and Transport, the constitution of the Board was altered in April, 1952, to provide for representation by senior departmental officers. The present membership of the Board consists of a Chairman who is the General Manager, a Deputy Chairman, a Finance Member and two other members, one of whom represents the Naval Board.

2. Functions.—The existing functions of the Board which have been summarized in earlier issues of the Official Year Book, are set out in detail in regulation 22 (4) of the Supply and Development Regulations.

In the exercise of its functions, the Board is responsible for—(i) the design of vessels; (ii) calling of tenders and placements of orders; (iii) co-ordination of the Board's supplies to shipbuilders, e.g., machinery and certain equipment; (iv) supervision of construction; (v) acceptance of vessels after sea trials; and (vi) administration associated with ship repairs, marine engines, spare parts, etc.

The Board is also responsible for determining, within the limits prescribed by the Commonwealth Government, the amount of subsidy to be paid on merchant ships constructed in Australia. In 1956, the Government accepted a recommendation made by the Tariff Board that the maximum subsidy on ships built in Australia for the coastal trade should be increased from 25 per cent. to 33½ per cent. of the cost of construction.

In order to take advantage of this, private shipowners are required to place their orders for vessels through the Board, which has thus become the ordering authority for all vessels built in Australian yards on which a subsidy is paid. The increased subsidy was payable on all orders placed with the Board after 12th April, 1956.

The Board has also undertaken the preparation of plans and drawings for the various yards, as the level of ship construction in Australia does not warrant each yard employing specialists in naval architecture. In this way, the Board has assisted in raising the efficiency of the industry as a whole and also in the development of individual yards. (For a more detailed reference to the constitution and functions of the Board see Official Year Book No. 37, p. 1170).

In order to assist the shipbuilding industry to become more self-sufficient, the Board has also encouraged the construction of marine engines in Australia including steam engines and several well known types of diesel engines manufactured under licence. The marine diesel engines under construction at 31st March, 1957, were:—"Doxford", three engines of 3,300 B.H.P., two of 4,400 B.H.P., and one of 2,800 B.H.P.; "Polar", one engine of 1,120 B.H.P.

3. **Construction Programme.**—From its inception to 31st March, 1957, the Board had arranged for the construction of 52 vessels of over 300 gross tons and totalling 287,561 tons deadweight. During the war, the Board was also responsible for the construction of numerous small craft and a 1,000 ton floating dock.

Current orders at 31st March, 1957, placed by the Board were for the construction of 15 vessels totalling 150,000 tons deadweight. The vessels consisted of 2 bulk ore carriers each of 19,000 tons on behalf of the Broken Hill Pty. Co. Ltd., together with 2 bulk carriers of 14,000 d.w.t. each, 6 bulk carriers of 10,000 d.w.t. each, 2 colliers of 7,000 d.w.t. each, 2 bulk wheat/general cargo vessels of 2,000 d.w.t. each and a 6,000 d.w.t. passenger/car ferry all to Commonwealth account. The passenger/car ferry has been designed for the carriage of passengers and their cars and loaded trailers on the Bass Strait run from Melbourne to northern Tasmania and when completed, late in 1959, will be the first of its kind to be operated in the Australian Coastal trade.

§ 7. Commonwealth Scientific and Industrial Research Organization.

1. **General.**—By the Science and Industry Research Act 1949, the previously existing Commonwealth Council for Scientific and Industrial Research was re-organized under the title of the Commonwealth Scientific and Industrial Research Organization. An account of the organization and work of the former Council, and of the earlier Commonwealth Institute of Science and Industry from which the Council was formed, was given in earlier issues of the Official Year Book. (*See* No. 14, p. 1061 and No. 37, p. 1183).

2. **Science and Industry Research Act 1949.**—This Act provides for—

- (a) an Executive of the Organization consisting of five members to be appointed by the Governor-General, at least three of whom shall be persons possessing scientific qualifications; and
- (b) an Advisory Council of the Organization, consisting of the members of the Executive, the Chairman of each State Committee constituted under the Act, and such other members as the Advisory Council, with the consent of the Minister, co-opts by reason of their scientific knowledge.

The powers and functions of the Organization are as follows:—(a) To initiate and carry out scientific researches in connexion with primary or secondary industries in Australia; (b) to train research workers and to establish industrial research studentships and fellowships; (c) to make grants in aid of pure scientific research; (d) to establish and make grants to industrial research associations in any industry; (e) to test and standardize scientific apparatus and instruments; (f) to collect and disseminate scientific and technical information; (g) to publish scientific and technical reports and periodicals; and (h) to act as a means of liaison between Australia and other countries in matters of scientific research.

3. **Science and Industry Endowment Act 1926-1949.**—Under this Act, the Government established a fund of £100,000, the income from which is used to provide assistance (a) to persons engaged in scientific research; and (b) in the training of students in scientific research. Provision is made for gifts or bequests to the fund which is controlled by a trust consisting of the Executive of the Organization. In accordance with the Act, arrangements have been made to send a number of qualified graduates abroad for training in special fields of work.

4. **Work of the Organization.**—The activities of the Commonwealth Scientific and Industrial Research Organization have necessitated a widespread and adaptable arrangement of its research laboratories. Undesirable centralization has been avoided mainly in two ways. In the first place, the policy has been followed of establishing laboratories in different places in the Commonwealth wherever the necessary facilities, contacts and other suitable conditions could best be found. Secondly, the Act provides for the establishment of a State Committee in each of the six States. These Committees are widely representative of scientific and industrial interests, and advise the Executive or the Advisory Council on general matters and on particular questions of investigation and research.

For about twelve years after its establishment, the work of the previous Council was devoted mainly to the solution of problems affecting the agricultural and pastoral industries. Unlike manufacturing concerns which can often employ their own scientific staffs, the farmers and the pastoralists are dependent on outside help for the solution of their problems which require research. It was a recognition of the greater need of the primary producer which directed the Council's early policy. However, in 1937, the Commonwealth Government decided to extend the activities of the C.S.I.R. so as to provide assistance to secondary

industries, and several laboratories have been established for work in that field; it was thus in the fortunate position of being able to render to these industries assistance of vital importance almost immediately after the outbreak of war. In fact, the remarkable technological advances and developments in secondary industrial production during the war would to a large extent have been impossible had it not been for the assistance rendered by scientific research, and this may well serve as a forceful illustration of what may be accomplished in times of peace.

For the purpose of carrying out its research work, there are established within the Organization a number of Divisions and Sections. The Divisions, of which there are now eighteen, comprise the major establishments for which special laboratory buildings have been erected and equipped; the Sections generally include establishments which have not reached a stage of development, so far as the scope and magnitude of their operations are concerned, to justify their designations as Divisions. As the Organization's investigations extend on a Commonwealth-wide basis and as many of the investigations which are being conducted—particularly those concerned with problems affecting the agricultural and pastoral industries—necessitate experimental work in the field, a number of field stations are established in various parts of Australia.

The Divisions which have been established are as follows:—

- (1) Plant Industry, with main laboratories at Canberra and Brisbane and field stations.
- (2) Entomology, with main laboratories at Canberra and field stations.
- (3) Animal Health and Production with main laboratories in Melbourne, Sydney and Brisbane and field stations.
- (4) Biochemistry and General Nutrition, with main laboratories at Adelaide and field stations.
- (5) Soils, with main laboratories at Adelaide and extensive operations in the field.
- (6) Forest Products, with main laboratories in Melbourne and field experiments.
- (7) Food Preservation and Transport, with main laboratories at Homebush (New South Wales) and a subsidiary laboratory in Brisbane.
- (8) Fisheries and Oceanography, with main laboratories at Cronulla (New South Wales), subsidiary laboratories in Perth (Western Australia), Dunwich, (Queensland), and Thursday Island, and experimental work in coastal waters of Australia.
- (9), (10), (11) Metrology, Physics and Electrotechnology, comprising the National Standards Laboratory at Sydney.
- (12) Radiophysics, with main laboratory at Sydney.
- (13) Industrial Chemistry, with main laboratories in Melbourne.
- (14) Tribophysics, with laboratories in Melbourne.
- (15) Building Research, with laboratories in Melbourne.
- (16) Mathematical Statistics, with main laboratory in Adelaide.
- (17) Meteorological Physics, with main laboratory in Melbourne and field station.
- (18) Land Research and Regional Survey, with headquarters in Canberra, and field stations at Ayr (Queensland), Katherine (Northern Territory) and Ivanhoe (Kimberley, Western Australia).

The following are the Sections:—

- (1) Commonwealth Research Station, Murray Irrigation Area, Merbein (Victoria).
- (2) Irrigation Research Station, Griffith (New South Wales).
- (3) Radio Research Laboratories, Camden (New South Wales).
- (4) Dairy Research, Melbourne.
- (5) Mineragraphic Investigations, Melbourne.
- (6) Ore-dressing Investigations, Melbourne and Kalgoorlie.
- (7) Plant Fibre, Melbourne.
- (8) Physical Metallurgy, Melbourne.
- (9) Wool Textile Research Laboratories, Geelong, Melbourne and Sydney.
- (10) Coal Research, Sydney.
- (11) Mathematical Instruments, Sydney.
- (12) Wildlife Survey, with main laboratory in Canberra, subsidiary laboratory at Albury, and field experiments.
- (13) Animal Genetics, Sydney.
- (14) Engineering.

In addition to its investigational work, the Organization deals with inquiries covering a wide range of scientific and technical subjects and maintains Scientific Research Liaison Offices in London and Washington.

An Agricultural Research Liaison Section established at the Organization's Head Office assists in making results in agricultural research speedily available to State Departments of Agriculture for use in their extension work.

Recently an Industrial Research Liaison Section has also been established at Head Office to foster liaison in the secondary and manufacturing fields.

The Organization's Head Office, with administrative and executive staff, is in Melbourne, and associated with it are the Organization's Central Library, Agricultural Research Liaison Section and Industrial Research Liaison Section. The funds for the Organization are provided from two main sources, namely, from Commonwealth revenue by Parliamentary appropriation, and from industry directly or indirectly by way of contributions and special grants. The fact that contributions and grants account for over one-eighth of the total annual expenditure indicates that the C.S.I.R.O. has succeeded in a very large measure in gaining the confidence of the public.

The activities of the C.S.I.R.O. are now so comprehensive in their scope and so widely distributed that it is not an easy matter to present an adequate picture of them in a concise form. For details of the investigations in progress, reference should be made to the Annual Report of the Organization.

§ 8. Mount Stromlo Observatory.

1. **General.**—In January, 1957, the former Commonwealth Observatory was transferred from the control of the Department of the Interior to the Australian National University where, as part of the Research School of Physical Sciences of that University, it has become known as the Mount Stromlo Observatory.

2. **Foundation of Observatory.**—The Observatory was founded primarily to prosecute astrophysical research, including the study of the relations between solar and terrestrial phenomena. A short history of the foundation of the Observatory appears in *Official Year Book No. 19*, p. 979.

3. **Site of Observatory.**—The Observatory is situated on Mount Stromlo, which forms part of a ridge of hills about seven miles west of Canberra. The highest point in the ridge is 2,560 feet above sea level, that is about 700 feet above the general level of the surrounding country.

4. **Equipment.**—The major items of equipment at Mount Stromlo comprise a 74-inch reflector, a 50-inch reflector, which is the re-built Melbourne 48-inch telescope, a 30-inch reflector donated by the late J. H. Reynolds, Esq., a 20-inch reflector once the property of the late J. H. Catts, M.P., as well as a 9-inch refractor, a solar tower telescope of 45 feet focal length and other smaller telescopes. A photographic refractor of 26-inch aperture belonging to the Universities of Yale and Columbia is now installed in a dome provided by the Commonwealth Government, and a 24-inch/30-inch Schmidt telescope from the University of Uppsala has been installed in a similar fashion.

5. **Functions of Observatory.**—Investigations in the fields of stellar spectroscopy, stellar photometry and variable stars are being carried out. The Observatory is responsible for the accuracy of the Australian Time Service. Considerable attention is being given to the development of this work, and a highly accurate quartz clock system has been installed. A photographic zenith tube has been acquired for time determination.

6. **International Co-operation.**—The Observatory works in close liaison with overseas observatories and major equipment has been or is being installed at Mount Stromlo in co-operation with the University Observatories of Yale and Columbia (U.S.A.), Uppsala (Sweden), and Munich (Germany).

§ 9. Standards Association of Australia.

The Standards Association of Australia is the national standardizing organization of Australia, and issues Australian standard specifications for materials and codes of practice.

The Association was established in July, 1929 by the amalgamation of the Australian Commonwealth Engineering Standards Association and the Australian Commonwealth Association of Simplified Practice. It is an independent body in close touch with modern industrial requirements and has the full recognition and support of the Commonwealth and State Governments and industry. It was incorporated by Royal Charter in 1950.

The sole executive authority of the Association is vested in the Council, on which industry is fully represented, together with official representatives of the Commonwealth

and State Governments and their technical departments, and of scientific, professional and commercial organizations. Voluntary assistance is rendered in the drafting of specifications and codes by several thousand individuals who are experts in their particular fields, and are organized into some hundreds of committees. These committees are grouped under broad industry headings including civil engineering and building construction, mechanical engineering, electrical engineering, chemical industry, timber industry, transportation, aircraft materials, ferrous and non-ferrous metallurgy, textiles, mining, ceramics, medical and dental materials, household and domestic economy, miscellaneous and general.

These committees are comprised of nominated representatives of manufacturing, distributing and purchasing organizations, and of scientific and other expert authorities in the particular field of the project being dealt with. The operations of these committees are co-ordinated and supervised by committees broadly representative of the whole industry within which the respective projects are included.

The specifications of the Association provide a suitable standard of performance, quality and dimension and an equitable basis for tendering. They help to eliminate redundant qualities and sizes. They enable purchasers to obtain their requirements with greater assurance of satisfaction, with more rapid delivery and without the necessity of drafting individual specifications.

The underlying principles covering the preparation of the specifications and codes are that they shall be in accordance with the needs of industry; that the common interests of producer and consumer be maintained; that periodical revision should keep the work abreast with progress; and that standardization be arrived at by general consent without coercion.

Organizations, companies, firms and individuals interested in the work of the Association are eligible for subscription membership. Members are entitled to free copies of the publications of the Association and to the use of the library and its Special Information Service. Bibliographical research is undertaken for committees, members of the Association, and industry in general. Many hundreds of inquiries are answered each year.

The Association has international affiliations and the standards of all British and foreign countries are filed in the library and are accessible to members. It is a member, representing Australia, of the International Organization for Standardization (ISO). The Association also administers the Australian National Committees of the International Electrotechnical Commission and the International Commission on Large Dams.

The Association is also the representative of the British Standards Institution, and all British standards may be purchased from headquarters and branch offices in the various States.

The headquarters of the Association are at Science House, Gloucester Street, Sydney, and branches of the Association are situated at Temple Court, 422 Collins Street, Melbourne; School of Arts Building, 166 Ann Street, Brisbane; Alliance Building, Grenfell Street, Adelaide; Gledden Building, Hay Street, Perth; c/o Engineering Department, Hobart Technical College, Hobart; Department of Works, Canberra; and Howard Smith Chambers, Watt Street, Newcastle.

§ 10. Film Censorship Board.

1. **Legislation.**—The Censorship of imported films derives its authority from Section 52 (g) of the Customs Act which gives power to prohibit the importation of goods. Under this section, regulations have been issued prohibiting the importation of films except under certain conditions and with the consent of the Minister. The regulations provide, *inter alia*, that no film shall be registered which in the opinion of the Censor is (a) blasphemous, indecent or obscene; (b) likely to be injurious to morality, or to encourage or incite to crime; (c) likely to be offensive to the people of any friendly nation or to the people of a part of the Queen's Dominions; or (d) depicts any matter the exhibition of which is undesirable in the public interest.

The regulations governing the exportation of Australian-made films are similar with the addition that no film may be exported which in the opinion of the Censorship is likely to prove detrimental or prejudicial to the Commonwealth of Australia.

The Censorship consists of a Censorship Board of five persons and an Appeal Censor, the headquarters being in Sydney. There is also a right of appeal to the Minister.

In addition to the censorship of moving pictures, the Censorship may refuse to admit into Australia any advertising matter proposed to be used in connexion with the exhibition of any film. In respect of films and advertising matter produced in Australia, legislation of a uniform nature is now operative in all States except South Australia and New South Wales. Under the State legislation the Commonwealth Film Censorship Organization acts as censor for the States concerned by virtue of agreements entered into between the Commonwealth and the respective State Governments.

2. Import of Films.—Imported standard size (35-millimetre) films dealt with by the Censorship for the year 1956 were as follows:—1,291 films of 3,349,181 feet passed without elimination, 164 films of 1,302,574 feet passed after eliminations and 2 films of 15,023 feet rejected, making a total of 1,457 films of 4,666,778 feet. The countries of origin were as follows:—United States of America, 782 films of 2,550,717 feet; United Kingdom, 423 films of 1,198,615 feet; and other countries, 252 films of 917,446 feet.

The films which chiefly concern the Censorship are the feature or dramatic films. Of these, 431—3,548,480 feet were imported during 1956 (247—2,049,762 feet from the United States of America and 99—765,048 feet from the United Kingdom). Two hundred and seventy-three—2,246,337 feet were passed without eliminations, 156—1,287,120 feet were passed with eliminations and two films of 15,023 feet were rejected in the first instance. In one instance an appeal was lodged, which was disallowed. During 1955, 412 feature films were dealt with, 294 being passed without eliminations and 114 passed with eliminations, while one film rejected in the first instance was subsequently passed for public exhibition.

During 1956, 7,801,277 feet of imported 16 millimetre films were censored (Commercial Films, 3,184,247 feet, Films for Television, 3,170,854 feet and Private Films taken by Travellers, 1,446,176 feet) compared with 3,963,628 feet for 1955, representing an increase of 97 per cent. Of these, one Commercial Film was rejected and 30 passed after eliminations, and 18 Films for Television were rejected and 187 passed after eliminations.

During 1956, 2,067,219 feet of 8-millimetre and 9.5-millimetre films were censored compared with £1,637,612 feet for 1955. Of this total, 1,974,789 feet comprised films taken by travellers during their travels abroad, the remainder, 92,430 feet, being commercially produced films. Of these commercial films three were rejected and one subjected to eliminations.

3. Export of Films.—The number of films exported for the year 1956 was 2,143 of 2,260,420 feet, of which 1,626 films of 1,372,597 feet were sent to British countries, including Trust Territories and 243 films of 528,114 feet were sent to the United States of America. This footage includes in many cases, several prints of the one film. The increase of more than half a million feet over the figure for 1955 was mainly due to the films exported in connexion with the Olympic Games.

§ 11. Australian National Film Board and the Film Division.

1. The Australian National Film Board.—The Australian National Film Board was inaugurated in April, 1945, on the recommendations of a Commonwealth Government inter-departmental committee which considered the suggestions of a conference of interested individuals and Commonwealth and State officials, including Directors of Education, called in November, 1944 by the Ministers for Information and Post-war Reconstruction. It was attached, for administrative purposes, to the Department of Information.

With the abolition of the Department of Information in March, 1950, administration of the Board was transferred to the News and Information Bureau, Department of the Interior.

In November, 1950, the Board was reconstituted as an advisory body to the Minister for the Interior on matters concerned with the production, acquisition and distribution of films required by Commonwealth departments for the following purposes:—

- (a) for use within Australia on important matters of national interest and welfare, such as school and adult education, rehabilitation, social development, international understanding, trade and tourist expansion, and immigration;
- (b) for dissemination abroad to expand trade and commerce with other countries, encourage tourist traffic with Australia, improve Australia's relations with other countries and, where necessary, to explain Australia's national policies, and to encourage immigration.

The constitution provides for a membership of ten, with the Secretary of the Department of the Interior, Chairman, the Director of the News and Information Bureau, Deputy Chairman, and the remainder representative of Commonwealth departments, State Government instrumentalities and organizations interested in the production, distribution or utilization of films for national publicity.

2. **The Film Division of the News and Information Bureau.**—Production and distribution of all films required by Commonwealth Departments is undertaken by the staff of the Film Division, News and Information Bureau, Department of the Interior, or by commercial enterprises under the supervision of officers of the Film Division. Theatrical distribution in Australia, and both theatrical and non-theatrical distribution overseas, of all Film Division productions are organized by the News and Information Bureau's home office or its oversea representatives. Non-theatrical distribution in Australia is organized through the National Library, Canberra, in co-operation with State film distribution agencies.

The first Australian Government organization for the production of motion pictures for national publicity purposes was the Cinema and Photographic Branch of the Department of Commerce, set up in Melbourne in 1920. Early in the 1939-45 War, the newly-established Department of Information was made responsible for the operation of the Cinema Branch and for an Official War Photography Unit.

Since 1946, the Film Division has produced 252 films for general exhibition, as well as training and special purpose films. Prints are dispatched to 44 oversea centres where distribution is arranged by News and Information Bureau officers or other Australian representatives. In Britain, there is regular distribution through more than a thousand theatres, and a large non-theatrical and educational series of circuits. By arrangement with the British Broadcasting Corporation, items of topical interest photographed by the Film Division are flown to London for television. In the United States of America, there is wide non-theatrical distribution and considerable use of the films by television networks. An exchange arrangement with the National Film Board of Canada secures extensive distribution in Canada. French versions, prepared in Paris under the supervision of the Australian Embassy, circulate through France and French-speaking countries. Selected films have also been recorded in Dutch, German, Italian, Japanese, Hindustani, Tamil and other Indian dialects.

In addition to films made on the initiative of the News and Information Bureau, the Film Division has produced, or is producing, films under the sponsorship or with the co-operation of Commonwealth Departments and many other bodies such as the Commonwealth Bank of Australia, the Road Safety Council, Overseas Telecommunications Commission, Snowy Mountains Hydro-electric Authority, Australian Wine Board, the Australian National University and the Australian Broadcasting Commission.

The co-operation of the Australian motion picture industry with the Commonwealth, spontaneously offered at the outset of the 1939-45 War, continues. Special films for urgent national appeals are planned, produced and distributed, with the assistance of the National Films Council of the motion picture industry and its Film Production Advisory Committee.

§ 12. National Safety Council of Australia.

The National Safety Council of Australia was founded in Melbourne in 1927 for the purposes of developing, mainly by means of education, safety on the road, at work and in the home, and its activities have developed in other directions wherever the need for reducing the toll of accidents has been shown. To this end, it conducts continuous propaganda through the press and in other ways. It also forms Junior Safety Councils in the schools for developing a safety conscience among children. The children themselves are officers of these Councils and patrol the roads in the neighbourhood of the schools and conduct the scholars across in safety. Posters are available to schools in connexion with Health and Safety lessons. Films specially taken are available for children's and road safety instruction.

A "Safe Driving" campaign for individual motor drivers is conducted as well as a "Freedom from Accidents" competition among employee drivers, those completing a year free from any accident for which they were responsible being given a certificate to that effect. An industrial service of four posters per month, together with slips for pay envelopes, constitutes a regular service for the dissemination of safety advice, and is supplied to over 150,000 workers in factories yearly. Committees deal with specific problems regarding

traffic, films, safety in industry, air safety and home dangers. The Air Safety Committee has issued a 32-page booklet "Air Sense" for distribution with pilots' private licences through the Civil Aviation Department, and has a plan for assistance to aircraft in distress which is being implemented throughout Australia.

The Council is supported by Government grants, public subscriptions and payments for service, and is a non-profit organization. Its work is carried on by a small staff controlled by committees and governed by an executive. The following committees, whose work is of an entirely honorary nature, are in operation, namely, Executive, Traffic, Industrial Safety, Home, Air Safety and Publicity.

§ 13. Australian Road Safety Council.

1. Origin and Organization.—The Australian Road Safety Council was formed in June, 1947, through the instrumentality of the Australian Transport Advisory Council.

The prime movers for the establishment of the Council were the Australian Automobile Association, which submitted a comprehensive plan; the New South Wales Minister for Transport, who advocated expansion, on a nation-wide basis, of road safety activities on lines similar to those of the Road Safety Council of New South Wales; and the National Safety Council of South Australia, which conveyed recommendations from a Special Safety Convention held in Adelaide in 1946.

At that time, in addition to the above-mentioned organizations in New South Wales and South Australia, there was a road safety organization in Victoria. Steps were immediately taken to form Councils in Queensland, Western Australia and Tasmania, and subsequently for the internal Territories.

The Australian Road Safety Council is the composite body of Road Safety Councils of the following States and Territories of Australia:—

Governmental.—New South Wales, Road Safety Council of New South Wales; Queensland, Road Safety Council of Queensland; Tasmania, Road Safety Council of Tasmania; the Australian Capital Territory and the Northern Territory, Road Safety Councils of the Australian Capital Territory and the Northern Territory respectively.

Non-Governmental.—Victoria, Victorian Road Safety Division, National Safety Council of Australia; South Australia, Road Safety Division, National Safety Council of South Australia; Western Australia, Road Safety Division, National Safety Council of Western Australia.

The Council is representative, geographically and technically, of the whole Commonwealth and comprises nominees of practically all classes of road users, together with representatives of road transport, the Department of Defence and police administrations from each State. National organizations represented on the Council are:—The Federal Chamber of Automotive Industries, Council of Fire and Accident Underwriters, Australian Road Transport Federation, Australian Automobile Association, Transport Workers' Union of Australia, Federation of Motor Cycle Importers and Distributors of Australia, and Auto Cycle Council of Australia.

The Council meets annually and an Executive Committee operates between conferences. The principal effort of the Council is directed through educational, advertising and public relations media.

An annual grant is made available by the Commonwealth Government under the Commonwealth Aid Roads Act for the promotion of road safety. Hitherto £100,000 annually, it has been increased to £150,000 for the five years commencing 1st July, 1955. Of this, £90,000 is allocated to State Road Safety Councils for local activities in the following proportions:—New South Wales, £22,500; Victoria, £18,000; Queensland, £16,650; Western Australia, £14,850; South Australia, £11,250; and Tasmania, £6,750. The remaining £60,000 is applied to the National Campaign, spread equitably over the entire Commonwealth.

2. Mode of Operation.—The role of the Australian Road Safety Council is primarily in the field of education and public relations. Its task is to inculcate the habit of safe use of the roads by all who travel on them and to promote the cause of road safety as a humanitarian and community ideal of the highest importance. To this end, it constantly strives to increase public awareness of the road accident problem, which for the year ended 30th June, 1956 resulted in 105,638 accidents involving casualties or damage in excess of £10 to property, the deaths of 2,119 persons and injuries to 48,773 persons. (For further information on the subject of Traffic Accidents see pp. 406–408 of this Year Book.)

The Council works in close collaboration with two other committees also established by the Australian Transport Advisory Council, namely, the Australian Motor Vehicle Standards and the Australian Road Traffic Code Committees. All three committees are

administered by the Commonwealth Department of Shipping and Transport, which is the executive department for the Australian Transport Advisory Council.

The Australian Motor Vehicle Standards Committee develops and promulgates essential basic motor vehicle standards such as maximum lengths, weights, height, carrying capacity of vehicles, and minimum lighting, braking and other mechanical efficiencies. In addition to ensuring a greater safety factor, these standards have helped to eliminate many conflicting State requirements which had an adverse effect on design and production costs.

The Australian Road Traffic Code Committee is charged with the responsibility of progressively preparing a "blue print" uniform national traffic code for incorporation in State legislation. Speed limits, right-hand turns, rules governing approaches to intersections, qualifications of drivers, and pedestrian behaviour are a few of the numerous aspects which come within its purview, and a high degree of uniformity has been achieved.

The campaign for road accident prevention resolves broadly into three main elements relating to (i) the Road User, (ii) the Road, and (iii) the Vehicle. Similarly the attack falls into three main divisions—(i) Education, (ii) Enforcement, and (iii) Engineering. The link between the components is, broadly:—

The Road User	}	Education (public relations media, instruction in schools, homes, etc.).
		Enforcement (of correct road usage—through the police and the courts, uniform traffic laws, etc.).
The Road	}	Engineering (technical improvements of all kinds, safer roads and vehicles, improved illumination, uniform vehicle standards, etc.).
The Vehicle		

In addition to the foregoing activities, the Council convenes special national conferences, as required by the Australian Transport Advisory Council, to consider specific road safety problems. Typical of these have been the special committee appointed in 1951 to discuss level crossing accidents, which recommended, among other measures, the appointment in each State of a committee to investigate level crossings and report on safety provisions, the elimination of some railway level crossings and the closure of others where practicable and desirable; a special meeting held in June, 1953 to discuss methods of reducing the high incidence of motor cycle accidents, at which various measures to offset the greater vulnerability of both the machine and its rider were recommended; and special meetings held in May, 1954 and April, 1955 to consider the problems of "Youth and Road Safety" and "Pedestrian Behaviour" respectively. Road safety and traffic authorities from overseas countries took part in special "International Sessions" of the 1956 Congress of the Council. Through the Road Safety Council of New South Wales, the Australian Road Safety Council has pioneered the advocacy of voluntary blood tests for intoxication in cases of suspected driving under the influence of drugs or alcohol.

§ 14. Australian Atomic Energy Commission.

In November, 1952, a Commission of three members was appointed to control the Commonwealth's activities in relation to uranium and atomic energy, and in April, 1953, upon the enactment of the Atomic Energy Act 1953, the Commission was established as a statutory authority, with powers and functions as defined in the Act. The Commission is a corporate and autonomous body, controlling its own service. It functions under the direction of the Minister for National Development.

The functions of the Commission fall under two main headings. Firstly, it is responsible for undertaking and encouraging the search for and mining of uranium, and is empowered to co-operate with the appropriate authorities of the States in connexion with these and related matters. Secondly, it is authorized to develop the practical uses of atomic energy by constructing and operating plant for this purpose, carrying out research and generally fostering the advancement of atomic energy technology. These powers and functions are set out in detail in Part II. of the 1953 Act. In general, and subject to the Commonwealth's defence powers and particular provisions of the Act, they are exercisable only in or in relation to the Territories of the Commonwealth.

The search for and mining of uranium in the Territories of the Commonwealth are freely open to private enterprise, subject to the Atomic Energy Act 1953 and the Ordinances of the Territories. For the assistance of private prospectors, and with the object of ascertaining the uranium resources of the Territories, aerial and geological surveys are carried out to identify areas favourable to uranium occurrences. These surveys are undertaken for the Commission by the Bureau of Mineral Resources of the Department of National Development, and the results are published from time to time in map form for general information. As incentives to private enterprise to engage in the search for uranium, rewards have been paid for discoveries. Taxation concessions are allowed in respect of income derived from uranium mining. In addition, the Atomic Energy Commission, the

Bureau of Mineral Resources and other Commonwealth agencies make available to prospectors and mining companies a wide range of technical and advisory services.

The development of the uranium resources of the States is governed by the legislation and policies of the States. Commonwealth aerial survey facilities are made available to the States for the radiometric examination of areas within the States, and work is undertaken by the State Mines Departments for the Commonwealth on the testing of uranium ores and research on ore treatment problems.

Uranium oxide is being produced in Australia from large ore deposits at Rum Jungle, in the Northern Territory, and Radium Hill, in South Australia. The Rum Jungle deposits are being developed under arrangements between the Commonwealth and the Combined Development Agency, a joint procurement organization of the United States and United Kingdom Governments. The actual mining and treatment operations are being conducted for the Commonwealth by an Australian mining company. A treatment plant was brought into operation on the field in September, 1954, the substantial production from which is being sold to the Agency for defence purposes. The Radium Hill deposits are being developed by the South Australian Government, which has established an ore concentration plant on the field and a plant for the treatment of the concentrates at Port Pirie. Like the Rum Jungle project, the operations at Radium Hill and Port Pirie are carried out under arrangements with the Combined Development Agency, and the output from the operations is sold to the Agency.

Uranium ores have also been found elsewhere in the Commonwealth, most notably at the Mary Kathleen lease in the Mt. Isa-Cloncurry district in Queensland. The Mary Kathleen lease, containing a large body of ore, is being developed by commercial interests, which are proceeding with the erection of a treatment plant in the area at a cost of several million pounds. Production from the plant will be sold to the United Kingdom Atomic Energy Authority, under arrangements approved by the Commonwealth Government. Another company, operating in the South Alligator River area of the Northern Territory, has sold some ore of exceptionally high grade to the Combined Development Agency.

The Commission has undertaken a research programme into the civil uses of atomic energy, with special reference to Australian needs. By arrangement with the United Kingdom Atomic Energy Authority, it has had a team of scientists working in the Authority's Research Establishment at Harwell in England. At the end of 1955, the Commission began the construction of its Research Establishment at Lucas Heights near Sydney. This consists of a high flux nuclear reactor of the most advanced type, with associated services and various laboratories. During 1957, as the reactor approached completion, most of the scientific staff returned from England to continue the research programme in Australia. Within Australia, in addition to its programme at Lucas Heights the Commission is supporting atomic energy research on a considerable scale in the various universities, and it has established a wide range of post-graduate studentships and undergraduate scholarships in the universities to train scientists for future work in atomic energy fields.

The broad objects of the Commission's research programme are to develop the production of electric power from nuclear fuels, and to investigate and promote the application of atomic energy and radioactive isotopes in industry, agriculture, medicine and biological research and other fields. In these endeavours, the Atomic Energy Commission is working in close co-operation with the United Kingdom Atomic Energy Authority, under arrangements which give Australia access to the results of the very large United Kingdom programme of research on peaceful atomic energy uses. The results of research in Australia will in like manner be made available to the United Kingdom. Work in Australia, though constituting a self-contained programme, is co-ordinated with the United Kingdom programme, to avoid overlapping of research objectives and duplication of investigations.

In the light of the vast amount of research now going forward overseas, and the programmes of many nations for the establishment of full-scale power producing reactors, it seems clear that nuclear power is rapidly approaching the stage of being economically practicable. A number of Government authorities, and several commercial organizations have begun serious study of the possible application of nuclear energy to their problems. The planned Australian research effort will enable Australia to make a full contribution to the advancement of atomic energy technology, both in power production and in other fields, and will, at the same time, place the country in a position to take advantage of the practical uses of atomic energy as they are developed.

§ 15. The United Nations.

1. **General.**—The Moscow Declaration of 1943 concerning a new international organization for the maintenance of international peace and security marked the end of the League of Nations. The dissolution of the League, and the transfer of certain of its functions to the new body, the United Nations, took place over subsequent years. Information concerning the League of Nations was given in issue No. 35 and earlier issues of the Official Year Book.

The Charter of the United Nations was drawn up by the delegates of fifty nations at the United Nations Conference on International Organization at San Francisco from 25th April to 26th June, 1945. Australia's ratification was deposited on 1st November, 1945. Following the admission of 16 new members during the Tenth Session and 5 more during the Eleventh Session there are now *81 member States:—Afghanistan, Albania, Argentina, Australia, Austria, Belgium, Bolivia, Brazil, Bulgaria, Burma, Byelorussia, Cambodia, Canada, Ceylon, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia, Denmark, the Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, Finland, France, Ghana, Greece, Guatemala, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran, Iraq, the Republic of Ireland, Israel, Italy, Japan, Jordan, Laos, Lebanon, Liberia, Libya, Luxembourg, Mexico, Morocco, Nepal, the Netherlands, New Zealand, Nicaragua, Norway, Pakistan, Panama, Paraguay, Peru, the Philippines, Poland, Portugal, Romania, Saudi Arabia, Spain, Sudan, Sweden, Syria, Thailand, Tunisia, Turkey, the Ukraine, the Union of South Africa, the Union of Soviet Socialist Republics, the United Kingdom, the United States of America, Uruguay, Venezuela, Yemen and Yugoslavia.

The full record of the Conference is contained in the Report by the Australian Delegates on the United Nations Conference on International Organization held at San Francisco, from 25th April to 26th June, 1945.

At San Francisco, an Executive Committee and a Preparatory Commission were established, and when these bodies had completed their work of preparation for the first meeting of the United Nations, the General Assembly met in London on 10th January, 1946.

The principal organs of the United Nations are the General Assembly, the Security Council, the Economic and Social Council, the Trusteeship Council, the International Court of Justice, and the Secretariat.

2. **General Assembly.**—This is the forum of the United Nations. In it, each member state is represented and has one vote. It meets in regular annual sessions and has provision for special sessions. With the exception of disputes which are before the Security Council and matters essentially within the domestic jurisdiction of any State, it has power to discuss any matter within the scope of the Charter and to make recommendations upon it. The assembly elects the non-permanent members of the other major organs and considers annual reports from them. Upon the recommendation of the Security Council, it may expel a member which has persistently violated the principles of the Charter.

3. **The Security Council.**—This has the primary responsibility for the maintenance of international peace and security. It is composed of five permanent members, namely China, France, the United Kingdom, the Union of Soviet Socialist Republics and the United States of America, and six non-permanent members with two-year periods of office, of whom three retire at the end of each year. At the initial election three countries, including Australia, were elected for a term of two years and three others for a term of one year only. The following are the non-permanent members of the Security Council at present*: Australia and Cuba (whose terms commenced on 1st January, 1956), the Philippines (elected for a one year term commencing 1st January, 1957 following the resignation of Yugoslavia) and Colombia, Iraq and Sweden (whose terms commenced on 1st January, 1957). On procedural matters, decisions are taken by an affirmative vote of any seven members. But on all other matters, decisions can only be made on the affirmative vote of seven members, including the concurring votes of all the permanent members. However, the powers which are parties to a dispute for peaceful settlement do not vote.

The Security Council is assisted by a Military Staff Committee consisting of the Chiefs of Staff of the permanent members of the Council or their representatives.

4. **The Economic and Social Council.**—This body consists of eighteen members, each elected for a period of three years. Its main functions are to make, or initiate, studies and reports, and to make recommendations to the General Assembly or to members of the United Nations, upon international, economic, social, cultural, educational, health and related matters. It may make recommendations for the purpose of promoting respect for, and observance of, human rights and fundamental freedoms for all.

The present* members of the Economic and Social Council are: France, China, Egypt, Argentina, the Dominican Republic and the Netherlands (retiring 1957); Brazil, Canada, Greece, Indonesia, the United States of America and Yugoslavia (retiring 1958); and the United Kingdom, the Union of Soviet Socialist Republics, Pakistan, Mexico, Poland and Finland (retiring 1959).

5. **The Trusteeship Council.**—The Charter declares the political, social, cultural and economic advancement of the Trusteeship Territories to be a sacred trust. A Trusteeship Council has been set up composed of those members of the United Nations who are administering trust territories and an equal number of members who are not administering trust

* April, 1957.

territories (including any permanent members of the Security Council who are not administering trust territories). Territories which may be placed under trusteeship in accord with individual trusteeship agreements are those previously held under mandate, those detached from enemy states as a result of the 1939-45 War and those dependent territories placed under the system by the states responsible for their administration. Australia is automatically a member of the Trusteeship Council, as the Power administering the Trust Territories of New Guinea and Nauru. The present* members of the Trusteeship Council are: Australia, Belgium, France, Italy, New Zealand, the United Kingdom, the United States of America (administering States), and Burma, China, Guatemala, Haiti, India, Syria and the Union of Soviet Socialist Republics. China and the Union of Soviet Socialist Republics are members of the Trusteeship Council by virtue of their permanent membership of the Security Council.

The Council has among its duties the consideration of annual reports submitted by the trustee state, the carrying out of periodic inspections by agreement with it, and the formulation of questionnaires on the welfare and advancement of the dependent peoples.

6. The International Court of Justice.—This consists of fifteen judges, no two of whom may be nationals of the same state. Its jurisdiction comprises all cases which the parties refer to it, and all matters especially provided for in the Charter or in treaties and conventions in force. Provision exists in the Statute of the Court whereby States, parties to the Statute, may accept the jurisdiction of the Court as compulsory, either conditionally, or unconditionally in certain international disputes.

The present* members of the Court are: Judges Badawi (Egypt), Wellington Koo (China), Read (Canada), Winiarski (Poland), Zorivic (Yugoslavia)—all retiring in 1958; Judges Hackworth (United States of America), Sir Zafrullah Khan (Pakistan), Klaested (Norway), Kojevnikov (U.S.S.R.), and Armand-Ugon (Uruguay)—all retiring in 1961; and Judges Lauterpacht (United Kingdom), Basdevant (France), Guerrero (El Salvador), Cordova (Mexico), and Quintana (Argentina)—all retiring in 1964.

Judge Koo was elected to replace Judge Hsu Mo (China) who died in 1956.

7. The Secretariat.—The Secretary-General is the head of the Secretariat of the organization. He is appointed by the General Assembly upon the recommendation of the Security Council, and he appoints his staff in accordance with the rules approved by the General Assembly. Mr. Trygve Lie (Norway) was appointed first Secretary-General, and at the Sixth Session of the General Assembly in 1950 was re-appointed for three further years as from 1st February, 1951. In November, 1952, Mr. Lie announced his intention of retiring and in April, 1953, Mr. Dag Hammarskjold (Sweden) was appointed in his place.

8. Specialized Agencies.—In addition to these organs of the United Nations there are specialized agencies which co-operate closely with the United Nations in many fields on economic and social questions.

Those now† in operation are: The International Labour Organization; Food and Agriculture Organization; United Nations Educational, Scientific and Cultural Organization; International Civil Aviation Organization; International Bank for Reconstruction and Development; International Monetary Fund; Universal Postal Union; World Health Organization; International Telecommunication Union; World Meteorological Organization.

To enable co-ordination of the work of the specialized agencies, arrangements have been made for them to submit reports on their activities and budgets to the United Nations where they are discussed by the Economic and Social Council and the General Assembly.

§ 16. Australian Representation Abroad : Oversea Representation in Australia.

1. General.—The following statements show particulars of the various Australian diplomatic and other representatives overseas and of overseas representatives in Australia at 31st August, 1957. Full details of Commonwealth and foreign representation in Australia—diplomatic and consular—and of permanent Australian missions overseas may be obtained from publications issued by the Department of External Affairs, Canberra. A statement is issued each quarter by the Department of Trade, showing the latest particulars of the Australian Trade Commissioner Service overseas.

2. Australian Representation Overseas. —

AUSTRALIAN DIPLOMATIC AND OTHER REPRESENTATIVES OVERSEAS.

Her Majesty's Australian Ambassador Extraordinary and Plenipotentiary to—

Burma (Rangoon)—C. T. Moodie.

France (Paris)—A. T. Stirling, C.B.E.

Germany, Federal Republic of (Bonn)—P. Shaw.

Indonesia (Djakarta)—L. R. McIntyre, O.B.E.

* April, 1957.

† December, 1956.

Ireland (Dublin)—(Vacant); S. Jamieson (Chargé d'Affaires *ad interim*).
Japan (Tokyo)—Sir Alan Watt, C.B.E.
The Netherlands (The Hague)—H. A. McClure-Smith.
The Philippines (Manila)—K. C. O. Shann.
Thailand (Bangkok)—J. K. Waller, O.B.E.
United States of America (Washington, D.C.)—The Hon. Sir Percy Spender, K.B.E., Q.C.

Her Majesty's Australian Envoy Extraordinary and Minister Plenipotentiary to—
Brazil (Rio de Janeiro)—(Vacant); R. H. Gilman (Chargé d'Affaires *ad interim*).
Cambodia (Phnom Penh)—F. H. Stuart.
Israel (Tel Aviv)—B. C. Ballard.
Italy (Rome)—D. P. McGuire, C.B.E.
Laos (Vientiane)—F. J. Blakeney.
Vietnam (Saigon)—F. J. Blakeney.

High Commissioners for Australia in—
Canada (Ottawa)—W. R. Crocker, C.B.E.
Ceylon (Colombo)—A. J. Eastman.
India (New Delhi)—P. R. Heydon.
Malaya, Federation of (Kuala Lumpur)—T. K. Critchley.
New Zealand (Wellington)—Vice-Admiral Sir John Collins, K.B.E., C.B.
Pakistan (Karachi)—Major-General W. J. Cawthorn, C.B., C.I.E., C.B.E.
Union of South Africa (Cape Town)—(Vacant); H. Gilchrist (Acting High Commissioner).
United Kingdom of Great Britain and Northern Ireland (London)—The Rt. Hon. Sir Eric Harrison, K.C.V.O.

Australian Military Mission—
Germany, Federal Republic of (Berlin)—Head, P. Shaw.

Australian Mission—
United Nations (New York)—Ambassador, Dr. E. R. Walker, C.B.E.
United Nations (Geneva)—Permanent Representative, G. A. Jockel.

Australian Commissioner in—
Singapore, Brunei, Sarawak and North Borneo (Singapore)—R. L. Harry.

Consuls-General—
Greece (Athens)—J. J. B. Cliffe.
Switzerland (Geneva)—G. A. Jockel.
United States of America (New York)—The Hon. Sir Josiah Francis.
United States of America (San Francisco)—M. H. Marshall.

Consuls—
Denmark (Copenhagen)—G. T. Pretyman.
New Caledonia (Noumea)—Dr. J. S. Cumpston, E.D.
Portugese Timor (Dili)—F. J. A. Whittaker.
United States of America (New York)—J. E. Ryan.

Trade Commissioner Service of the Commonwealth of Australia—
British West Indies—B. T. Connolly (Port of Spain).
Burma—L. C. Holmes, Commercial Secretary and Acting Trade Commissioner (Rangoon).
Canada—C. L. Steele (Montreal); H. Wrigley, C.B.E., M.C., E.D. (Vancouver).
Central African Federation—H. M. Le Marchand (Salisbury).
Ceylon—M. F. Roberts (Colombo).
France—A. R. Taysom, Commercial Counsellor and Trade Commissioner (Paris).
Germany, Federal Republic of—R. R. Ellen, Commercial Counsellor and Trade Commissioner (Bonn).
Hong Kong—K. T. Ridley (Hong Kong).
India—F. R. Gullick (New Delhi); J. L. Chapman (Calcutta); D. L. Crawford (Bombay).
Indonesia—D. R. McPhee, O.B.E., E.D., Commercial Counsellor and Trade Commissioner (Djakarta).
Italy—H. K. H. Cook, Commercial Counsellor and Trade Commissioner (Rome).
Japan—N. F. Stuart, Commercial Counsellor and Trade Commissioner (Tokyo).
Malaya, Federation of—W. Cairns (Kuala Lumpur).
New Zealand—W. R. Hudspeth (Wellington); B. G. Dawson (Auckland); H. Sullivan (Christchurch).
Pakistan—R. K. Scott, Commercial Counsellor and Trade Commissioner (Karachi).
Philippines, The—E. E. Jarvis, Commercial Counsellor and Trade Commissioner (Manila).
Singapore—P. R. Searcey (Singapore).
Union of South Africa—S. D. Shubart, Commercial Counsellor and Trade Commissioner (Johannesburg).

United Kingdom of Great Britain and Northern Ireland—G. R. B. Patterson, Senior Trade Commissioner; E. B. Gilbert (London).

United States of America—A. C. B. Maiden, Commercial Counsellor and Acting Trade Commissioner; J. B. Todd, Commercial Counsellor (Washington); A. J. Day (New York); W. D. Hardy (San Francisco).

3. **Oversea Representation in Australia.**—Consular representatives are not included in the following statement. Particulars of these are contained in a publication *Consular Representatives and Trade Commissioners in Australia*, issued by the Department of External Affairs, Canberra. There are more than 180 such representatives in Australia, and 53 countries are represented.

DIPLOMATIC REPRESENTATIVES IN AUSTRALIA.

Ambassador Extraordinary and Plenipotentiary of—

Burma—(Vacant); U Htoon Shein (Chargé d'Affaires *ad interim*) (Canberra U 1451).

China—(Vacant); Dr. Chen Tai Chu (Charge d'Affaires *ad interim*) (Canberra U 2368).

France—His Excellency Monsieur R. Sivan (Canberra X 2925).

Germany, Federal Republic of—His Excellency Dr. Walther Hess (Canberra X 3575).

Indonesia—His Excellency, Dr. A. Y. Helmi (Canberra U 1221).

Ireland—(Vacant); Mr. William B. Butler (Chargé d'Affaires *ad interim*) (Canberra J 3251).

Japan—His Excellency Mr. Tadakatsu Suzuki (Canberra U 1251).

The Netherlands—His Excellency Mr. A. M. L. Winkelman (Canberra U 1256).

The Philippines—His Excellency Dr. Jose F. Imperial (Sydney FL 4168).

Thailand—His Excellency Nai Konthi Suphamongkhon (Canberra, U 8101).

United States of America—His Excellency Mr. William J. Sebald (Canberra U 1351).

Envoy Extraordinary and Minister Plenipotentiary of—

Austria—Dr. J. Manz (Chargé d'Affaires) (Canberra U 8167).

Belgium—His Excellency Monsieur Jean Querton (Sydney FB 1325).

Brazil—His Excellency Senhor L. A. Borges da Fonesca (Canberra X 2680).

Chile—Senor Don Juan Domeyko (Chargé d'Affaires) (Sydney FU 3353).

Denmark—(Vacant); Mr. F. Henning Hergel, O.B.E. (Chargé d'Affaires *ad interim*) (Sydney BW 3547).

Finland—(Vacant); Mr. P. I. Simelius (Chargé d'Affaires) (Sydney FM 3116).

Greece—His Excellency Monsieur G. K. A. Christodoulo (Canberra J 3159).

Israel—His Excellency Mr. Mordekhai Nurock (Sydney BW 2082).

Italy—His Excellency Signor Silvio Daneo (Canberra J 3263).

Sweden—His Excellency Mr. C. A. Y. R. Bergenstrahle (Canberra U 1421).

High Commissioner for—

Canada—His Excellency Mr. T. W. L. MacDermot (Canberra U 1304).

Ceylon—His Excellency Mr. P. R. Gunasekara (Canberra X 1021).

India—His Excellency Shri Parakat Achutha Menon (Canberra J 3209).

Malaya, Federation of—His Excellency Mr. Gunn Lay Teik, O.B.E. (Canberra X 1277).

New Zealand—His Excellency Mr. G. E. L. Alderton, C.M.G. (Canberra U 1030).

Pakistan—His Excellency Lieutenant-General Mohammed Yousuf (Sydney BL 3394).

Union of South Africa—His Excellency Mr. A. A. M. Hamilton (Canberra U 2370).

United Kingdom of Great Britain and Northern Ireland—His Excellency The Right Honorable Lord Carrington, M.C. (Canberra U 2211.)

Commissioner for—

Malta—Captain George F. L. Stivala; O.B.E. (Melbourne MU 1291).

TRADE COMMISSIONERS OF OVERSEA GOVERNMENTS IN AUSTRALIA.

Canada—Senior Canadian Government Trade Commissioner—Mr. J. C. Britton (Sydney BW 5696-7).

Canadian Government Trade Commissioner—Mr. T. G. Major (Melbourne MU 4716).

India—Indian Trade Commissioner—Mr. H. A. Sujan (Sydney BW 9518).

New Zealand—Senior New Zealand Government Trade Commissioner—Mr. J. A. Malcolm (Sydney BL 3941).

New Zealand Government Trade Commissioners—Mr. R. J. Inglis (Melbourne MU 8111); Messrs. E. J. Sutch and T. A. Foley (Sydney BL 3941).

*United Kingdom of Great Britain and Northern Ireland—United Kingdom Senior Trade Commissioner—Mr. H. J. Gray, C.M.G. (Canberra U 2211).
United Kingdom Trade Commissioners—Mr. N. L. Hibbs (Canberra U 2211); Messrs. A. R. Bruce, O.B.E., A. Hartland, O.B.E., and L. F. Hope (Sydney BW 8086); Messrs. A. R. Starck, O.B.E. and G. J. Husted (Melbourne MU 5556); Mr. R. Fell (Brisbane B 3207); Mr. J. D. Leithead (Perth BA 2042).*

§ 17. Retail Trade.

1. **General.**—The statistics in this section relate to the number of retail establishments throughout Australia and the turnover of these establishments.

Information of this nature was first collected in respect of the year ended 30th June, 1948, by a full Census of all retail establishments. As this was the first Census of its type in Australia, its scope and the data sought were the minima consistent with the objective of securing a record of the number of such establishments, their type, their geographical distribution, their aggregate sales of goods and a simple commodity dissection together with a record of the value of certain services provided. This Census was followed by a second Census of all retail establishments trading during the year ended 30th June, 1949.

A third Census was taken for the year ended 30th June, 1953, in which retailers were asked to furnish more detailed information concerning the dissection of their turnover into commodity groups and questions were asked about stocks of goods on hand, the number of persons engaged in the business and credit sales.

A further Census was taken in respect of the year ended 30th June, 1957 and tabulation of the results is proceeding.

In general terms, the Censuses covered those establishments which normally sell goods by retail in shops, rooms, kiosks and yards. Certain types of establishments which sell services by retail (including repairs and materials therein) were also included, e.g., boot repairers, hairdressers, motor garages and service stations and cafés. The Censuses included the retail sales of those factories or wholesalers who conducted a regular retail business, but excluded those who only occasionally sold goods by retail. Both new and second-hand goods were included in sales recorded by relevant retail establishments.

During the period between Censuses, variations in the value of retail sales have been measured by means of quarterly sample surveys. Annual totals derived from these surveys and some of the results of the 1952–53 Census are contained in this section.

2. **Value of Retail Sales in Each Commodity Group, 1948–49 and 1950–51 to 1955–56, Australia.**—The following table shows the value of retail sales of goods in each of the commodity groups specified in the years 1948–49 and 1950–51 to 1955–56 on a comparable basis throughout. The figures for the years 1948–49 and 1952–53 were obtained from Censuses taken in respect of those years, whereas figures for the other years shown are estimates based on sample surveys.

VALUE OF RETAIL SALES: COMMODITY GROUPS, AUSTRALIA.
(£ million.)

Commodity Group.	Year ended 30th June—						
	1949.(a)	1951.(b)	1952.(b)	1953.(a)	1954.(c)	1955.(c)	1956.(b)
Groceries	143.4	186.1	232.9	261.5	275.1	306.0	335.0
Butchers' Meat	65.3	92.3	118.7	127.8	133.9	146.6	159.0
Other Food(d)	116.6	155.5	187.8	206.8	223.7	245.8	270.1
<i>Total Foodstuffs</i>	<i>325.3</i>	<i>433.9</i>	<i>539.4</i>	<i>596.1</i>	<i>632.7</i>	<i>698.4</i>	<i>764.1</i>
Beer, Wine and Spirits	95.3	123.2	153.9	173.0	186.7	202.1	218.9
Clothing, Drapery, Piece-goods and Footwear	237.8	328.5	351.6	355.1	387.6	421.5	438.8
Hardware(e)	55.7	91.2	109.6	113.8	124.7	142.5	153.3
Electrical Goods	33.8	64.7	77.5	75.8	91.2	99.6	105.5
Furniture	46.4	76.9	76.1	72.8	81.0	86.5	90.9
Other Goods(f)	167.9	252.4	307.5	315.5	336.9	364.6	391.6
<i>Total (excluding Motor and Vehicles, etc.)</i>	<i>962.2</i>	<i>1,370.8</i>	<i>1,615.6</i>	<i>1,702.1</i>	<i>1,840.8</i>	<i>2,015.2</i>	<i>2,163.1</i>
<i>Motor Vehicles, Parts, Petrol, etc.(g)</i>	<i>166.1</i>	<i>382.0</i>	<i>433.3</i>	<i>417.3</i>	<i>491.1</i>	<i>579.5</i>	<i>641.3</i>

(a) Census figures. (b) Survey figures. (c) Survey figures revised since previous issue. (d) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, cooked provisions, fish, etc., but excludes some delivered milk and bread. (e) Excludes basic building materials (e.g., timber, roofing tiles, bricks, etc.). (f) Includes tobacco, cigarettes, etc., newspapers, books and stationery, chemists' goods, grain and produce, jewellery, office equipment, etc. (g) Excludes farm machinery and implements, earth-moving equipment, etc.

In the foregoing table, figures for the years ended 30th June, 1949 to 1952, relate to establishments with total retail sales of £50 or more; for the years ended 30th June, 1953 to 1956, they relate to establishments with total retail sales of £500 or more. The total amount of retail sales of establishments so excluded in 1952-53 was not significant (less than 0.1 per cent. of total), and their omission does not affect the validity of the comparisons shown.

3. **Takings for Certain Services, Australia.**—The following table shows the amounts of "Other takings" recorded for the services specified in respect of establishments covered by the Retail Censuses of 1948-49 and 1952-53. The figures for the year ended 30th June, 1949 relate to establishments with "Other takings" of £50 or more recorded for the services specified; for the year ended 30th June, 1953, they relate to establishments with retail sales or "Other takings" of £500 or more. The amount of "Other takings" of establishments so excluded in 1952-53 was less than one per cent. of total takings shown for Repair Work Done and Meals in Cafés, Restaurants, etc., and less than three per cent. of total takings shown for Hairdressing.

TAKINGS FOR CERTAIN SERVICES, AUSTRALIA.
(£'000.)

Service.	1948-49.	1952-53.
Repair, Servicing and Maintenance Work Done(a)—		
Motor	25,273	56,864
Other	9,365	16,088
<i>Total</i>	<i>34,638</i>	<i>72,952</i>
Meals in Cafés, Restaurants, etc.	21,256	32,765
Meals and Accommodation in Hotels	13,976	24,936
Hairdressing	6,684	9,883

(a) Includes value of materials used and cost of labour,

4. **Number of Establishments with Sales in each Commodity Group, 1952-53, States.**—The following table shows the number of establishments with sales in each of the commodity groups specified during the year ended 30th June, 1953, for each State. Many establishments recorded sales in more than one commodity group. Thus the aggregate of the number of establishments by commodity group is greater than the total number of individual establishments.

NUMBER OF RETAIL ESTABLISHMENTS WHICH SOLD GOODS IN EACH COMMODITY GROUP: STATES, 1952-53.(a)

Commodity Group.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Foodstuffs—</i>									
<i>Groceries (including Bacon, Butter, etc.)</i>	11,650	7,181	4,447	2,700	2,320	1,227	50	36	29,611
Butchers' Meat	2,833	2,120	1,150	826	606	346	10	12	7,903
Fresh Fruit and Vegetables	6,124	3,113	3,132	1,356	1,587	889	25	18	16,244
Bread, Cakes and Pastry	8,160	4,665	3,552	1,830	1,587	657	18	26	20,495
Confectionery, Ice Cream, Soft Drinks (including Milk Drinks)	12,226	7,246	4,860	2,798	2,617	1,284	44	33	31,108
Other Food (Fish, Poultry, Cooked Meats, Wrapped Lunches, etc.)	5,496	2,689	1,923	1,264	1,160	288	9	20	12,849
<i>Beer, Tobacco, etc.—</i>									
Beer, Wine and Spirits	3,004	2,191	1,400	709	734	318	35	25	8,416
Tobacco, Cigars and Cigarettes	17,013	10,080	6,543	3,714	3,539	1,689	60	58	42,696
<i>Clothing, Drapery, etc.—</i>									
<i>Clothing—</i>									
Men's and Boys' Wear	2,861	2,188	1,384	999	957	412	41	18	8,860
Women's, Girls' and Infants' Wear (including Hand Bags)	4,297	3,484	1,417	1,092	925	459	35	22	11,731
Drapery, Piece-goods, Manchester and Soft Furnishings	2,343	1,699	1,099	847	786	295	31	14	7,114
Footwear—									
Men's and Boys'	1,878	1,399	1,030	721	614	347	31	12	6,032
Women's, Girls' and Infants'	1,761	1,258	851	654	557	305	24	12	5,422
<i>Hardware, Electrical Goods, Furniture—</i>									
Builders' Hardware and Supplies (including Tools of Trade)(b)	1,715	1,472	806	664	692	172	14	13	5,548
Domestic Hardware, Kitchenware, China and Glassware	3,235	2,428	1,464	1,278	1,120	445	32	15	10,017
Domestic Refrigerators, Electrical Goods and Accessories, Radios and Musical Instruments	2,530	1,929	1,167	872	914	301	19	15	7,747
Furniture (including Bedding)	1,113	962	518	394	419	147	13	9	3,575
Floor Coverings	820	666	310	311	261	135	(c)	(c)	2,511
Business Machines and Equipment	120	80	77	38	58	22	(c)	(c)	398

For footnotes see next page.

NUMBER OF RETAIL ESTABLISHMENTS WHICH SOLD GOODS IN EACH COMMODITY GROUP: STATES, 1952-53(a)—continued.

Commodity Group.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Other Goods—</i>									
Newspapers, Periodicals, Books and Stationery ..	3,510	2,667	2,014	1,209	1,021	484	25	14	10,944
Chemists' Goods (including Toiletries, Cosmetics and Dispensing) ..	4,052	2,394	1,814	1,088	1,315	432	36	15	11,146
Sporting and Travel Goods ..	1,494	1,062	686	448	461	157	15	10	4,333
Jewellery, Watches, Clocks, Silverware, etc. ..	1,551	1,130	675	520	519	192	19	9	4,615
Grain, Feed, Fertilizers ..	1,527	1,066	1,029	539	604	248	(c)	(c)	5,026
Other Goods (not specified) ..	2,691	2,876	966	776	732	308	20	22	8,391
<i>Total (excluding Motor Vehicles, etc.) ..</i>	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
<i>Motor Vehicles, etc. (e)—</i>									
Tractors (including parts) ..	575	389	356	230	196	44	(c)	(c)	1,794
New Motor Vehicles (including Motor Cycles, etc.) ..	1,273	848	563	456	241	77	9	11	3,478
Used Motor Vehicles (including Motor Cycles, etc.) ..	1,267	824	612	466	293	83	(c)	(c)	3,564
Motor Parts, Accessories, Tyres, Tubes, etc. ..	2,960	2,252	1,440	1,031	947	291	27	14	8,962
Petrol, Oil, Motor Lubricants, etc.	3,899	2,891	1,943	1,252	1,049	429	31	15	11,509
Grand Total ..	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)	(f)

(a) All figures refer to establishments with total retail sales in 1952-53 of £500 or more. The number of establishments in each State with retail sales in 1952-53 of less than £500 but more than £100 was as follows:—New South Wales, 1,126; Victoria, 989; Queensland, 449; South Australia, 279; Western Australia, 294; Tasmania, 100; Northern Territory and Australian Capital Territory, 5; Total, 3,242. (b) Excludes basic building materials (e.g., timber, roofing tiles, etc.). (c) Not available for publication. (d) Not available. (e) Excludes farm machinery and implements, earth-moving equipment, etc. (f) Many establishments showed sales in more than one commodity group. Thus the number of establishments selling goods in each commodity group does not add down to the total number of individual establishments which is as follows:—New South Wales, 40,523; Victoria, 32,864; Queensland, 15,051; South Australia, 9,673; Western Australia, 7,911; Tasmania, 3,637; Northern Territory, 146; Australian Capital Territory, 180; Total, 109,985.

5. Value of Retail Sales of Goods in each Commodity Group, 1952-53, States.—The following table shows the value of retail sales of goods in each of the commodity groups specified during the year ended 30th June, 1953.

VALUE OF RETAIL SALES IN EACH COMMODITY GROUP: STATES, 1952-53.(a)
(£'000.)

Commodity Group.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Foodstuffs—</i>									
Groceries (including Bacon, Butter, etc) ..	104,479	64,727	42,357	20,549	20,670	8,687	709	827	263,005
Butchers' Meat ..	50,858	36,663	17,006	10,443	8,150	4,607	231	382	128,340
Fresh Fruit and Vegetables ..	22,157	15,854	7,104	4,437	4,420	1,582	76	99	55,729
Bread, Cakes and Pastry ..	22,529	16,940	7,607	4,789	3,563	1,999	71	149	57,647
Confectionery, Ice Cream, Soft Drinks (including Milk Drinks)	24,918	20,289	7,710	5,293	3,751	1,936	89	148	64,134
Other Food (Fish, Poultry, Cooked Meats, Wrapped Lunches, etc.) ..	12,593	8,912	3,570	2,301	1,918	555	35	128	30,012
<i>Beer, Tobacco, etc.—</i>									
Beer, Wine and Spirits ..	70,623	45,612	22,233	14,827	14,445	5,357	664	641	174,402
Tobacco, Cigars and Cigarettes	28,200	19,967	8,830	5,851	5,233	2,405	182	251	70,919
<i>Clothing, Drapery, etc.—</i>									
Clothing—									
Men's and Boys' Wear ..	36,486	25,964	12,107	8,634	6,336	3,328	135	256	93,246
Women's, Girls' and Infants' Wear (including Hand Bags)	56,515	41,914	16,780	13,589	9,403	5,761	124	386	144,472
Drapery, Piece-goods, Manchester and Soft Furnishings	27,587	18,501	10,144	6,269	4,793	2,039	94	132	69,559
<i>Footwear—</i>									
Men's and Boys' ..	6,678	4,779	2,257	1,593	1,319	659	41	51	17,377
Women's, Girls' and Infants'	12,846	9,058	3,621	2,805	2,282	1,117	24	87	31,840

For footnotes see next page.

VALUE OF RETAIL SALES IN EACH COMMODITY GROUP: STATES, 1952-53(a)—
continued.
(£'000.)

Commodity Group.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Hardware, Electrical Goods, Furniture—</i>									
Builders' Hardware and Supplies (including Tools of Trade)(b) ..	28,069	16,317	8,577	4,433	5,164	1,588	117	212	64,477
Domestic Hardware, Kitchenware, China and Glassware ..	18,372	14,172	6,000	5,325	4,127	1,580	98	166	49,840
Domestic Refrigerators, Electrical Goods and Accessories, Radios and Musical Instruments ..	28,821	20,837	10,795	7,000	6,104	2,277	99	208	76,141
Furniture (including Bedding) ..	18,090	15,081	6,040	4,972	3,348	1,555	16	155	49,257
Floor Coverings ..	8,610	7,734	2,007	2,680	1,867	882	(c)	(c)	23,859
Business Machines and Equipment ..	4,739	3,751	1,684	948	795	298	(c)	(c)	12,218
<i>Other Goods—</i>									
Newspapers, Periodicals, Books and Stationery ..	22,221	16,497	6,292	3,310	3,277	1,539	21	191	53,348
Chemists' Goods (including Toiletries, Cosmetics and Dispensing) ..	21,278	14,374	6,422	4,068	3,247	1,458	35	177	51,059
Sporting and Travel Goods	4,756	3,049	1,441	781	839	381	9	65	11,321
Jewellery, Watches, Clocks, Silverware, etc. ..	9,751	6,292	3,055	2,026	1,818	649	37	86	23,714
Grain, Feed, Fertilizers ..	17,754	11,263	6,045	2,526	6,553	1,152	(c)	(c)	45,351
Other Goods (not specified above) ..	15,801	17,776	5,285	4,314	3,852	1,756	69	84	48,937
<i>Total (excluding Motor Vehicles, etc.) ..</i>	<i>674,731</i>	<i>476,323</i>	<i>224,969</i>	<i>143,763</i>	<i>127,274</i>	<i>55,147</i>	<i>2,995</i>	<i>5,002</i>	<i>1,710,204</i>
<i>Motor Vehicles, etc.(d)—</i>									
Tractors (including parts)	5,837	5,560	6,587	3,099	3,379	820	(c)	(c)	25,306
New Motor Vehicles (including Motor Cycles, etc.)	58,830	44,635	26,049	19,339	14,950	5,840	253	249	170,145
Used Motor Vehicles (including Motor Cycles, etc.)	31,846	18,112	11,358	10,785	8,579	2,691	(c)	(c)	83,547
Motor Parts, Accessories, Tyres, Tubes, etc. ..	20,909	15,731	8,828	5,340	4,629	1,874	161	91	57,563
Petrol, Oil, Motor Lubricants, etc. ..	32,541	24,020	10,046	6,699	5,812	2,479	147	195	81,939
Grand Total ..	824,694	584,381	287,837	189,025	164,623	68,851	3,611	5,682	2,128,704

(a) All figures refer to establishments with total retail sales in 1952-53 of £500 or more. The total retail sales of the establishments with retail sales in 1952-53 of less than £500 but more than £100 were as follows:—New South Wales, £312,000; Victoria, £283,000; Queensland, £128,000; South Australia, £88,000; Western Australia, £85,000; Tasmania, £27,000; Northern Territory and Australian Capital Territory, £1,000; Total, £924,000. (b) Excludes basic building materials (e.g. timber, roofing tiles, etc.). (c) Not available for publication. (d) Excludes farm machinery and implements, earth-moving equipment, etc.

6. Number of Retail Establishments and Value of Retail Sales Classified According to Main Type of Business, 1952-53, States.—The following tables show the number of establishments and the value of retail sales made in 1952-53 in each State classified according to the main type of business. In classifying establishments by type of business, the description given by the proprietor was used as a guide but the classification was based mainly on the commodity group for which the largest item of turnover was recorded.

NUMBER OF RETAIL ESTABLISHMENTS CLASSIFIED ACCORDING TO MAIN TYPE OF BUSINESS : STATES, 1952-53.(a)

Main Type of Business.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Food Stores—</i>									
Grocers	9,698	5,284	3,756	1,889	1,837	1,042	40	23	23,569
Butchers	2,474	1,938	1,026	724	525	247	8	11	6,953
Fruiterers	2,130	1,845	458	574	295	112			5,424
Bakers	1,845	1,503	693	395	337	163	9	21	4,946
Confectioners and Milk Bars	2,053	2,802	580	578	300	203			6,526
Cafés	728	345	366	79	138	21			1,688
Fishmongers and Poulterers ..	548	421	190	93	79	21	8	8	1,354
Other Food Stores	511	521	80	146	76	19			1,356
<i>Hotels, Tobacconists, etc.—</i>									
Hotels, Wine Saloons	2,303	1,855	1,261	633	529	306	18	7	6,912
Tobacconists	536	490	206	108	143	36	(b)	(b)	1,523
Tobacconists and Hairdressers	1,058	1,126	188	284	201	71	(b)	(b)	2,931

For footnotes see next page.

NUMBER OF RETAIL ESTABLISHMENTS CLASSIFIED ACCORDING TO MAIN TYPE OF BUSINESS: STATES, 1952-53(a)—continued.

Main Type of Business.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Clothing, Drapers, etc.—</i>									
Clothing	4,106	3,502	1,175	793	657	302	13	22	10,570
Drapers, Haberdashers, etc. . .	544	465	250	138	112	16	7	20	1,531
Footwear Stores	589	621	162	158	81	55			1,674
<i>Hardware, Electrical Goods, Furniture, etc., Stores—</i>									
Domestic and Builders' Hardware Stores	1,005	1,209	433	357	314	67	6	10	3,401
Electrical Goods, Radios and Musical Instruments Stores	1,088	854	528	265	248	123	7	7	3,120
Furniture and Floor Coverings Stores	626	681	281	163	176	64	(b)	(b)	1,998
Business Machines Stores	66	47	38	24	21	17	..	..	213
<i>Other Goods Stores—</i>									
Newsagents and Booksellers	1,024	877	418	197	271	77			2,872
Chemists	1,308	1,025	406	302	201	90			3,341
Sports Goods Stores	199	140	78	26	18	15			480
Watchmakers and Jewellers	667	509	217	133	96	47	10	40	1,679
Grain and Produce Merchants	389	267	116	94	94	18			979
Cycle Stores	181	232	93	67	47	13			633
Florists and Nurserymen	396	371	67	68	65	38			1,007
Other Types of Business	839	1,218	323	254	210	114			2,974
<i>Total (excluding Motor Vehicle Dealers, etc.) ..</i>	<i>36,911</i>	<i>30,148</i>	<i>13,389</i>	<i>8,542</i>	<i>7,071</i>	<i>3,297</i>	<i>131</i>	<i>165</i>	<i>99,654</i>
<i>Motor Vehicle Dealers, etc.—</i>									
Tractor Dealers	107	57	46	30	28	11	..	..	279
New Motor Vehicle (including Motor Cycle) Dealers	250	174	129	93	86	27	(b)	(b)	763
Garages and Service Stations	2,600	2,094	1,268	821	587	243	10	11	7,634
Motor Parts and Tyre Dealers	396	219	137	98	80	47	(b)	(b)	979
Used Motor Vehicle Dealers	259	172	82	89	59	12	(b)	(b)	676
Total	40,523	32,864	15,051	9,673	7,911	3,637	146	180	109,985

(a) All figures refer to establishments with total retail sales in 1952-53 of £500 or more.

(b) Not available for publication.

VALUE OF RETAIL SALES OF GOODS CLASSIFIED ACCORDING TO MAIN TYPE OF BUSINESS: STATES, 1952-53.(a)

(£'000.)

Main Type of Business.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Food Stores—</i>									
Grocers	143,876	79,717	60,269	27,877	31,795	13,367	1,487	928	359,316
Butchers	50,557	36,728	16,923	10,469	7,994	4,562	235	382	127,850
Fruiters	20,548	16,266	4,814	4,647	3,191	1,115			50,716
Bakers	18,316	14,444	5,874	4,116	2,860	1,667	91	401	47,478
<i>Confectioners and Milk Bars</i>	<i>16,247</i>	<i>20,065</i>	<i>3,930</i>	<i>4,278</i>	<i>1,874</i>	<i>1,293</i>			<i>47,843</i>
Cafés	3,982	1,222	1,775	518	371	53			7,974
Fishmongers and Poulterers	3,663	2,537	1,151	531	642	181	53	75	8,719
Other Food Stores	5,630	5,023	556	1,292	598	184			13,344
<i>Hotels, Tobacconists, etc.—</i>									
Hotels, Wine Saloons	69,922	46,050	22,772	15,269	14,573	5,716	603	584	175,489
Tobacconists	5,825	4,490	1,906	1,592	1,089	435	(b)	(b)	15,421
Tobacconists and Hairdressers	3,827	5,368	369	1,213	614	179	(b)	(b)	11,577
<i>Clothing, Drapers, etc.—</i>									
Clothing	137,517	103,876	39,681	34,807	21,682	12,482	165	1,227	351,437
Drapers, Haberdashers, etc. . .	21,933	10,340	9,466	2,572	6,930	576	86	119	51,892
Footwear Stores	10,979	9,679	3,116	2,657	2,259	1,235			30,055
<i>Hardware, Electrical Goods, Furniture, etc., Stores—</i>									
Domestic and Builders' Hardware Stores	35,506	24,924	11,227	7,985	5,552	2,466	200	211	88,071
Electrical Goods, Radios and Musical Instruments Stores	20,587	16,273	8,592	4,797	4,704	1,838	71	156	57,018
Furniture and Floor Coverings Stores	25,368	19,625	7,887	5,663	3,523	1,904	(b)	(b)	64,228
Business Machines Stores	4,626	3,646	1,716	999	669	317	..	..	11,973

For footnotes see next page.

VALUE OF RETAIL SALES OF GOODS CLASSIFIED ACCORDING TO MAIN
TYPE OF BUSINESS: STATES, 1952-53(a)—continued.
(£'000.)

Main Type of Business.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Other Goods Stores—</i>									
Newsagents and Book-sellers	21,080	14,421	5,206	2,236	2,950	1,300			47,406
Chemists	18,150	11,911	5,377	3,159	2,354	1,115			
Sports Goods Stores .. .	2,376	1,883	700	258	224	315			5,820
Watchmakers and Jewelers	8,790	5,130	2,609	1,569	1,584	697			20,509
Grain and Produce Merchants	17,208	11,543	5,012	2,656	6,621	987			
Cycle Stores	1,177	946	543	360	262	69			3,357
Florists and Nurserymen .. .	1,941	1,979	401	395	333	260			5,312
Other Types of Business .. .	7,198	8,960	2,888	1,794	2,361	824			24,079
<i>Total (excluding Motor Vehicle Dealers, etc.)</i>	(c) 676,829	(c) 477,046	(c) 224,760	(c) 143,709	(c) 127,609	(c) 55,137	(c) 3,075	(c) 5,004	(c) 1,713,169
<i>Motor Vehicle Dealers, etc.</i>									
Tractor Dealers	3,454	2,617	3,470	1,990	1,987	666	..	..	14,184
New Motor Vehicle (including Motor Cycle) Dealers	41,366	34,835	19,115	18,110	15,099	4,554	(b)	(b)	133,463
Garages and Service Stations	75,811	53,290	32,547	17,678	13,987	7,382	219	491	201,405
Motor Parts and Tyre Dealers	6,851	5,675	2,375	2,018	1,257	522	(b)	(b)	18,738
Used Motor Vehicle Dealers	20,383	10,918	5,570	5,520	4,684	590	(b)	(b)	47,745
Total	824,694	584,381	287,837	189,025	164,623	68,851	3,611	5,682	2,128,704

(a) All figures refer to establishments with total retail sales in 1952-53 of £500 or more, and are the total value of all commodities sold by the types of business shown. (b) Not available for publication. (c) These figures differ from their counterparts in the table on p. 1076 because they include retail sales of motor vehicles, etc., made by establishments whose main type of business is other than motor vehicles, and exclude retail sales of goods other than motor vehicles, etc., made by establishments whose main type of business is motor vehicles.

7. Takings for Certain Services: States, 1952-53.—The following table shows the amounts of "Other takings" recorded for the services specified for each State in respect of the establishments covered by the Census of Retail Establishments, 1952-53. The figures relate to establishments with retail sales or "Other takings" of £500 or more.

TAKINGS FOR CERTAIN SERVICES, STATES, 1952-53.
(£'000.)

Service.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
<i>Repair, Servicing and Maintenance Work Done(a)</i>									
Motor	19,916	15,394	9,373	5,290	4,755	1,905	89	142	56,864
Other	5,565	4,125	2,406	1,654	1,551	657	17	113	16,088
Total	25,481	19,519	11,779	6,944	6,306	2,562	106	255	72,952
<i>Meals in Cafés, Restaurants, etc.</i>									
Meals and Accommodation in Hotels	14,739	8,468	4,507	1,910	2,427	584	63	67	32,765
Hairdressing	9,053	6,696	3,708	1,949	1,937	1,169	109	315	24,936
	3,974	3,024	1,023	871	719	244	7	21	9,883

(a) Includes value of materials used and cost of labour.

CHAPTER XXXI.

STATISTICAL ORGANIZATION AND SOURCES OF INFORMATION.

§ 1. Statistical Organization in Australia.

1. **Early Development of Australian Statistics.**—(i) *Crown Colony Blue Books.* Statistical organization in Australia was founded in the "Blue Books" which, in the Crown Colony days, were prepared annually for the information of the Colonial Office. Although primarily intended for administrative purposes, these documents have been important sources of statistical data, even though some important matters are not covered, and others only partially so. These "Blue Books" form the basis from which later statistical publications were developed. This led to an element of uniformity in statistical compilation within the British Empire.

(ii) *Statistical Registers.* Following the advent of Responsible Government which was granted during the period 1851–1860 to all Australian States except Western Australia—and to that State in 1890—the "Blue Book" was succeeded in all States by "Statistical Registers". These were in many respects the old "Blue Books" in a new form, and were largely confined to summaries of the "by-product" statistics of Government administrative departments.

The first example of extensive Governmental organization for purely statistical purposes was the taking of periodic population censuses, which were initiated in all States under the Crown Colony régime. The growing need for quantitative data concerning the progress of the several young communities of Australia eventually led to the appointment of official Statisticians commissioned to prepare and publish such data.

(iii) *Statistical Conferences.* To enable the interchange of ideas between States and to obtain uniform State Statistics which could be aggregated to Australian totals, conferences were held in the several States from as early as 1861. Altogether, six conferences were held prior to the formation of the Commonwealth Bureau of Census and Statistics in 1906. These were held in 1861, 1875, 1890, 1900, 1902 and 1903. The holding of these conferences has been continued since the formation of the Commonwealth Bureau, and a representative from New Zealand attended up to 1928.

2. **Creation of the Commonwealth Bureau of Census and Statistics.**—Under the provisions of section 51 of the Commonwealth Constitution, power is conferred on the Commonwealth Parliament "to make laws for the peace, order and good government of the Commonwealth with respect to—" (*inter alia*) "(XI.) Census and statistics". In compliance with this provision, the Census and Statistics Act 1905 was passed, and in 1906 the Commonwealth Bureau of Census and Statistics was created. A conference of Statisticians in 1906 defined the relations between the Commonwealth and State Bureaux, and in each case the State Statistician became the representative in his own State of the Commonwealth Statistician for the purpose of administering the Commonwealth Act. In addition, each State has its own "Statistics Act", and although these are not identical in all States, they embody common principles. The Commonwealth Bureau did not attempt to duplicate the existing statistical organization, but endeavoured to use the services of the State statistical offices whenever possible, and to undertake the initial collection of statistics only in fields not already occupied by the States, or in which efficiency demanded complete centralization.

3. **Integration of Statistical Services.**—The creation and development of the Commonwealth Bureau of Census and Statistics, the frequent conferences of Commonwealth and State Statisticians, and the close and increasing liaison between officers dealing with the same subjects in the State and Commonwealth fields, did much to promote uniformity in the official statistical collections and methods employed throughout Australia. The complete realization of this aim could not, however, be achieved, even with the utmost co-operation of those concerned, while seven distinct statistical systems operated.

This became apparent after the first world war, when the economic problems that then arose drew attention to deficiencies in the Australian statistical data. With a view to overcoming these weaknesses the Prime Minister of the day proposed to the Premiers' Conference that State statistical offices be transferred to the Commonwealth. Tasmania alone agreed

to this, and the transfer was effected in 1924. Since then, an amalgamated office has functioned satisfactorily in that State as a Commonwealth office which also serves State statistical needs.

The boom of the 1920's, the depression of the 1930's, the second world war, and the post-war boom, each with its special economic problems, imposed a severe strain on the Commonwealth and State statistical systems. Moreover, the development during and since the second world war of a very considerable volume of new statistics added greatly to the complexities of the several administrations in their efforts to secure, and maintain, uniformity in statistical collections. The establishment of Commonwealth statistical offices in some State capitals ameliorated the situation to some extent—indeed, without their establishment the new and expanded statistical collections could not have been carried out at all. However, this did not solve the problem, and constituted only one of a number of improvisations devised to obtain uniform data essential for national purposes, and to satisfy urgent demands for new types of statistics. Furthermore, the excessive amount of time and effort entailed in such improvisations made it impossible to devote the necessary time to the major questions of supplying growing statistical needs promptly.

The emergence of the problem of providing uniform statistical services throughout Australia, adequate to meet present-day demands, was foreseen during the 1939–45 War, and in 1949 discussions were initiated with the Premiers by the Prime Minister, with the object of integrating the statistical services of the Commonwealth and the States by agreement. These negotiations were continued by correspondence, and subsequently the Governments of the States of Western Australia, South Australia and New South Wales accepted the terms of draft agreements to integrate their respective statistical offices with that of the Commonwealth. In each case, an undertaking was given by the Commonwealth to introduce legislation to authorize agreements of the type to be made concerning statistical administration.

Accordingly the Statistics (Arrangements with States) Bill was introduced into the Commonwealth Parliament on 17th April, 1956, its purpose being to seek parliamentary approval of the making of arrangements with individual States for, and the setting up of, integrated statistical services. The legislation is permissive in nature, designed to enable the Commonwealth to enter into an agreement with any State to effect an amalgamation of Commonwealth and State statistical offices and services. The objective of such an agreement is that, in each State accepting it, there will be an integrated statistical service operated by Commonwealth statistical officers under the immediate direction of a statistician in the State who would hold office under both the Commonwealth and State governments. Both Commonwealth and State will be adequately served with statistics, and no State will be required to surrender its existing powers in the field of statistics. The rights of officers transferred under any agreement entered into are provided for. After passing through the usual stages of Parliament, the bill became law on 12th May, 1956.

Agreements authorized under the Act have been made with the States of New South Wales, South Australia and Western Australia, taking effect from 30th August, 11th April and 5th July, 1957, respectively. As stated above, an integrated statistical office has operated in Tasmania since 1924.

4. Scope of the Commonwealth Bureau of Census and Statistics.—The scope of the Commonwealth Bureau of Census and Statistics has constantly been widened, more particularly during the 1939–45 War, when the Bureau responded to the urgent demands of administration for immediate and accurate statistical information in various fields. Since the war, requirements in the administrative, industrial, financial and scientific spheres have led to the development of many new statistical collections. All the activities of the Bureau are covered by the Census and Statistics Act, which confers authority to collect information and contains stringent provisions to ensure that the information obtained is treated, in strictest secrecy.

For administrative purposes the Commonwealth Bureau is divided into a number of Divisions. These are:—Census, Compiling, Development, Publications, Social Accounting and Administrative.

(a) *Census Division.* This Division of the Bureau is responsible for the taking of periodic population censuses and the tabulation, summarization and preparation for publication of the results obtained.

(b) *Compiling Division.* The Compiling Division is divided into the following Branches which compile statistics dealing with specific fields of activity:—

Trade and Transport Branch—Responsible for the original compilation, tabulation and analysis of statistics relating to imports and exports, and for the compilation of statistics relating to road and rail transport, aviation, shipping, posts and telegraphs, telephones and wireless.

Prices Branch—Deals with the collection of retail and wholesale prices and the compilation of retail and wholesale price index numbers. A staff of trained field officers is maintained in the several States to facilitate the collection of accurate information.

Employment and Labour Branch—Compiles all employment estimates, wage and labour statistics.

Primary Production Branch—Deals with statistics relating to agricultural and pastoral activities, mining, forestry and fishing. Original data are largely supplied by State Statisticians.

Secondary Production Branch—Compiles all factory statistics both annual and monthly. Collates on a Commonwealth basis original annual data supplied by State Statisticians.

Finance and Taxation Branch—Compiles statistics of private finance (banking, insurance, exchange rates, etc.), public finance (Commonwealth, State and Local and Semi-Governmental authorities), and statistics relating to all aspects of Commonwealth taxation.

Demography Branch—Concerned with statistics of births, deaths, marriages and migration, and is responsible for periodic estimates of population.

(c) *Development Division.* This Division was created in order to develop new statistical collections to meet post-war demands for more adequate and up-to-date statistics, and also to examine current collections in the light of such requirements. It is divided into three Branches, namely:—

Sampling Techniques Branch—Undertakes the development and application of sampling procedures to statistical collections and furnishes technical advice to branches and other Government departments.

Development Branch—Develops new statistical collections and examines current collections in the light of present day requirements. Compiles social statistics.

Business Statistics Branch—Conducts censuses and surveys and analyses statistics relating to internal trade (retail), business and hire purchase activities, and company investments and profits.

(d) *Publications Division.* This Division is responsible for the scrutiny, editing and graphical illustration of all Bureau publications, and, in collaboration with other Divisions, for the initiation, development and co-ordination of statistical publications. It also maintains a regular flow of statistical series to certain international organizations, and revises statistical material in certain oversea and local publications.

(e) *Social Accounting Division.* This Division undertakes research into the theoretical and practical problems of social accounting. It is divided into three branches as follows:—

Balance of Payments Branch—collects and analyses statistics on Australia's balance of international payments.

National Income and Expenditure Branch—prepares estimates of national income and expenditure.

Quantum Indexes Branch—undertakes research into quantum of production.

(f) *Administrative Division.* The Administrative Division is responsible for all aspects of staff recruitment and direction, supplies, payment of accounts, etc. The Reproduction Section of the Division is equipped with multilith and duplicating machines for processing statistical statements for more immediate requirements. In addition, a special section of this Division is responsible for the examination of statistical methods and systems and the co-ordination of all statistics in Commonwealth Departments (*see* para. 5 below). The Mechanical Tabulation Branch and the specialized library of official and unofficial publications on statistics and economics are controlled by the Administrative Division. The Mechanical Tabulation Branch is equipped with modern tabulating equipment and is responsible for all machine tabulating work required by other Divisions of the Bureau with the exception of the Census Division.

5. *Relation of the Bureau to other Commonwealth Departments.*—In October, 1950, the Commonwealth Public Service Board issued a circular relative to the compilation of statistics in other Commonwealth Departments, in which it stated that the Commonwealth

Statistician should be the co-ordinating authority on all statistics in Commonwealth Departments, and that, as a general principle, where any new statistical field is to be established involving the regular collection of statistics, the Commonwealth Statistician should be consulted to ensure that they are necessary and that they are based on sound statistical methods; furthermore, that the Commonwealth Statistician should make a regular inspection, at least once every twelve months, of all statistical work done by Departments to ensure that their needs are met by the most economical means and without duplication of effort.

This project of co-ordination is being implemented as time and circumstances permit.

§ 2. Statistical Publications of Australia.

1. **General.**—The official statistical publications of Australia may be divided bibliographically into two main divisions, namely:—(i) Commonwealth publications dealing both individually and collectively with the several States of Australia; and (ii) State publications dealing with individual States only.

2. **Commonwealth Publications.**—Commonwealth publications may be grouped under two heads, namely:—(i) Publications issued by the Commonwealth Statistician; and (ii) Parliamentary and Departmental Reports and Papers.

(i) *Publications issued by the Commonwealth Statistician.* The following is a list of the principal statistical publications issued from the Commonwealth Bureau of Census and Statistics since its inauguration to June, 1957:—

Australian Balance of Payments.—Statements Nos. 1 to 3, 1928–29 to 1951–52.

Australian Life Tables, 1901–1910. *Australian Joint Life Tables, 1901–1910.*

Australian Life Tables, 1920–1922.

Australian Life Tables, 1932–1934. *Australian Joint Life Tables, 1932–1934.*

Australian Life Tables, 1946–1948.

Australian Mineral Industry Statistics (formerly *Minerals and Metals Bulletin*).—Part 2 of Quarterly Bulletin issued jointly with the Bureau of Mineral Resources.

Australian Primary Industries.—Report prepared for the Empire Producers Conference, Sydney, March, 1938.

Census (1911) Results.—Bulletins. Vols. I. (Statistician's Report), II., and III., with Appendix "Mathematical Theory of Population."

Census (1921) Results.—Bulletins, Nos. 1 to 26. Parts I. to XVI., forming Vol. I., and Parts XVII. to XXIX., forming, with the Statistician's Report, Vol. II. NOTE.—Part XXVII., Life Tables.

Census (1933) Results.—Bulletins, Nos. 1 to 25. Parts I. to XIV., forming Vol. I., Parts XV. to XXVIII., forming Vol. II., and Parts XXIX. to XXXVII., forming, with Statistician's Report and Australian Life Tables 1932–1934, Vol. III.

Census (1947) Results.—Bulletins, Nos. 1 to 25. Parts I. to XVI., forming Vol. I., Parts XVII. to XIX., forming Vol. II., and Parts XX. to XXVIII., forming, with Statistician's Report and Australian Life Tables 1946–1948, Vol. III.

Census (1954) Results.—See Price List at end of volume.

Census of Motor Vehicles, 31st December, 1955.—Bulletins, Nos. 1 to 8.

* *Census of Retail Establishments (1947–48) Results.*—Bulletins, Nos. 1 to 7.

* *Census of Retail Establishments (1948–49) Results.*—Bulletins, Nos. 1 to 7.

* *Census of Retail Establishments (1952–53) Results.*—Bulletins, Nos. 1 to 14.

* *Dairying Industry* (formerly *Summary of Dairying Industry*).—Statistical Bulletin, monthly; first issue, September, 1937.

Demography, 1911 to 1955 annually.

* *Factories, Principal Statistics, Summary.*—Annually, 1948–49 to 1955–56.

Finance.—Bulletins 1907 to 1916–17 annually; 1917–18 and 1918–19 (one vol.); 1919–20 and 1920–21 (one vol.); 1922–23 to 1955–56 annually.

* *Food Production and the Consumption of Foodstuffs and Nutrients in Australia, Statistical Bulletin.* Half-yearly, 1946–47 to 1947–48; annually, 1948–49 to 1954–55.

* *Fruit Growing Industry Summary.*—Annually, 1944–45 to 1955–56.

Labour and Industrial Statistics.—Memoranda and Reports, various, to 1913.

Labour Report.—Annually, 1913 to 1954.

* Obtainable from Commonwealth Statistician—for methods of obtaining other publications still in print see back page of this volume.

- **Livestock Numbers* (formerly *Summary of Livestock Statistics*).—Statistical Bulletin, annually, 1943 to 1956.
- Local Government in Australia*.—July, 1919.
- **Manufacturing Industries*.—Bulletins on Individual Industries, annually, 1936–37 to 1939–40, 1940–41 (issue incomplete), and 1944–45 to 1955–56.
- **Monthly Review of Business Statistics*.—First issue, October, 1937.
- **Occupation Survey (1945) Results*.—Detailed tables.
- Official Year Book of the Commonwealth of Australia*.—Annually, 1907 to present issue (No. 43). Issues Nos. 40 to 43 also published in parts.
- Oversea Trade*.—Bulletins, annually, 1906 to 1955–56.
- **Oversea Trade*.—Preliminary Bulletins. Annually, 1952–53 to 1956–57.
- **Oversea Trade Statistics: Imports Cleared for Home Consumption classified according to Individual Items of the Customs Tariff, 1950–51 to 1955–56*.
- Pocket Compendium of Australian Statistics* (formerly *Statistical Digest*).—1913, 1914, 1916, and 1918 to 1957 annually.
- Population and Vital Statistics*.—Bulletins and Reports, various, 1906–1910.
- Primary Industries*.—Bulletin, annually, 1950–51 to 1954–55, in two parts; Part I. Rural Industries; Part II. Non-Rural Industries and Value of Production.
- Production*.—Bulletin, annually, 1906 to 1949–50. From 1936–37 to 1949–50 issued in two parts.—Part I. Secondary Industries; Part II. Primary Industries (including Total Recorded Production); thereafter separate Bulletins (see *Primary Industries and Secondary Industries*).
- Professional Papers*.—Various. A full list appears in *Official Year Book No. 13*, p. 3.
- Quarterly Summary of Australian Statistics*.—First issue, No. 70, December, 1917, replacing *Monthly Summary of Australian Statistics* (Bulletins Nos. 1 to 69).
- **Report of Proceedings of the Conference of British Commonwealth Statisticians, 1951*.
- **Rural Land Use and Crop Statistics* (formerly *Summary of Crop Statistics*).—Statistical Bulletin, annually, 1943–44 to 1955–56.
- Secondary Industries*.—Bulletin, annually, 1950–51 to 1954–55.
- Social Insurance*.—Report to the Hon. the Minister for Trade and Customs, 1910.
- Social Statistics*.—Bulletins, 1907 to 1915 annually, and 1918.
- Superannuation for the Commonwealth Public Service*.—Report to the Hon. the Minister for Home Affairs, 1910.
- **Survey of Motor Vehicles (1947–48) Results*.—Bulletins Nos. 1 to 7.
- **Survey of Private Superannuation Schemes 1951–52* (reprinted in *Finance Bulletin No. 44*).
- Transport and Communication*.—Bulletins, 1906, 1908 to 1916 annually, 1919 to 1930 annually, and 1932 to 1955–56 annually.
- **Vegetables Grown on Farms for Human Consumption*.—Statistical Bulletin, annually, 1942–43 to 1955–56.
- Wages and Prices*.—January, 1932.
- Wealth*.—The Private Wealth of Australia and its Growth as ascertained by various methods, together with a Report on the War Census in 1915.
- **Wheat Industry* (formerly *Summary of the Wheat Situation*).—Statistical Bulletin, periodically; first issue, July, 1936.
- **Wool Supplies and Utilization*.—Bulletin, annually, 1952–53 to 1955–56.

The foregoing list includes all the printed publications issued from the Bureau, and certain more important mimeographed publications issued for the most part annually. Other mimeographed statements, obtainable on application to the Commonwealth Statistician and dealing with a wide variety of subjects, are issued as follows:—

Annually—Bee Farming; Commonwealth and State Taxation Collections; Companies with Oversea Affiliations; Factory Products (Principal); Factory Statistics (Principal); Fire, Marine and General Insurance; Fishing and Whaling; Milking Machines on Rural Holdings; Mining and Quarrying; Oversea Trade between Australia and Eastern Countries; Registrations of New Motor Vehicles; Rural Statistics of the Australian Capital Territory; Social Services, Expenditure by States; Tractors on Rural Holdings; University Statistics; Value of Production; Wheat Forecast and Estimate; Wool Production.

Half-yearly—Australian Balance of Payments; Capital Expenditure; Labour Turnover; Meat Production and Utilization; Trade of Australia with the United Kingdom.

* Obtainable from Commonwealth Statistician—for methods of obtaining other publications still in print see back page of this volume.

Quarterly—Building; Interim Retail Price Index; New Capital Raisings; Retail Sales of Goods; Retail Price Variations—All Items ("C" Series) Index; Road Traffic Accidents; Tractor Statistics; Trade of Australia with Monetary Areas.

Monthly—Banking; Demographic Review; Employment; Exports of Wool from Australia; Export Prices Index; Gold Mining Industry; Hire Purchase Business of Finance Companies; Life Assurance; Oversea Trade; Production Statistics; Registrations of New Motor Vehicles; Savings Bank Deposits and Savings Certificates; Wholesale Price (Basic Materials and Foodstuffs) Index.

(ii) *Commonwealth Parliamentary and Departmental Reports and Papers.* Lists of the principal official reports and other documents containing statistical information issued from the inauguration of the Commonwealth appear in the Official Year Books up to No. 13, but it is not now practicable to undertake the preparation of such lists.

3. *State Publications.*—The chief statistical publications of each State are set out hereunder. As with the Commonwealth Parliamentary and Departmental Reports and Papers, it is not practicable to enumerate the various Departmental Reports, statements of accounts, etc., issued by officials, boards, local and semi-governmental authorities, etc., in each State.

- (a) *New South Wales*—Statistical Register (annually); Official Year Book of New South Wales (annually); Pocket Year Book (annually); Statistical Bulletin (monthly to December, 1919, quarterly to June, 1943, then discontinued to September, 1948); Monthly Summary of Business Statistics.
- (b) *Victoria*—Statistical Register (annually to 1916, then discontinued); Victorian Year-book (annually); Statistical Abstract (quarterly to 1917, then discontinued to December, 1946).
- (c) *Queensland*—Statistical Register (annually); Official Year Book, 1901; A.B.C. of Queensland Statistics (annually to 1936, then discontinued); Queensland Year Book (annually 1937 to 1941, then discontinued to 1945); Queensland Pocket Year Book (annually).
- (d) *South Australia*—Statistical Register (annually); Official Year Book, 1912 and 1913; Statesman's Pocket Year Book of South Australia (annually); Quarterly Summary of Statistics.
- (e) *Western Australia*—Statistical Register (annually); Statistical Abstracts (quarterly, previously issued monthly to July, 1917); Pocket Year Book of Western Australia (annually).
- (f) *Tasmania*—Statistical Register (annually); Pocket Year Book of Tasmania (annually); Monthly Review of Business Statistics.

§ 3. The Third Conference of British Commonwealth Statisticians, Canberra, 1951.

Conferences of the Government Statisticians of the British Commonwealth were held first in London in 1920 and then in Ottawa in 1935. The Third Conference was held in Canberra from 12th to 23rd November, 1951. Delegates were present from Australia, Canada, Ceylon, India, New Zealand and the United Kingdom (including a representative of the Colonial Office). Ireland, the Commonwealth Economic Committee and the United Nations were represented by observers, and the Australian State Government Statisticians were also present. A summary of the activities of the conference may be found in Official Year Book No. 39, p. 1320.

§ 4. Select List of Works about, or published in, Australia.

(Compiled by the Librarian of the Commonwealth National Library.)

This list aims to meet the growing need, in Australia as publishing develops, and overseas as interest in Australia widens, for an authoritative current reference and reading list of books dealing with Australia or of Australian authorship, wherever published.

Australians will find these books in the National Library and in their State Libraries as well as in leading bookshops. Oversea readers may have access to them in the collections which the National Library maintains at 42 Australian posts abroad. They will be found also, increasingly, in leading libraries and bookshops in many countries. In the United States, for example, Australian books are included in the Farmington Plan in which 62

libraries and research institutions co-operate to ensure that at least one copy of all material published in any part of the world and likely to be required for a serious purpose will be available promptly somewhere in the country. Under a similar arrangement, Australian books are supplied to the National Library of Canada.

The list is classified broadly by subject and under each heading there is first a list of the principal standard books still in print, then a list of selected books and official publications (excluding annual reports) published in the last few years. To ensure that, so far as is possible, an evenness of standard is maintained in the compilation of the list, the advice of a representative range of experts in the various subject fields has been sought. Where known the retail price in the country of publication is given, but this is subject to fluctuation.

The Library also issues a series of select lists which include; *Australian Public Affairs Information Service* (monthly and, since 1955, cumulated annually), a subject index of material in new books, pamphlets, current periodicals and government publications from English-speaking countries, with an important bearing on investigations into Australian political, economic, cultural and social affairs; and the following full bibliographies.

Australian Government Publications, a monthly list covering both the Commonwealth and the States;

Books published in Australia: a monthly list of books supplied to the National Library under copyright.

The two last-mentioned publications are cumulated annually as the *Annual Catalogue of Australian Publications* which includes also a list of books published overseas of Australian interest or by authors resident in Australia, a select list of the more important Australian periodical and serial publications and a directory of publishers.

General and Descriptive.

STANDARD WORKS IN PRINT.

- AUSTRALIAN ENCYCLOPAEDIA: (new ed.): 10 v. Syd., Angus & Robertson, 1957. £50.
 AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE. Northern Australia: task for a nation. Syd., Angus & Robertson, 1954. 19s. 6d.
 CAIGER, G., ed. The Australian way of life. Lond., Heinemann, 1953. 12s. 6d.
 COOK, J. The journals of Captain James Cook on his voyages of discovery: ed. from the original manuscripts by J. C. Beaglehole with the assistance of J. A. Williamson, J. W. Davidson and R. A. Skelton: v. 1: Voyage of the *Endeavour*, 1768-1771. Lond., Hakluyt Society, 1955. 80s. and 50s. Volume one of the first definitive edition of Cook's journals.
 FINLAYSON, H. H. The red centre: man and beast in the heart of Australia (2nd ed.). Syd., Angus & Robertson, 1952. 21s.
 HILL, ERNESTINE. The great Australian loneliness. Melb., Robertson & Mullens, 1952. 27s. 6d.
 OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA: No. 1 to date. Canb., Govt. Pr., 1908 to 1946-47 (No. 37), 5s. per issue; after No. 38, 10s. Latest issue: No. 43, 1957.
 RATCLIFFE, F. N. Flying fox and drifting sand: the adventures of a biologist in Australia: introd. by Julian Huxley. Syd., Angus & Robertson, 1951. 15s. First published in 1938.
 TAYLOR, T. G. Australia: a study of warm environments and their effect on British settlement (6th ed.). Lond., Methuen, 1951. 30s.
 WALKABOUT: Australian geographical magazine: v. 1 to date. Melb., Australian Geographical Society, 1934 to date. Monthly, 24s. per annum.
 WHITE, H. L., ed. Canberra: a nation's capital: foreword by Sir Robert Garran. Syd., Angus & Robertson, 1954. 35s.

RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIAN PUBLICITY COUNCIL. Land of the southern cross: Australia. Melb., 1956. 42s.
 BANK OF NEW SOUTH WALES. Australia for the visitor. Syd., 1956.
 BARNARD, MARJORIE F. Sydney: the story of a city. Melb., Melbourne Univ. Press, 1956. 13s. 6d.
 BARTLETT, N. The pearl seekers. Lond., Melrose, 1954. 16s. An historical account of the Australian pearling industry.
 BEATTY, B. Beyond Australia's cities. Melb., Cassell, 1956.
 BEVAN, I., ed. The sunburnt country: profile of Australia; introd. by Gilbert Murray. Lond., Collins, 1953. 21s. An illustrated account by well-known Australian writers of various aspects of their country.
 BRAY, J. E. Northern Territory in brief: sketches by A. J. Mahood: photographs by Walkabout. Alice Springs (N.T.), Publication Syndicate, 1956. 3s. 6d.
 CLARKE, C. The coast of coral. Lond., Muller, 1956. 21s. Adventure on the Great Barrier Reef.
 FARWELL, G. Australian setting. Lond., Evans, 1952. 12s. 6d.
 FLATTELY, S. The Australian snow pictorial. Melb., Georgian House, 1952. 25s.
 GORE, S. Overlanding with Annabel. Syd., Angus and Robertson, 1956. 18s. An account of a journey by car from Perth to Darwin.
 GROOM, A. Wealth in the wilderness. Syd., Angus and Robertson, 1955. 21s. A journey by car from Brisbane via Alice Springs across to Wyndham.
 HILL, ERNESTINE. Australia: land of contrasts: ed. by Sydney Ure Smith (2nd ed.) Syd., Sands, 1954. 7s. 6d.
 ———. The Territory. Syd., Angus and Robertson, 1955. 25s. An historical account of the Northern Territory and its pioneers.

General and Descriptive—continued.

RECENT PUBLICATIONS OF INTEREST—continued.

- HOPE, W. E. S. *Diggers' Paradise*. Lond., Hale, 1956. 18s.
 HURLEY, J. F. *Australia: a camera study*. Syd., Angus and Robertson, 1955. 45s.
 ———— *Tasmania: a glance at its history, beauty, resources and development over a period of 150 years: a camera study*. Syd., Sands, 1953. 19s. 6d.
 ———— *Victoria: a camera study: by Frank Hurley*. Syd., Sands, 1956. 30s.
 ———— *Western Australia: a camera study*. Syd., Angus and Robertson, 1953. 42s.
 HURLEY, P. J. In *search of Australia* (4th ed.). Syd., Dymock's, 1954. 21s.
 LEEPER, G. W., *ed.* *Introducing Victoria*. Melb., Melbourne Univ. Press (for A.N.Z.A.A.S.), 1955. 30s.
 LOCK, A. C. C. *Destination Barrier Reef*. Melb., Georgian House, 1955. 25s.
 ———— *Tropical tapestry*. Melb., Georgian House, 1956. 25s. *Travel in Queensland from the Tropic of Capricorn to Cape York, and from the coast to the Northern Territory border*.
 MOOREHEAD, A. C. *Rum Jungle*. Lond., H. Hamilton, 1954. 12s. 6d. *Deals not only with the recently discovered uranium field, but with many aspects of life in northern and central Australia*.
 MOUNTFORD, C. P. *Brown men and red sand: wanderings in wild Australia*. Melb., Robertson & Mullens, 1948. 25s.
 NIEMELA, J. N. *Australia: the great south land*. Syd., Angus and Robertson, 1956. 15s.
 REID, F. *The romance of the Great Barrier Reef*. Syd., Angus and Robertson, 1954. 22s. 6d.
 WHITE, MYRTLE R. *No roads go by: illus. by Elizabeth Durack* (2nd ed.). Syd., Angus and Robertson, 1954. 16s. *An account of the daily life on a cattle station in South Australia forty years ago. First published in 1932*.
 WINSTON, D. *Sydney's great experiment: the progress of the Cumberland county plan*. Syd., Angus and Robertson, 1957. 37s. 6d.

Territories Outside Australia.

STANDARD WORKS IN PRINT.

- AUSTRALIAN NATIONAL ANTARCTIC RESEARCH EXPEDITION, 1947-1949. *Reports*. Melb., Antarctic Division, Department of External Affairs, 1951 to date.
 GORDON, D. C. *The Australian frontier in New Guinea 1870-1885*. N.Y., Columbia Univ. Press, 1951. \$4.25.
 HANDBOOK OF PAPUA AND NEW GUINEA, 1954: comp. and ed. by R. W. Robson. Syd., Pacific Publications, 1954. 15s.
 HOGGIN, H. I. *Transformation scene: the changing culture of a New Guinea village*. Lond., Routledge, 1951. 30s.
 LEESON, IDA. *A bibliography of bibliographies of the South Pacific*. Melb., Oxford Univ. Press, 1954. 15s. *Published under the auspices of the South Pacific Commission*.
 NEW ZEALAND ANTARCTIC SOCIETY. *The Antarctic to-day: a mid-century survey*: ed. by Frank A. Simpson. Well., Reed, 1952. 47s. 6d.
 PAPUA AND NEW GUINEA, Territory of. *Official research publications: no. 1 to date*. Port Moresby, Govt. Pr., 1951 to date.
 PAPUA AND NEW GUINEA, Territory of—*Laws, statutes &c.* *Laws of the Territory of Papua-New Guinea, 1945-1949* (annotated) . . . together with supplements to the *Laws of the Territory of Papua, 1888-1945* (annotated) and the *Laws of the Territory of New Guinea 1921-1945* (annotated). Syd., Govt. Pr., 1952.
 SCHOLDS, W. A. *Seventh continent: saga of Australian exploration in Antarctica 1895-1950*. Lond., Allen & Unwin, 1953. 21s.
 STANNER, W. E. H. *The South Seas in transition: a study of post-war rehabilitation and reconstruction in three British Pacific dependencies*. Syd., Asian Pub. Co., 1953. 50s.
 WILLIAMS, F. E. *Orokaiva magic*. Oxf., Oxford Univ. Press, 1928. 12s. 6d.
 ———— *Orokaiva Society*. Oxf., Oxford Univ. Press, 1930. 25s.
 ———— *Papuans of the Trans-Fly*. Oxf., Oxford Univ. Press, 1936. 30s.
 See also the annual reports of the Administrators of the various Territories, and reports to the General Assembly of the United Nations on trusteeship territories, the anthropological reports of the Governments of Papua and New Guinea, and material appearing in *Oceania*.

RECENT PUBLICATIONS OF INTEREST.

- AUSTRALIA—*News and Information Bureau*. 1856-1956: *Norfolk Island centenary celebrations*. Canb., 1956. 6s. 6d.
 BARRETT, C. L. *Isles of the sun*. Melb., Heinemann, 1954. 22s. 6d. *Observations of a naturalist in Papua-New Guinea*.
 BIERRE, J. *The last cannibals*. Lond., M. Joseph, 1956. 21s. *An account of primitive civilizations in Central Australia and in New Guinea*.
 EVANS, E. R. G., *1st Baron Mountevans*. *The Antarctic challenged*. Lond., Staples, 1955. 16s.
 KEARNS, W. H. *The silent continent: by W. H. Kearns and Beverley Britton*. Lond., Gollancz, 1955. 18s. *A history of Antarctic discovery*.
 LAFFIN, J. *Return to glory*. Syd., Angus and Robertson, 1956. 16s. *A descriptive account, by a World War II veteran, of a return visit to the battlefields of New Guinea, New Ireland and the Solomons*.
 MEAD, MARGARET. *Growing up in New Guinea: a comparative study of primitive education* (new ed.). N.Y., New American Library, 1953. 35s.
 ———— *New lives for old: cultural transformation—Manus, 1928-1953*. N.Y., Morrow, 1956. \$6.75.
 MIGOT, A. *The lonely south*. Lond., Hart-Davis, 1956. 21s. *An account of a year spent with a French scientific mission to Kerguelen Islands and the Antarctic*.
 SIMPSON, C. *Adam in plumes*. Syd., Angus and Robertson, 1954. 25s.
 ———— *Adam with arrows: inside New Guinea*. Syd., Angus and Robertson, 1953. 25s.
 ———— *Islands of men: a six-part book about life in Melanesia*. Syd., Angus and Robertson, 1955. 25s.

History.

STANDARD WORKS IN PRINT.

- CLARK, C. M. H., *ed.* Select documents in Australian history 1788-1900: selected and ed. by C. M. H. Clark with the assistance of L. S. Pryor. 2v. Syd., Angus & Robertson, 1950. 112s.
- CRAWFORD, R. M. Australia. Lond., Hutchinson's Univ. Library, 1952. 8s. 6d.
- FITZPATRICK, B. C. British Empire in Australia: an economic history 1834-1939 (2nd ed.). Melb., Melbourne Univ. Press, 1949. 17s. 6d.
- GREENWOOD, G., *ed.* Australia: a social and political history. Syd., Angus & Robertson, 1955. 45s.
- HISTORICAL RECORDS OF AUSTRALIA: (ed. by J. F. Watson). Syd., Commonwealth National Library, 1914 to date. 12s. 6d. *per v.* 34 v. have so far appeared. Publication has been suspended since 1925.
- HISTORICAL STUDIES: AUSTRALIA AND NEW ZEALAND: No. 1 to date. Melb., Melbourne Univ. Press, 1940 to date. Bi-annual. 16s. *per annum.*
- O'BRIEN, E. M. The foundation of Australia (1786-1800): a study in English criminal practice and penal colonization in the eighteenth century; foreword by John M. Ward (2nd ed.). Syd., Angus and Robertson, 1950. 25s.
- SCOTT, SIR ERNEST. A short history of Australia (8th ed.). Melb., Oxford Univ. Press, 1950. 14s. 6d.
- SHANN, E. O. G. An economic history of Australia. Melb., Georgian House, 1948. 18s. First published in 1930.
- SHAW, A. G. L. Economic development of Australia (3rd ed.). Melb., Longmans, 1955. 15s. 6d.
- The story of Australia. Lond., Faber, 1955. 15s.

RECENT PUBLICATIONS OF INTEREST.

- BAILEY, J. D. Growth and depression contrasts: in the Australian and British economies 1870-1880. Canb., Australian National University, 1956. (Australian National University. Social science monographs: no. 6.)
- BANFIELD, LORNA L. Like the ark: the story of Ararat (Victoria). Melb., Cheshire, 1955. 21s.
- BURNSIDE, S. A. City Corporation. The first hundred years: a history of Burnside in South Australia. Adel. 1956. 25s.
- CURREY, C. H. The Irish at Eureka. Syd., Angus & Robertson, 1954. 21s.
- FITZPATRICK, B. C. The Australian Commonwealth: a picture of the community. Melb., Cheshire, 1956. 30s.
- FLETT, J. Dunolly: the story of an old gold-diggings town. Glen Waverley (Vic.), Poppet Head Press, 1956. 45s.
- FRIEND, D. A collection of Hillendiana. Syd., Ure Smith, 1956. 35s.
- HARRIS, A. Settlers and convicts; or, Recollections of sixteen years' labour in the Australian backwoods: by an emigrant mechanic: foreword by C. M. H. Clark (2nd ed.). Melb., Melbourne Univ. Press, 1954. 18s. 6d.
- IDRIESS, I. L. The silver city. Syd., Angus & Robertson, 1956. 21s. An account of the author's childhood on the North Coast of New South Wales and in the city of Broken Hill.
- INGLETON, G. C., *comp.* True patriots all; or, News from early Australia, as told in a collection of broadsides: garnered and decorated by Geoffrey Chapman Ingleton. Syd., Angus & Robertson, 1952. 42s.
- KIERNAN, T. J. The Irish exiles in Australia. Melb., Burns, Oates and Washbourne, 1954. 28s. 6d. An account of the Irish political prisoners transported to Australia in 1848.
- NEWHAM, W. H. Melbourne: the biography of a city. Melb., Cheshire, 1956. 30s.
- NORMAN, W. A., *comp.* The history of the city of Mitcham. Mitcham (S.A.), City of Mitcham, 1955. 30s.
- PALMER, E. VANCE. The legend of the nineties. Melb., Melbourne Univ. Press, 1954. 25s.
- PEARL, IRMA. Our yesterdays: Australian life since 1853 in photographs: arranged by Irma Pearl: commentary by Cyril Pearl. Syd., Angus & Robertson, 1954. 30s.
- PIKE, D. H. Paradise of dissent: South Australia 1829-1857. Melb., Longmans, Green, 1957. 70s.
- SKEMP, J. R. Letters to Anne. Melb., Melbourne Univ. Press, 1956. 21s. A companion volume to the author's *Memories of Myrtle Bank*, and based on letters received from relatives in southern Tasmania, Victoria and the East Riding of Yorkshire, by Anne Lovell of Richmond and Enfield, Tasmania during the years 1849 to 1872.
- TENNANT, KYLIE. Australia: her story. Lond., Macmillan, 1953. 15s.
- WILLIAMS, W. L. History trails in Melbourne. Syd., Angus & Robertson, 1957. 15s.

Military and Naval History.

STANDARD WORKS IN PRINT.

- AUSTRALIA—Army, Department of—Public Relations Directorate. The Australian army at war: an official record of service in two hemispheres, 1939-1945. Melb., 1947.
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- BEAN, C. E. W. Anzac to Amiens: a shorter history of the Australian fighting services in the first world war. Canb., Australian War Memorial, 1946. 25s.
- FEAKES, H. J. White ensign—southern cross: a story of the King's ships of Australia's navy: (foreword by Admiral Lord Mountbatten of Chelsea). Syd., Ure Smith, 1951. 42s.
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- OFFICIAL HISTORY OF AUSTRALIA IN THE WAR OF 1914-1918: (ed. by C. E. W. Bean): 12 v. Canb., Australian War Memorial, 1921-42. 21s. *per v.* v. 8, 10, 11, 18s.
- OFFICIAL HISTORY OF THE AUSTRALIAN ARMY MEDICAL SERVICES IN THE WAR OF 1914-1918: (ed. by Col. A. G. Butler): 3 v. Canb., Australian War Memorial, 1930-43. 21s. *per v.*
- SWAN, W. N. Spearheads of invasion: an account of the seven major invasions carried out by the Allies in the south-west Pacific area during the recent world war as seen from a Royal Australian Naval Landing Ship Infantry: foreword by Vice-Admiral Sir John Collins. Syd., Angus & Robertson, 1953. 25s.

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- ODGERS, G. J. Across the parallel: the Australian 77th Squadron with the United States Air Force in the Korean war. Melb., Heinemann, 1952. 19s. 6d.
- RICHARDSON, H. One man war: the Jock McLaren story. Syd., Angus & Robertson, 1956. 16s. McLaren, a member of the Australian Eighth Division in the second World War, after escaping from Singapore, participated in guerilla warfare in the Philippines and later in Borneo.
- SELBY, D. Hell and high fever. Syd., Currawong, 1956. 15s. A personal narrative of the campaign in New Guinea during World War II.
- SLIM, Sir WILLIAM. Defeat into victory. Lond., Cassell, 1955. 32s. 9d. An account by the present Governor-General of Australia, of the campaigns which he conducted in Burma during World War II.
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- ALEXANDER, F., *ed.* Four bishops and their see, Perth, Western Australia 1857-1957. Nedlands (W.A.), Univ. of Western Australia Press, 1957. 22s. 6d.
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- DALE, H. P. Salvation chariot: a review of the first seventy-one years of the Salvation Army in Australia 1880-1951. Melb., Salvation Army Press, 1952. 15s. 9d.
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- VON STEGLITZ, K. R. The story of the pioneer church in Van Diemen's Land: a book for Tasmania's sesquicentenary year. Hobart, 1954. 4s. 6d.
- WALKER, A. Heritage without end: illus. by Frank Whitmore (2nd ed.). Melb., General Conference Literature and Publications Committee of the Methodist Church of Australasia, 1953. 3s. 6d. An historical account of the Methodist Church in Australia.

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- SERLE, P. Dictionary of Australian biography. 2 v. Syd., Angus & Robertson, 1949. 105s.
- WHO'S WHO IN AUSTRALIA: 1906 to date. Melb., Herald Press, 1906 to date. 75s. per issue. Latest issue: 15th, 1955.

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- BASSETT, MARNIE. The governor's lady: Mrs. Philip Gidley King: an Australian historical narrative (2nd ed.). Lond., Oxford Univ. Press, 1956. 20s. Philip Gidley King was Governor of New South Wales from 1800 to 1806.
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- BEDFORD, RUTH M. Think of Stephen: a family chronicle. Syd., Angus & Robertson, 1954. 25s. Biography of Sir Alfred Stephen and his family, written by one of his grand-daughters.
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- HANCOCK, Sir W. KEITH. Country and calling. Lond., Faber, 1954. 18s. Autobiography.
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- HAWKE, JESSICA. Follow my dust. Lond., Heinemann, 1957. 21s. A biography of Arthur Upfield by his wife.
- HETHERINGTON, J. A. Blamey: the biography of Field Marshal Sir Thomas Blamey. Melb., Cheshire, 1954. 19s. 6d.
- IDRIESS, I. L. Flynn of the Inland (new ed.). Syd., Angus & Robertson, 1956. 25s. Biography of the founder of the Australian Inland Mission and the Flying Doctor Service.
- MACQUARIE, L. Lachlan Macquarie: governor of New South Wales: journals of his tours in New South Wales and Van Diemen's Land 1810-1822. Syd., Public Library of New South Wales, 1956. 90s.
- MARSHALL, A. I can jump puddles. Melb., Cheshire, 1955. 18s. 9d. This autobiography of one of Australia's prominent creative writers deals mainly with his experiences as a crippled child.
- PARK, RUTH. The drums go bang: by Ruth Park and D'Arcy Niland. Syd., Angus & Robertson, 1956. 16s. Joint autobiography of husband and wife, both well known as creative writers.
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- AUSTRALIAN LIBRARY JOURNAL. Syd., Library Association of Australia, 1951 to date. Quarterly. 20s. per annum.
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- Review of education in Australia 1948-1954: ed. by R. M. McDonnell, W. C. Radford and P. M. Staurengli. Melb., 1956. 40s.
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- AUSTRALIA—*Laws, Statutes, etc.* The Acts of the Parliament of the Commonwealth of Australia passed from 1901 to 1950: to which is prefixed the Commonwealth of Australia Constitution Act . . . as altered to 31st December, 1950, with notes of cases, tables and indexes. Syd., Law Book Co., 1952-1955. Acts passed since 1950 are included in annual supplementary volumes.
- AUSTRALIA—*Prime Minister's Department.* The Federal Guide: a handbook of the organization and functions of Commonwealth government departments. Canb., 1957.
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- AUSTRALIAN DIGEST, 1825-1933: being a digest of the reported decisions of the Australian Courts and of Australian appeals to the Privy Council: with table of cases, ed. by B. Sugerman and others: supplements, 1934 to date. Syd., Law Book Co., 1934 to date. 60s. per v., supplements, 28s. per annum.
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- LARCOMBE, F. A. A history of local government in New South Wales. Syd., Local Government and Shires Associations, 1955. 2s. 6d.
- LEGGE, J. D. Australian colonial policy: a survey of native administration and European development in Papua. Syd., Angus & Robertson, 1956. 25s.
- LEYDIN, R. S. Local government in the Northern Territory. Darwin, 1952.
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- PERLMAN, M. Judges in industry: a study of labour arbitration in Australia. Melb., Melbourne Univ. Press, 1954. 37s. 6d.
- PREST, W. The economics of federal-state finance: the Joseph Fisher lecture in commerce given in Adelaide on September 2, 1954. Adel., Univ. of Adelaide, 1955. gratis.
- SAWER, G. Cases on the constitution of the Commonwealth of Australia (2nd ed.). Syd., Law Book Co., 1957.
- SCELLENBERG, T. R. Modern archives: principles and techniques. Melb., Cheshire, 1956. 37s. 6d. Based on lectures delivered in Australia in 1954 under a Fulbright grant.
- WYNES, W. A. Legislative, executive and judicial powers in Australia: being a treatise on the distribution of legislative, executive and judicial powers of Commonwealth and States under the Commonwealth of Australia Constitution Act (2nd ed.). Syd., Law Book Co., 1956. 95s.

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- AUSTRALIAN ENCYCLOPEDIA OF FORMS AND PRECEDENTS OTHER THAN COURT FORMS. Syd., Butterworth, 1955 to date. 97s. 6d. *per v.* 5v. and one supplement have so far been issued.
- BAALMAN, J. Outline of law in Australia (2nd ed.). Syd., Law Book Co., 1955. 25s.
- COWEN, Z. Essays on the law of evidence: by Zelman Cowen and P. B. Carter. Oxf., Clarendon, 1956. 35s.
- DAWES, E. N. Australian proprietary and private companies: law and management. Syd., Butterworth, 1955. 52s. 6d.
- FLEMING, J. G. The law of torts. Syd., Law Book Co., 1957. 84s.
- FOENANDER, O. DE R. Developments in the law governing workers compensation in Victoria. Melb., Law Book Co., 1956. 35s.
- GUNN, J. A. L. Guide to Commonwealth income tax: by J. A. L. Gunn and R. E. O'Neill (8th ed.). Syd., Butterworth, 1955. 40s.
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- SELETTO, B. Laws of gift and estate duties of the Commonwealth of Australia and the conventions with the United States of America (3rd ed.): by Bernard Seletto and O. M. L. Davies. Syd., Butterworth, 1955. 50s.
- YORSTON, R. K. Australian mercantile law: by R. Yorston and E. E. Fortescue (9th ed.). Syd., Law Book Co., 1957. 45s.
- Limited liability companies in Australia: some aspects of control: a study of the development, control and management of limited liability companies in Australia including an outline of the functions of a board of directors. Syd., Law Book Co., 1956. 42s.

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- AUSTRALIAN JOURNAL OF POLITICS AND HISTORY. Brisb., Univ. of Queensland Press, 1955 to date. 12s. 6d. *per issue*.
- AUSTRALIAN OUTLOOK (INCORPORATING THE AUSTRAL-ASIATIC BULLETIN): v. 1 to date. Syd., Australian Institute of International Affairs, 1947 to date. Quarterly, 15s. *per issue*.
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- CRISP, L. F. The Australian federal labour party, 1901–1951. Lond., Longmans, Green, 1955. 25s.
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- DEAKIN, Rt. Hon. A. The federal story: the inner history of the federal cause: foreword by the Rt. Hon. W. A. Watt: ed. by Herbert Brookes. Melb., Robertson & Mullens, 1944. 12s. 6d.
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- PARLIAMENTARY HANDBOOK AND RECORD OF ELECTIONS FOR THE COMMONWEALTH OF AUSTRALIA. Canb., Commonwealth National Library, 1915 to date. 42s. *per issue*. Latest issue: 12th, 1957.
- WEBB, L. C. Communism and democracy in Australia: a survey of the 1951 Referendum. Melb., Cheshire for the Australian National University, 1954. 25s.

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- AUSTRALIA—*Royal Commission on Espionage*. Report. Canb., Govt. Pr., 1955. 5s.
- AUSTRALIAN INSTITUTE OF POLITICAL SCIENCE—*21st Summer School, Canberra*, 1955. Liberty in Australia: papers: ed. by John Wilkes. Syd., Angus & Robertson, 1955. 16s. Papers on various aspects of democratic life.
- DAVIES, A. F., ed. Policies for progress: essays in Australian politics: ed. for the Victorian Fabian Society by Alan Davies and Geoffrey Serle. Melb., Cheshire, 1954. 18s. 6d.
- EGGLESTON, Sir FREDERIC. Reflections on Australian foreign policy. Melb., Cheshire, 1957. 30s.
- FITZPATRICK, B. C. The Australian Commonwealth: a picture of the community 1901–1955. Melb., Cheshire, 1956. 30s.
- HEALEY, G. A.L.P.: the story of the Labor Party. Brisb., Jacaranda Press, 1955. 22s. 6d.
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- O'FLAHERTY, S. W. A synopsis of the formation and the historical records of the Australian Labor Party, South Australian branch: chapters on Labor's land policy by M. R. O'Halloran and S.A. Labor Party's impact on the Federal parliament by N. J. O. Makin . . . 1882–1956. Woodville (S.A.), Printed by G. J. Daly, 1956.
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- WHITTINGTON, D. Ring the bells: a dictionary of Australian federal politics. Melb., Georgian House, 1956. 21s.

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 ——— Quarterly Summary of Australian Statistics: 1912 to date. Canb., 1912 to date. 1s. *per issue.*
 AUSTRALIAN FINANCIAL REVIEW. Syd., Sydney Morning Herald, 1951 to date. Weekly. 1s. 6d. *per issue.*
 BORRIE, W. D. Italians and Germans in Australia: a study of assimilation by W. D. Borrie: assisted by D. R. G. Packer. Melb., Cheshire for the Australian National University, 1954. 30s.
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- GUTHRIE, J. F. A world history of sheep and wool. Melb., McCarron Bird, 1957. 45s.
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- MARTIN, C. S. Irrigation and closer settlement in the Shepparton district: 1838-1906: ed. by J. L. F. Woodburn. Melb., Melbourne Univ. Press, 1955. 12s. 6d.
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- McLUCKIE, J. Australian and New Zealand botany: by John McLuckie and H. S. McKee. Syd., Associated General Publications, 1954. 84s.
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- HARRIS, THISTLE Y., *ed.* Naturecraft in Australia: an introductory handbook to the fauna and flora and to the Australian environment for the use of the bushwalker, student, teacher, field naturalist and conservationist. Syd., Angus & Robertson, 1956. 25s.
- IREDALE, T. Birds of New Guinea. Melb., Georgian House, 1956. 2 v. 504s.
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- SERVENTY, V. Australia's great barrier reef: a handbook on the corals, shells, crabs, larger animals and birds with some remarks on the reef's place in history. Melb., Georgian House, 1955. 13s. 6d.
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- ROYAL VICTORIAN INSTITUTE OF ARCHITECTS. Guide to Victorian architecture. Melb., 1956. 5s.
- SCOUALL, S. Consider the lilies: by Stuart Scougall and Franz Holford; wood engravings by Eva Sandor. Syd., Ure Smith, 1954. 126s. Essays on the planning of a garden.
- SEIDLER, H. Houses, interiors and projects. Syd., Associated General Publications, 1954. 84s.
- SHERMAN, A. The flower paintings of Albert Sherman: introd. by Howard Ashton. Syd., Angus & Robertson, 1956. 84s.
- SIMPSON, C. Australian image. Syd., Legend Press, 1956. 32s. 6d.
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* Excludes the works of individual authors, reference to which will be found in Miller, *Australian literature* and Serle, *An Australasian anthology*.

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DIARY OF PRINCIPAL ECONOMIC EVENTS, 1953 to 1956.

The principal economic events for the years 1931 to 1938 were shown on pp. 968 to 977 of Official Year Book No. 33, those for the years 1939 to 1944 on pp. 1129 to 1141 of Official Year Book No. 36, those for the years 1945 to 1948 on pp. 1235 to 1245 of Official Year Book No. 37, while those for the years 1949 to 1952 were covered by Official Year Books Nos. 38 to 40. For reasons of space some of the items originally shown for the years 1953 and 1954 have been omitted from this issue. Previous issues should be consulted for additional information for these years.

1953.

The immigration programme was cut further during the year. Total employment (excluding rural and household domestic employment and the defence forces) rose from 2,533,000 in December, 1952, to 2,612,000 in December, 1953. Numbers on unemployment benefit dropped to less than half the level of 41,600 reached in January. Production of coal was down slightly from the 1952 level, but production of gas and electricity and of many basic materials continued to increase. Production of domestic electrical goods, many clothing and textile lines and sporting goods increased substantially after the set back of the previous year. There was also some revival in house building. Seasonal conditions were satisfactory. Meat production was substantially increased. The average wheat yield was lower than the previous year's record but still high at 17 bushels per acre. Acreage was somewhat greater and total production was estimated at about 199 million bushels compared with 195 million bushels in the 1952-53 harvest. The wool clip for 1953-54 was only 3 per cent under the record of the previous year. Wool prices firmed at the opening sales in September and during the first half of the 1953-54 season averaged 85d. compared with 81.8d. in 1952-53. Export prices generally remained above the previous year's level and the value of exports was considerably higher than in 1952. During the second half of the year, however, imports also increased substantially, and the balance of payments credit on current account which reached about £110 million in the first half of the year dropped to about £50 million in the second half. Rises in internal prices and earnings were much smaller. Average earnings per employee rose by 4 per cent., the basic wage by 2 per cent., retail prices by 4 per cent., and wholesale prices by 5 per cent. Interest rates were kept stable during the year at 4½ per cent. on Commonwealth bonds, 4¾ per cent. on local and semi-governmental securities and 5 per cent. on bank advances. Both Commonwealth loans raised during the year were oversubscribed.

5th January.—New deposits of coal, bauxite, tin and zinc discovered as a result of surveys carried out by the Bureau of Mineral Resources, Geology and Geophysics.

8th January.—Ten year agreement signed for sale to the United States of America of uranium from deposits at Rum Jungle, Northern Territory.

10th January.—United Kingdom and Queensland Governments agreed to abandon the Queensland-British Food Corporation's farming project in Central Queensland.

19th February.—The Commonwealth Bank Bill 1953, which set up the Commonwealth Trading Bank under a General Manager, in place of the General Banking Division of the Commonwealth Bank, and the Banking Bill 1953, which provided for a new method of determining the maximum amounts which the trading banks may be required to lodge with the Commonwealth Bank, introduced into the House of Representatives. (Both Acts assented to 28th March.)

1st April.—Further relaxation of import restrictions to allow additional imports to the value of £50,000,000 during the next twelve months other than from the dollar area and Japan.

13th April.—New International Wheat Agreement signed in Washington fixing Australia's annual wheat export quota at 75,000,000 bushels. (Legislation introduced into House of Representatives, 11th October.)

15th May.—Australia and United States of America signed conventions to end double taxation between the two countries. (Acts ratifying these conventions were assented to 11th December.)

19th May.—Australian Loan Council meeting at Canberra adopted programme of £231,000,000 for State Government works during 1953–54. Borrowing programme of £90,486,000 by Local Government and Semi-governmental authorities also approved. Loan Council decided to retain ruling interest rates on public loans for at least twelve months.

8th June.—Britain and Australia signed agreement for reciprocity in social services benefits.

24th June.—Contract prices for sale of Australian butter and cheese to the United Kingdom Ministry of Food during 1953–54 increased by approximately $3\frac{1}{2}$ per cent.

1st July.—Commonwealth Medical Benefits Scheme commenced, under which persons who are contributors to an approved medical benefits organization are entitled to receive part reimbursement by the Commonwealth of payments made for medical services to themselves or their dependants.

Conditions of purchase by Australian Atomic Energy Commission of acceptable uranium ores and concentrates from 1st July announced, including guaranteed minimum prices for five years.

Further relaxation of restrictions on imports from sterling countries came into operation. Some increases in imports from Japan also were allowed.

15th July.—Announced that the United Kingdom Government would pay higher prices, representing increases of $7\frac{1}{2}$ and $5\frac{1}{2}$ per cent. respectively, for Australian lamb and mutton in 1953–54.

7th August.—Shipping freights to United Kingdom rose by $7\frac{1}{2}$ per cent.

13th August.—Commonwealth Government rejected a Japanese request for a conference to discuss trade relations between Australia and Japan.

9th September.—The Commonwealth Budget for 1953–54 introduced into the House of Representatives. (For details, see Official Year Book No. 41, p. 1086.)

10th September.—Pearl Fisheries Bill introduced, providing for a licensing system and other measures to control pearl fisheries. (Act assented to 17th September.) (See also 11th September.)

11th September.—Australian sovereignty proclaimed over sea-bed, sub-soil, and continental shelf adjoining Australia and Australian territories.

12th September.—Commonwealth Court of Conciliation and Arbitration refused applications by employers for reduction of current basic wages and for an increase of standard hours of work and also refused applications by unions for increases of basic wages. The employer's applications for abandonment of the system of automatic adjustment of the basic wage in accordance with retail price indexes were, however, granted.

24th September.—Australian Council of Trade Unions Congress withdrew its policy of unqualified opposition to incentive payments, leaving individual unions free to accept incentive payment schemes if they so desire.

1st October.—Announced that Australia would receive an increase of $5\frac{1}{2}$ per cent. in the price of beef and veal shipped to the United Kingdom during 1953–54 under the fifteen-year meat agreement with United Kingdom.

Further relaxation of import restrictions on goods from sterling areas came into operation, allowing additional annual imports valued at £45 million.

7th October.—All states agreed to a price of 14s. per bushel for wheat sold in Australia for the three years ending 1955–56.

13th October.—Wheat Marketing Bill providing for orderly marketing of wheat for next three harvests introduced into House of Representatives. (Act assented to 26th October.)

Bill providing for ratification of the International Wheat Agreement, under which portion of Australia's crop for the next three seasons will be exported within certain price limits, introduced into House of Representatives. (Act assented to 26th October.)

Queensland State Full Industrial Court rejected application by employer's organizations to end basic wage adjustments.

22nd October.—Commonwealth Court of Conciliation and Arbitration refused New South Wales transport authorities permission to withdraw applications for relief from basic wage adjustments.

26th October.—Factories and Shops (Wages Boards) Bill 1953 introduced in Victoria to pay latest cost-of-living increase in basic wages. (Act assented to 25th November.)

12th November.—Industrial Arbitration (Amendment) Bill, giving absolute preference to unionists, introduced in New South Wales Parliament. (Act assented to 17th December.)

3rd December.—Commonwealth Trading Bank of Australia commenced operations.

4th December.—Oil discovered at Exmouth Gulf, 680 miles north of Perth.

31st December.—With the expiration of the Defence Preparations Act, control of Capital Issues ceased.

Price control abandoned in Western Australia.

1954.

Net migration increased from 43,000 in 1953 to 68,000 in 1954, but was still well below the level of the preceding four years. Total employment (excluding rural and household domestic employment and the defence forces) rose from 2,612,000 in December, 1953 to 2,701,000 in December, 1954. In April, total employment exceeded the previous peak of 2,643,000 reached in November, 1951. Numbers on unemployment benefit fell from 13,423 in January to 2,975 in November, 1954. Production of pig-iron and steel was practically the same as in 1953, but there were rises in the production of coal, gas and electricity, and many basic materials. Production of domestic electrical appliances and of many textile and clothing lines also increased. More new houses were commenced in 1954 than in 1953, but the number completed was slightly below the 1953 figure. Meat production increased slightly in 1954. The wheat acreage for 1954–55 was about the same as in 1952–53, but both the total crop and the average yield were below the levels of the previous two seasons. A substantial fall in exports, however, resulted in a level of stocks at 30th November, more than twice as high as a year earlier. The 1954–55 wool clip was practically the same as the record 1952–53 clip and about 3 per cent. higher than the 1953–54 clip. In April, there was a further relaxation of import restrictions on trade with countries other than dollar area and Japan, and imports were substantially higher than in 1953. A fall in wool and wheat prices and a lower volume of wheat exports contributed to a decline in exports. In the second half of 1954, there was a debit balance of £108 million in the balance of payments on current account compared with a debit balance of £65 million in the first half of the year, and a credit balance of £50 million in the second half of 1953. Quotas were re-imposed on some imports in October. Average earnings per employee rose by 4 per cent., the same as the previous year's rise. Retail and wholesale prices, however, showed practically no change. Bank interest rates were not altered during the year. The three Commonwealth loans were issued at 4½ per cent. for long dated bonds and most local and semi-governmental loans at 4¼ per cent.

7th January.—Reciprocal agreement with the United Kingdom on Social Services became operative.

8th–15th January.—Conference of British Finance Ministers held in Sydney with the Prime Minister as Chairman and other Australian Ministers in attendance.

19th January.—It was announced that Australia would sign the declaration extending until 30th June, 1955, the schedule of tariff concessions under the General Agreement on Tariffs and Trade.

25th February.—Interim decision by Full Arbitration Court on claim by Metal Trades employees for increased margins left rates of pay unchanged (*see* 5th November, 1954).

4th March.—Loan of \$54 million from the International Bank, to be used to import capital goods and equipment.

10th March.—19th Security Loan of £35 million closed with a subscription of about £50 million.

1st April.—United Kingdom Free and Assisted Passages Migration Agreement with Australia renewed for another year.

9th April.—Contract for £25 million let for the construction of the Eucumbene–Tumut tunnel and other works in the Snowy Mountains Scheme.

16th April.—Revision of the 15 year marketing agreement for Australian meat sold in the United Kingdom, occasioned by the change over from bulk purchasing to private trading.

27th April.—£3.9 million contract let for building the Upper Tumut power station of the Snowy Mountains Scheme.

4th June.—Queensland Industrial Court increased margins to workers under Mechanical Engineering Award.

28th June.—Australia signed International Tin Agreement as a consuming country.

30th June.—Loan Council approved borrowing programme of £290 million for 1954–55 comprising Government loans, £200 million, Semi-Governmental loans, £75 million, and Local Government loans, £15 million. Tax reimbursement Grants to States to be £150 million for 1954–55. Australian population census taken.

1st July.—Forecast that by 31st July stocks of wheat carried over by the four major producing countries will total 1,601 million bushels compared with 1,061 million in 1953.

4th July.—Commonwealth Budget for 1953–54 resulted in a surplus of £56,300,000. Favourable trade balance of £149,400,000 for 1953–54.

13th July.—Heavy rain and gales caused damage to 200 miles of coastal area from Queensland to Northern New South Wales with floods in river districts of S.E. Queensland and Northern New South Wales.

4th August.—£1,800,000 hydro-electric project approved for Warragamba Dam (New South Wales).

13th August.—Wool sold in Australia in 1953–54 season realized £390.7 million, £14 million less than last year, but third highest on record.

18th August.—Commonwealth Budget for 1954–55 introduced into the House of Representatives. (For details *see* Official Year Book No. 42, p. 1156.)

31st August.—New South Wales Government granted £125,000 to New South Wales University of Technology for research in nuclear engineering (previously £50,000 was granted to the University of Sydney for research into nuclear physics). £50 million Commonwealth Cash and Conversion Loan oversubscribed by £1 million.

20th September.—Mechanical extraction of pillar coal commenced in some New South Wales mines.

29th September.—The Tariff Board annual report issued a warning against any general increase in the tariff level and on high cost in industry.

30th September.—New import restrictions announced on imported materials and equipment (goods on which quota restrictions were abandoned in April, 1954), on the basis of 100 per cent. of imports in the base year, 1950–51.

5th October.—National Joint Production Council formed representing management and workers.

14th October.—Announced that Commonwealth would grant £24 million for roads in 1954–55.

29th October.—Tariff changes increased tariffs on certain imports and increased protection to eight Australian industries. Government bounties on rayon yarn in Australia and scutched flax fibre produced from flax grown in Australia were announced.

3rd November.—Bounty paid on sulphuric acid as from 1st July, 1954. Legislation introduced to appropriate £600,000 annually for five years. Waterside workers declared a general strike on the Australian waterfront as a protest against proposed new Stevedoring legislation (*see* 5th November).

5th November.—Federal Arbitration Court granted higher margins for skilled workers in a judgment intended to be a guide to other wage fixing authorities. New Stevedoring legislation introduced into House of Representatives which, in effect, gave employers the right to nominate new waterside workers. Previously the right of deciding eligibility for work in the industry had been the prerogative solely of the Unions.

19th November.—Privy Council ruled New South Wales State Transport (Co-ordination) Act invalid insofar as it applied to interstate transport.

22nd November.—New arrangements for regulation of trading with Japan gave Japanese exporters the opportunity of obtaining a larger share of Australia's trade.

23rd November.—Commonwealth Government set target of migrants for 1954–55 at 115,000.

2nd December.—Australian wheat prices guaranteed under the wheat stabilization plan to remain at 12s. 7d. per bushel for 1954–55 season.

10th December.—\$25 million loan floated by Australia on United States market over-subscribed.

14th December.—£13 million lag in cash section of Commonwealth Government £125 million cash and conversion loan.

15th December.—Increased margins for coal industry employees, applying in New South Wales, Queensland, Victoria and Tasmania, announced by Coal Industry Tribunal.

31st December.—Governor of Commonwealth Bank announced an increase of 5s. per cent. in rates of interest on bank fixed deposits and Savings Bank deposits.

1955.

When the Treasurer presented the budget in August he said that there were "unmistakable signs of active inflation". A boom had been getting under way in consumer spending and private investment, and labour shortages had become general. No concessions in taxation were made in the budget. During the year, several measures were introduced to check inflation. In July, the Commonwealth Bank directed the trading banks to restrict new loans which would increase the scale of hire purchase. Towards the end of the year, the Prime Minister held a series of conferences with representatives of financial and industrial institutions to enlist their co-operation in checking inflation. Hire purchase and finance companies agreed to restrict the increase in their loans to 10 per cent. above the level at September, 1955. The level of total bank advances changed little in the second half of the year. In spite of lower wool and wheat prices, the value of exports was slightly higher than in 1954. The value of imports was much greater than in 1954 and the balance of payments deficit was therefore greater in 1955. Import restrictions were made more severe in April and again in September. Following the judgment of the Commonwealth Court of Conciliation and Arbitration late in 1954, margins for skill were adjusted upwards in many occupations. Nominal wages rose throughout the year, and by December, 1955 were 3½ per cent. higher than in December, 1954. Over the same period, average earnings rose by 7 per cent. and retail prices by 4½ per cent. Employment rose steadily during the year, and the number of persons receiving unemployment benefit fell to the lowest level since 1951. Investment by private businesses in 1955 was well above the level of 1954. Dwelling construction also continued at a high level. There were 78,000 new houses completed in 1955, a higher number than in any post-war year except 1952. The number commenced was 3,000 less than in 1954, but was higher than in 1952 or 1953. Secondary production was generally maintained at the high level of the previous year, and output of primary products increased. The wheat acreage in 1955-56 was slightly less than in any other post-war year, but the average yield was the highest on record. The total crop was therefore well above the 1954-55 level and nearly as high as in 1953-54. The production of wool in 1955-56 was over 1,410 million pounds compared with the previous record of about 1,290 million pounds in 1954-55. Net immigration during 1955 was 95,000. This compared with 68,000 in 1954 and 43,000 in 1953 but was still well below the 1950 and 1951 levels of 153,000 and 111,000 respectively.

1st January.—Price control in Victoria ended after 14 years. Increased Bank Deposit interest rates.

12th January.—Harbour at Cockburn Sound, Western Australia, opened to provide shipping facilities for Kwinana.

1st February.—Kwinana £40 million oil refinery began operations—to be in production by mid-March.

4th February.—Announced that arrangements completed for issue of £6 million public loan in Switzerland to Commonwealth Government.

7th February.—Australia's first aluminium plant, at Bell Bay, Tasmania, began production.

17th February.—Special conference agreed that Waterside Workers Federation should have right to nominate waterside recruits; counteracts legislation passed last November (see 5th November, 1954).

22nd February.—Guthega power station in operation, first power generated from Snowy Mountains Hydro-electric scheme being fed into New South Wales electricity system.

24th February.—Disastrous floods cover large areas of Central West New South Wales and Hunter Valley. Damage estimated at £15 million to townships, stock and grazing lands, and many lives lost.

18th March.—Government plan announced for sale to tenants of houses built under Commonwealth and State Housing Agreement. Maximum advance to be £2,750 repayable over 45 years at 4½ per cent. interest, minimum deposit 5 per cent. of first £2,000 of sale price, repayments of principal included in rent previously paid to be credited as part of deposit.

19th March.—Details announced of new 15 year 54½ million dollar loan from International Bank of Reconstruction to Australia at 4½ per cent. interest, including Bank's 1 per cent. commission.

21st March.—New import restrictions imposed, cutting Australia's rate of imports by about 20 per cent.; to operate from 1st April.

23rd March.—First commercial shipment of Australian uranium oxide, worth about £200,000, dispatched to United States.

15th April.—All price control ended in New South Wales.

20th April.—Broken Hill Pty. Company announced plans for spending £67 million on plant in next five years at Newcastle and Port Kembla.

12th May.—Increase of interest rates for home purchase and building finance from 5 per cent. to 5½ per cent. announced by most of major life assurance companies in Australia.

16th May.—Commonwealth Government to build ammunition filling and assembly factory at St. Marys, near Sydney, at estimated cost of £23 million.

5th June.—Australia's 1955-56 immigration programme to be increased to basic intake of 125,000 migrants (including 70,000 under assisted-passages scheme).

10th June.—Full High Court in reserved judgment declared invalid recent New South Wales legislation imposing a road tax on interstate road hauliers.

19th June.—Commonwealth abandons control of tea.

21st-23rd June.—At annual Loan Council meeting, Prime Minister rejected proposals by State Premiers for substantially increased loan programme to finance State Works in 1955-1956. Loan Council, by majority vote, approved borrowing programme of £193,500,000 for public works in 1955-56. Prime Minister announced that Commonwealth Government would grant States £157 million taxation reimbursements for 1955-56, an increase of £7 million on 1954-55.

19th July.—Decision by Federal Cabinet to cut subsidy on local consumption of butter and cheese, followed by increase in butter and cheese prices. General Motors-Holden's announced £21.6 million expansion programme for plants throughout Australia.

26th-28th July.—Price control re-imposed in New South Wales and South Australia.

9th August.—Western Australia State Arbitration Court increased Western Australian basic wage by 5s. 11d.

14th August.—Prime Minister stated that Australia would not extend trading concessions to Japan under G.A.T.T.

22nd August.—First International Wool Textile Research Conference to be held in Australia opened in Sydney. Attended by 100 research workers, including 52 scientists from overseas.

23rd August.—Contract system of shipping Australian wool exports to Europe and United Kingdom broke down as British and European shipowners refused to renew contracts at less than 10 per cent. increase in freight rates.

24th August.—Commonwealth Budget for 1955-56 introduced into the House of Representatives, providing for an estimated expenditure of £1,123,599,000, revenue of £1,123,769,000 and an estimated surplus revenue of £170,000. The major items of estimated expenditure from Consolidated Revenue Fund were:—Defence Services, £190,000,000; War and Repatriation Services, £121,000,000; National Welfare Fund, £218,500,000; Payments to or for the States, £220,000,000; Capital Works and Services, £104,000,000. Estimated expenditure from Loan Fund includes £8,500,000 for War Service Land Settlement and £3,000,000 for redemption of War Savings Certificates. The Budget included proposals for increases in expenditure on repatriation benefits (£1,750,000) and social services benefits (£11,000,000).

26th August.—Overall prices of Australian iron and steel raised by 5 per cent.

30th August.—New £30 million hot-strip steel mill of Australian Iron and Steel Ltd. at Port Kembla (N.S.W.) opened by the Prime Minister who described it as "a great and historic event in the development of Australia".

12th-21st September.—Prime Minister called series of conferences with representatives of trading banks, hire purchase companies, and trade-union leaders to discuss financial aspects of Australian economic problems and suggested remedies. Fresh tightening of bank credit.

1st October.—Increase of $7\frac{1}{2}$ per cent. in shipping freights for Australian exports to most oversea countries became effective. Reductions of from $7\frac{1}{2}$ per cent. to 25 per cent. operated on licensed imports.

6th October.—15 million dollars (£A6.8 million) loan successfully negotiated in Canada by Australian Government.

4th November.—Legislation passed to re-introduce automatic quarterly basic wage adjustments in New South Wales.

18th November.—Queensland and New South Wales coal producers combined to form Australian Coal Association with main object of trying to find new and improved ways of producing, preparing and marketing coal.

22nd November.—For the first time in history, brown coal coke was successfully used at a Richmond (Vic.) foundry to smelt iron commercially.

26th November.—Reduction of about 10 per cent. in Queensland shearing rates under the State Shearing industry award ordered in Industrial Court judgment of 25th November.

13th December.—Trade Unions case for increased basic wages and restoration of quarterly cost of living adjustments brought before Arbitration Court.

17th December.—Commonwealth £30 million cash loan undersubscribed by £2 million. Commonwealth Arbitration Court upheld appeal by Public Service Board against salary increases granted under "Castieau" Award of June, 1955, based on metal trades "2½ times" formula; Court, however, granted certain adjustments.

1956.

In order to arrest inflationary tendencies and the decline in international reserves, measures additional to those taken in the latter half of 1955 were found necessary early in 1956. Despite import restrictions, oversea balances had fallen by £55 million in the six months ended, December, 1955. The excessive demand for imports arose from the impact of high and increasing purchasing power on limited local supplies of both investment and consumption goods. On 14th March, the Prime Minister announced new taxation measures to provide a brake on consumption and investment spending. The Government had decided to increase taxation on motor vehicles and petrol, to impose higher customs and excise duties on beer, spirits, tobacco, cigars and cigarettes, to increase company taxation and to increase sales tax on less essential goods. The banks had agreed to raise interest rates on fixed deposits by 1 per cent. and the overdraft rate from 5 per cent. to an average of $5\frac{1}{2}$ per cent. with a maximum of 6 per cent. In June, new import cuts estimated at £40 million a year were imposed on motor vehicles and chassis. Oversea reserves had fallen by a further £18 million in the six months ended June, 1956. Final trade figures for 1956 showed that imports fell from £863 million in 1955 to £765 million and that exports rose from £778 million to £840 million. Exports of wool were £23 million higher at £377 million and exports of wheat and flour £19 million higher at £84 million. Oversea reserves at December, 1956 stood at £425 million, £70 million higher than in June, 1956 and £52 million more than in December, 1955.

Production of wool in 1955–56 was 1,410 million pounds and it was estimated to be 1,565 million pounds in 1956–57. Wheat production in 1955–56 was 195 million bushels but it was estimated that the 1956–57 crop would be the lowest since 1946–47 at about 135 million bushels, the area sown being expected to decline from 10 to 8 million acres. Preliminary estimates of the total value of production of primary industries suggested an increase of 8 or 9 per cent. in 1956–57.

Secondary production generally was at the same high level as in 1955, being maintained by continuing high employment in factories, improved industrial capacity and production of basic materials.

Although total civil employment (excluding rural and household domestic employees) was somewhat higher in the year, the number of persons receiving unemployment benefits was over 13,000 at the end of 1956, compared with 3,245 at the end of 1955. Nominal wages were nearly 5 per cent. higher, the main increase occurring in June, when an increase of 10s. per week in the Commonwealth basic wage was granted by the Full Arbitration Court. Average earnings rose by 6 per cent. over the year, during which retail prices increased by about 6 per cent.

Although there was little change in gross private investment on fixed capital equipment during 1956, significant changes occurred in some of the components of investment. Private dwelling construction was about £10 million lower, the value of motor cars purchased was

about £15 million lower, investment in commercial vehicles and other capital equipment was at much the same level and other new building and construction was about £20 million higher than in 1955.

5th January.—Rent control lifted in Tasmania.

18th January.—Federal Executive Council empowered all trading banks to operate Savings Banks on conditions broadly the same as those governing State Savings Banks. (Bank of New South Wales Savings Bank Limited and Australia and New Zealand Savings Bank Limited opened 19th January, C.B.C. Savings Bank Limited opened 16th July, 1956.)

23rd January.—General Australian waterside strike over pay rates and working conditions for waterside workers. Queensland floods destroyed tobacco crops in South-West, floodwaters created widespread havoc, heavy losses of sheep.

31st January.—Commonwealth Treasury commenced publication of *Quarterly Economic Review*. Eight Australian University economists urged interest and tax increases "to avoid crisis".

1st February.—Loan Council meeting in Canberra decided not to alter the £190 million programme for State public works in this financial year. It agreed also to increase the interest rate on public loans by semi-governmental authorities from $4\frac{1}{2}$ to $4\frac{7}{8}$ per cent. but decided against making any change in the Commonwealth bond rate.

14th February.—Australian Council of Trades Unions began presentation of a case to Arbitration Court for review of the basic wage.

15th February.—Waterside workers resumed work in all Australian ports after 23 days strike (see 23rd January).

17th February.—Conciliation Commissioner reduced award wages for shearers in all States except Queensland by 5 per cent. from 5th March (see also 26th November, 1955).

20th February.—Commonwealth Government set up Advisory Panel of experts to advise Economic Committee of Commonwealth Ministry on economic problems.

24th February.—Federal Council of Australian Workers' Union called on shearers and other pastoral workers not to work under new rates fixed by Conciliation Commissioner (see 17th February).

1st March.—British Atomic Energy Commission contracted to buy more than £40 million worth of uranium oxide from Mary Kathleen leases near Mt. Isa.

2nd March.—Majority decision of Full High Court ruled that Arbitration Court had no power to impose penalties on those disobeying its orders.

5th March.—Improvements to working of the arbitration system discussed at round-table conference by Ministry of Labour Advisory Council which included leading trade-unionists, employer's organizations and Government experts.

14th March.—Australia's first electric main railway line, 98 mile section from Melbourne to Traralgon, Gippsland, opened.

The Prime Minister, in a statement to the House of Representatives, announced a number of new economic measures proposed by the Government to achieve economic stability. These included increases in sales tax on motor vehicles, jewellery and other goods of a less essential character, increases in customs and excise duties on petrol, beer, spirits, tobacco, cigarettes and cigars and increased income tax on companies. Part of the increased taxes on petrol would be used to increase the grants to the States under the Commonwealth Aid Roads legislation. In addition, bank overdraft rates would be permitted to rise from 5 per cent. to an average of $5\frac{1}{2}$ per cent. with a maximum of 6 per cent. and bank fixed deposit rates would be increased by 1 per cent.

21st March.—Australian Loan Council approved Commonwealth proposal that interest rate on new semi-governmental loans be raised. Three new loans issued at rates of $5\frac{1}{2}$ per cent. and $5\frac{3}{8}$ per cent.

27th March.—Announced that banks would be free to fix their own rates for individual loans within the limits announced by the Prime Minister on 14th March (see above).

30th March.—Agreement completed between Australia and Netherlands under which 75,000 Dutch settlers would come to Australia in next five years.

4th April.—Rural and Industries Bank of Western Australia opened Savings Bank department.

7th April.—Commonwealth Bank increased rates of interest payable on savings bank accounts by one-quarter per cent. Other savings banks followed suit.

19th April.—Bill introduced in Commonwealth Parliament to set up Export Payments Insurance Corporation. (Act assented to 19th June.)

21st April.—Extensive deposits of iron ore discovered near Nowa Nowa, 215 miles east of Melbourne in East Gippsland.

27th April.—New agreement finalized by United Nations Wheat Conference; to come into force on 1st August, for a period of three years.

10th May.—Bill introduced in Commonwealth Parliament making sweeping changes in Conciliation and Arbitration system (see Chapter VI, p. 156). (Act assented to 30th June.)

24th May.—Prime Minister in first of series of economic surveys said that the Australian economy faced long-term problems.

25th May.—Full Arbitration Court announced 10s. increase in Commonwealth basic wage and restated decision not to make automatic quarterly adjustments.

29th May.—Bill introduced in Commonwealth Parliament to replace Stevedoring Industry Board by Australian Stevedoring Industry Authority. (Act assented to 30th June.)

Announced that, as part of Commonwealth Government's world-wide trade promotion drive, Australian trade missions would visit New Zealand, India, Ceylon, Japan, Pakistan, the Middle East and, possibly, the Philippines to try to boost Australian exports.

19th June.—Announcement made of successful conclusion of negotiations for an Australian loan of \$25 million to be raised in New York.

21st June.—Executive of Australian Council of Trades Unions, at special congress in Melbourne, empowered to take nation-wide strike action against Stevedoring Industry Act (see 29th May).

24th June.—Biggest floods for 70 years on Darling and Murrumbidgee Rivers cover vast areas of country in south-west New South Wales and also affect northern Victoria.

26th–28th June.—At the meeting of the Loan Council, the Commonwealth rejected proposals by the States for a substantially increased loan programme to finance State works during 1956–57. With the Commonwealth dissenting, the Loan Council approved a governmental borrowing programme of £210,000,000 for 1956–57. This included £35,532,000 for the Commonwealth–State Housing Agreement. However, the Commonwealth indicated that it was prepared to vote for a programme of £190,000,000 and would review the position after the first six months of the financial year to determine whether further assistance could be provided towards financing the Loan Council programme. In addition the Council approved a borrowing programme of £80,250,000 for semi-governmental and local authorities.

28th June.—At the Premiers Conference, the Acting Prime Minister and Treasurer, Sir Arthur Fadden, announced that the Commonwealth Government would make a supplementary grant to the States of £19,400,000. This will bring the total of the tax reimbursement grant and the supplementary grant to £173,000,000. This is £16,000,000 more than similar grants in 1955–56.

Acting Prime Minister announced new £40 million a year import cuts to reduce imports of fully assembled motor vehicles by 50 per cent. and unassembled chassis by 30 per cent. Dollar licences for import of motor vehicles from North America reduced by 30 per cent.

30th June.—Commonwealth budget results for 1955–56 showed surplus of £61.6 million.

10th July.—By decision of Privy Council, New South Wales Government held liable for repayment of £1 million to interstate road hauliers in respect of licence fees and mileage charges paid since July, 1952.

12th July.—Every road between Melbourne and Sydney blocked by floods, mud, or snow.

13th July.—Tasmanian wages board decided to suspend quarterly adjustments of State basic wage after 16s. adjustment made for June quarter.

1st August.—New International Wheat Agreement commenced to operate. Australian quota 30 million bushels out of total of 303 million bushels (see Chapter XXI., p. 836).

14th August.—New Conciliation and Arbitration Act became effective.

16th August.—Special Premiers' Conference. Commonwealth asked States to freeze basic wage but failed to reach agreement.

22nd August.—Large deposit of bauxite discovered on west coast of Cape York Peninsula.

29th August.—The 1956–57 Budget was introduced into the New South Wales Legislative Assembly. During 1955–56, the transactions of the Consolidated Revenue Fund, Railways, Tram and Omnibus Service and Sydney Harbour Services resulted in an

overall deficit of £6.8m. After providing for debt charges, there were deficits of £7.6m. on the Railways and £4.1 m. on Transport Services. The 1956-57 Budget provided for total expenditure of £223,078,000 (an increase of £10,847,000 over 1955-56 expenditure). Estimated revenue was £223,115,000 (£17,717,000 more than 1955-56 revenue). This would leave a small overall surplus of £37,000. After providing for debt charges, it was estimated that there would be deficits of £3.9m. on the Railways and £1.8m. on Tram and Omnibus services. New taxation proposals were the introduction of a land tax, a tax on poker machines and increased stamp duty on hire purchase agreements.

30th August.—Commonwealth Budget for 1956-57 introduced into the House of Representatives. During 1955-56, Commonwealth revenue was £1,130.7m. and exceeded the estimated revenue by £15.9m. Excise revenue, £168.3m., exceeded the estimate by £9.3m. and Sales Tax revenue, £110.0m., exceeded the estimate by £4.0m. Income Tax collections, £574.0m., were £3.0m. below the estimate. Excluding the transfer to the Loan Consolidation and Investment Reserve, Commonwealth Expenditure during 1955-56 was £1,069.1m. or £3.0m. greater than the estimate. This left a surplus of £61.6m. which was transferred to the Loan Consolidation and Investment Reserve. Expenditure on War and Repatriation Services, £124.5m., and the Post Office, £85.6m., were £3.8m. and £2.4m. respectively greater than the estimates. On the other hand, payments to the National Welfare Fund, £214.9m., and expenditure on Capital Works and Services, £101.9m., were £3.5m. and £2.1m. respectively below the estimates.

The Budget for 1956-57 provided for an estimated expenditure of £1,121.4m. an increase of £52.3m. over expenditure during the previous year. It was estimated that revenue would be £1,230.2m. or £99.5m. more than in the previous year. There would thus be a surplus of £108.8m. which would be paid to the Loan Consolidation and Investment Reserve. The more important items of expenditure were (1955-56 expenditure shown in parentheses)—Defence Services, £190.0m. (£190.7m.); War and Repatriation Services, £123.1m. (£124.5m.); National Welfare Fund, £226.6m. (£214.9m.); Payments to the States, £243.8m. (£220.5m.) and Capital Works and Services, £109.7m. (£101.9m.).

Revenue expected from the main sources was (1955-56 revenue shown in parentheses). Income Taxes, £611.7m. (£574.0m.); Excise Duties, £212.2m. (£168.3m.); Sales Tax, £130.0m. (£110.0m.) and Customs Duties, £50.0m. (£87.5m.).

The budget proposals provided for increases in some widows and invalid pensions, some minor concessions in income taxes, the imposition of customs and excise duties on cathode ray tubes used in television sets, and increases in broadcast listeners' fees and some postal, telegraph and telephone charges.

11th September.—The 1956-57 Budget was introduced into the Victorian Legislative Assembly. During 1955-56, there was a deficit of £3.2m. Revenue during the year totalled £123.2m. (£0.2m. more than estimated) and expenditure was £126.4m. (£1.6m. greater than estimated). The Budget provided for expenditure of £135,788,000 in 1956-57. This is £9,391,000 more than the expenditure in the previous year. Estimated revenue was £133,343,000, an increase of £10,191,000 over the previous year. This would result in a deficit of £2,445,000. This included an estimated Railways deficit of £5.5m., an increase of £1.4m. over the deficit in the previous year. Additional revenue was to be obtained by increasing entertainments tax, motor registration fees and stamp duty on cheques and receipts and by imposing a stamp duty on hire purchase agreements.

16th September.—Public première of television in Sydney, first regular television transmissions begun.

18th September.—The 1956-57 Budget was introduced into the South Australian Legislative Assembly. In 1955-56, the transactions of the Consolidated Revenue Fund resulted in a deficit of £1.4m. Revenue was £59.4m. or £0.4m. below the estimate and expenditure was £60.8m. or £0.3m. above the estimate. The 1956-57 Budget proposals provided for expenditure of £65,982,000 (£5,150,000 more than 1955-56) and estimated revenue of £65,129,000 (£5,727,000 more than the previous year). This would result in a deficit of £853,000. The additional revenue would be obtained from increased collections from land tax due to the reassessment of the values of all land, an increase in the rate of stamp duty on cheques, increases of the liquor licence fees and some other statutory fees and increased railway freights.

20th September.—The 1956-57 Budget was introduced into the Queensland Parliament. In 1955-56, Consolidated Revenue Fund receipts of £75.7m. were £1.7m. below the estimate and expenditure, £77.4m., was £0.1m. greater than estimated. This resulted in a deficit of

£1.7m. The 1956-57 Budget provided for an expenditure of £84,760,000 (£7,368,000 more than in 1955-56) from the Consolidated Revenue Fund. Estimated revenue was £84,775,000 (an increase of £9,107,000 over 1955-56). This would leave a small surplus of £15,000. Most of the increased revenue will be provided by increased railway charges which operated from 1st August 1956.

28th September.—All price controls suspended in New South Wales.

4th October.—Minister for Trade stated that United Kingdom asked Government for its reactions to suggestion that United Kingdom should join in partial free trade area in Western Europe.

10th October. Victorian Legislative Assembly passed legislation to abolish cost of living adjustments for State employees.

11th October. Prime Minister announced signing of new five-year Sugar Agreement between Commonwealth and Queensland governments.

12th October.—Queensland State Industrial Court granted an interim Shearing award for payment of £7 11s. per 100 sheep shorn. This was accepted by shearers and 10 months old industrial dispute ended.

19th October.—Rise in "C" series index resulted in 11s. increase in New South Wales basic wage.

26th October.—Eight metal trades unions, backed by A.C.T.U., apply to newly formed Commonwealth Industrial Commission for basic wage increases and restoration of quarterly cost-of-living adjustments.

Details released of plan for development of 1½ million acres of land near Esperance, Western Australia, by the American Chase Syndicate.

31st October.—The Tasmanian Budget for 1956-57 was tabled in the House of Assembly. During 1955-56, revenue was £18.0m. and expenditure £17.9m. This resulted in a surplus of £.1m. The 1956-57 Budget provided for expenditure of £20,283,000 or £ 2,387,000 more than in 1955-56. It was estimated that receipts will be £19,233,000, an increase of £1,223,000 over 1955-56. This would result in a deficit of £1,050,000. Provision was made in the budget proposals for an increase in stamp duty on cheques and a stamp duty on hire purchase agreements.

8th November.—The West Australian Budget for 1956-57 was introduced. In 1955-56, there was a deficit of £1.8m. Revenue during the year was £49.6m. and expenditure £51.4m. The Budget proposals provided for an expenditure of £54.9m. (an increase of £3.5m. over 1955-56). Estimated revenue was £63.6m. (£3.8m. more than 1955-56). This would result in a deficit of £1.4m. Increased land tax and probate duties were announced.

12th November.—Australia and United Kingdom agree on comprehensive trade pact to replace 24-year-old Ottawa Agreement.

22nd November.—Commonwealth Treasurer announced that Minister for External Affairs had signed loan agreements on behalf of Commonwealth for a total of \$27 million (£A12.1 million).

29th November.—First gas from brown-coal gasification plant at Morwell (Victoria) reached Melbourne through 103 mile high-pressure pipeline.

4th December.—World Bank announced \$50 million loan to Australia for development of agriculture, transport, industry and mining.

CHRONOLOGICAL TABLE.

CHRONOLOGICAL TABLE OF CHIEF EVENTS SINCE THE ESTABLISHMENT OF SETTLEMENT IN AUSTRALIA.

NOTES.—For each earlier year this Table rarely contains more than two or three items; for recent years, however, in order to provide a wide cover of events, etc., it includes a much greater number. Both the nature of the Table and considerations of space render necessary a continual reduction in these items, and for more information the reader should therefore consult earlier issues.

The Government was centralized in Sydney, New South Wales, up to 1825, when Tasmania (Van Diemen's Land) was made a separate colony. In the Table the names now borne by the States serve to indicate the localities.

Year.

- 1788 N.S.W.—Arrival of "First Fleet", under Captain Arthur Phillip, at Botany Bay. Land in vicinity being found unsuitable for settlement, the expedition moved to Sydney Cove, and formal possession of the colony was taken on 26th January. Formal proclamation of colony and establishment of regular government on 7th February. Branch Settlement established at Norfolk Island. French navigator La Perouse visited Botany Bay. First cultivation of wheat and barley. First grape vines planted.
- 1789 N.S.W.—First wheat harvested at Parramatta, near Sydney. Discovery of Hawkesbury River.
- 1790 N.S.W.—Scarcity of provisions. "Second Fleet" reached Port Jackson. Landing of the New South Wales Corps.
- 1791 N.S.W.—Arrival of "Third Fleet". Territorial seal brought by Governor King.
- 1792 N.S.W.—Visit of *Philadelphia*, first foreign trading vessel.
- 1793 N.S.W.—First free immigrants arrived in *Bellona*. First Australian church opened at Sydney. Tas.—D'Entrecasteaux discovered the Derwent River.
- 1794 N.S.W.—Establishment of settlement at Hawkesbury River.
- 1795 N.S.W.—Erection of the first printing press at Sydney. Descendants of strayed cattle discovered at Cowpastures, Nepean River.
- 1796 N.S.W.—First Australian theatre opened at Sydney. Coal discovered by fisherman at Newcastle.
- 1797 N.S.W.—Introduction of merino sheep from Cape of Good Hope.
- 1798 Tas.—Insularity of Tasmania proved by voyage of Bass and Flinders.
- 1800 N.S.W.—Hunter River coal-mines worked. First Customs House in Australia established at Sydney. Flinders' charts published.
- 1801 N.S.W.—First colonial manufacture of blankets and linen.
- 1802 Vic.—Discovery of Port Phillip by Lieut. Murray. Q'land.—Discovery of Port Curtis and Port Bowen by Flinders. S.A.—Discovery of Spencer's and St. Vincent Gulfs by Flinders.
- 1803 N.S.W.—First Australian wool taken to England by Capt. Macarthur. Issue of *The Sydney Gazette*, first Australian newspaper. Vic.—Attempted settlement at Port Phillip by Collins. Discovery of Yarra by Grimes. Tas.—First settlement formed at Risdon by Lieut. Bowen.
- 1804 Vic.—Abandonment of settlement at Port Phillip. Tas.—Foundation of settlement at Hobart by Collins.
- 1805 N.S.W.—First extensive sheep farm established at Camden by Capt. Macarthur.
- 1806 N.S.W.—"The great flood" on the Hawkesbury. Shortage of provisions. Tas.—Settlement at Launceston.
- 1807 N.S.W.—First shipment of merchantable wool (245 lb.) to England.
- 1808 N.S.W.—Deposition of Governor Bligh.
- 1809 N.S.W.—Free school established.
- 1810 N.S.W.—Post Office officially established at Sydney.
- 1813 N.S.W.—Passage across Blue Mountains discovered by Wentworth, Lawson and Blaxland. Macquarie River discovered by Evans.

- Year.
- 1814 N.S.W.—Flinders suggested the name “Australia”, instead of “New Holland”. Creation of Civil Courts.
- 1815 N.S.W.—First steam engine in Australia erected at Sydney. Lachlan River discovered by Evans. Tas.—Arrival of first immigrant ship with free settlers. First export of wheat to Sydney.
- 1816 N.S.W.—Sydney Hospital opened.
- 1817 N.S.W.—Oxley’s first exploration inland. Discovery of Lakes George and Bathurst and the Goulburn Plains by Meehan and Hume. First bank in Australia—Bank of New South Wales—opened at Sydney.
- 1818 N.S.W.—Liverpool Plains, and the Peel, Hastings and Manning Rivers discovered by Oxley, and Port Essington (N.T.) by Captain King.
- 1819 N.S.W.—First Savings Bank in Australia opened at Sydney.
- 1820 Tas.—First importation of pure merino sheep from Camden Park (N.S.W.) flocks.
- 1821 Tas.—Establishment of penal settlement at Macquarie Harbour.
- 1822 N.S.W.—Formation of Agricultural Society of New South Wales.
- 1823 N.S.W.—New South Wales Judicature Act passed. Discovery of gold at Fish River by Assistant-Surveyor McBrien. Qld.—Brisbane River discovered by Oxley.
- 1824 N.S.W.—Constituted a Crown Colony. Executive Council formed. Establishment of Supreme Court at Sydney, and introduction of trial by jury. First Australian Enactment (Currency Bill) passed by the Legislative Council. Proclamation of freedom of the press. First manufacture of sugar. Vic.—Hume and Hovell, journeying overland from Sydney, arrived at Corio Bay. Qld.—Penal settlement founded at Moreton Bay (Brisbane). Fort Dundas Settlement formed at Melville Island, N. Terr.
- 1825 Tas.—Van Diemen’s Land (Tasmania) proclaimed a separate colony. Qld.—Major Lockyer explored Brisbane River to its source and discovered coal.
- 1826 N.S.W.—Settlement in Illawarra District. Vic.—Settlement at Corinella, Western Port, formed by Captain Wright.
- 1827 Qld.—Darling Downs and the Condamine River discovered by Allan Cunningham. W.A.—Military settlement founded at King George’s Sound by Major Lockyer. First official claim of British Sovereignty over all Australia.
- 1828 N.S.W.—Second constitution. First Census. Sturt’s expedition down Darling River. Gas first used at Sydney. Richmond and Clarence Rivers discovered by Captain Rous. Vic.—Abandonment of settlement at Western Port. Qld.—Cunningham discovered a route from Brisbane to the Darling Downs, and explored Brisbane River.
- 1829 N.S.W.—Sturt’s expedition down Murrumbidgee River. W.A.—Foundation of settlement at Swan River. Foundation of Perth.
- 1830 N.S.W.—Sturt, voyaging down Murrumbidgee and Murray Rivers, arrived at Lake Alexandrina. Tas.—Black line organized to force aborigines into Tasman’s Peninsula, but failed. Small remnant subsequently (1830 to 1835) persuaded to settle on Flinders Island.
- 1831 N.S.W.—Crown lands first disposed of at auction. Mitchell’s explorations north of Liverpool Plains. SS. *Surprise*, first steamship built in Australia, launched at Sydney. First coal shipped from Australian Agricultural Company’s workings at Newcastle, N.S.W. First assisted immigration to N.S.W. S.A.—Wakefield’s first colonization committee. W.A.—Appointment of Executive and Legislative Councils.
- 1832 N.S.W.—State Savings Bank established.
- 1833 N.S.W.—First School of Arts established at Sydney.
- 1834 N.S.W.—First settlement at Twofold Bay. Vic.—Settlement formed at Portland Bay by Henty Brothers. S.A.—Formation of the South Australian Association. W.A.—Severe reprisals against Murray River natives at Pinjarrah for continued attacks on settlers.
- 1835 Vic.—John Batman arrived at Port Phillip; foundation of Melbourne.

- Year.
- 1836 N.S.W.—Mitchell's overland journey from Sydney to Cape Northumberland (S.A.). Vic.—Proclamation of Port Phillip district as open for settlement. S.A.—Settlement founded at Adelaide under Governor Hindmarsh.
- 1837 N.S.W.—Appointment in London of Select Committee on Transportation. Vic.—First overlanders from Sydney arrived at Port Phillip.
- 1838 N.S.W.—Discontinuance of assignment of convicts. Qld.—Settlement of German missionaries at Brisbane—first free colonists. S.A.—“Overlanding” of cattle from Sydney to Adelaide along the Murray route by Hawden and Bonney. Settlement at Port Essington, Northern Territory, formed by Captain Bremer.
- 1839 N.S.W.—Gold found at Vale of Clwydd by Count Strzelecki. S.A.—Lake Torrens discovered by Eyre. Port Darwin discovered by Captain Stokes. W.A.—Murchison River discovered by Captain Grey.
- 1840 N.S.W.—Abolition of transportation to New South Wales. Land regulations—proceeds of sales to be applied to payments for public works and expenditure on immigration. Vic.—Determination of northern boundary. Qld.—Penal settlement broken up and Moreton Bay district thrown open. S.A.—Eyre began his overland journey from Adelaide to King George's Sound.
- 1841 N.S.W.—Gold found near Hartley. W.A.—Completion of Eyre's overland journey from Adelaide to King George's Sound. New Zealand proclaimed a separate colony.
- 1842 N.S.W.—Incorporation of Sydney. Vic.—Incorporation of Melbourne. S.A.—Discovery of copper at Kapunda.
- 1843 N.S.W.—First Representative Constitution (under Act of 1842). Qld.—Moreton Bay granted legislative representation as a distinct electoral division.
- 1844 Qld.—Leichhardt's expedition to Port Essington (N.T.). S.A.—Sturt's last expedition inland.
- 1845 N.S.W.—Mitchell's explorations on the Barcoo. Qld.—Explorations by Mitchell and Kennedy. S.A.—Discovery of the Burra copper deposits. Sturt discovered Cooper's Creek.
- 1846 N.S.W.—Initiation of meat-preserving. Qld.—Foundation of settlement at Port Curtis. S.A.—Proclamation of North Australia.
- 1847 N.S.W.—Iron-smelting commenced near Berrima. Overland mail established between Sydney and Adelaide. Qld.—Explorations by Leichhardt, Burnett and Kennedy.
- 1848 N.S.W.—National and Denominational School Boards established. Qld.—Leichhardt's last journey. Kennedy speared by the blacks at York Peninsula. Chinese brought in as shepherds.
- 1849 N.S.W.—Indignation of colonists at arrival of convict ship *Hashemy*. Exodus of population to gold-fields of California. Vic.—*Randolph* prevented from landing convicts. Qld.—Assignment of *Hashemy* convicts to squatters on Darling Downs. W.A.—Commencement of transportation to Western Australia.
- 1850 N.S.W.—Final abolition of transportation. First sod of first Australian railway turned at Sydney. Sydney University founded. Vic.—Gold discovered at Clunes. Representative government granted. S.A.—Representative government granted. W.A.—Pearl oysters found by Lieut. Helpman at Saturday Island Shoal. Tas.—Representative government granted.
- 1851 N.S.W.—Payable gold discovered by Hargreaves at Lewis Ponds and Summerhill Creek. Vic.—Port Phillip created an independent colony under the name of Victoria. Discovery of gold in various localities. W.A.—Proclamation of Legislative Council Act.
- 1852 N.S.W.—Arrival of *Chusan*, first P. and O. mail steamer from England. S.A.—First steamer ascended the Murray River to the junction with the Darling. Tas.—Meeting of first elective Council protested against transportation. Payable gold discovered at The Nook, near Fingal, and at Nine Mile Springs.
- 1853 Tas.—Abolition of transportation. Vic.—Melbourne University founded.
- 1854 Vic.—Opening of first Australian railway—Flinders Street to Port Melbourne. Riots on Ballarat gold-fields. Storming of the Eureka Stockade, 3rd Dec. Telegraph first used.

- Year.
- 1855 N.S.W.—Opening of railway—Sydney to Parramatta. Mint opened.
- 1856 N.S.W.—Pitcairn Islanders placed on Norfolk Island. W.A.—A. C. Gregory's expedition in search of Leichhardt.
Responsible Governments in N.S.W., Vic., S.A. and Tas. (Act of 1855).
- 1857 N.S.W.—Select Committee on Federation. Vic.—Manhood suffrage and vote by ballot. S.A.—Passage of Torrens' Real Property Act.
- 1858 N.S.W.—Establishment of manhood suffrage and vote by ballot. Telegraphic communication between Sydney, Melbourne and Adelaide. Qld.—Canoona gold rush.
Population of Australia reached 1,000,000.
- 1859 Qld.—Proclamation of Queensland as separate colony. Tas.—First submarine cable, via Circular Head and King Island to Cape Otway.
- 1860 Vic.—Burke and Wills left Melbourne and crossed to Gulf of Carpentaria. S.A.—Copper discoveries at Wallaroo and Moonta. McDouall Stuart reached centre of continent and named "Central Mount Stuart".
- 1861 N.S.W.—Anti-Chinese riots at Lambing Flat and Burrangong gold-fields. Opening of first tramway in Sydney. Regulation of Chinese immigration. Vic.—Burke and Wills perished at Cooper's Creek, near Innamincka, S.A.
- 1862 N.S.W.—Abolition of State aid to religion. Real Property (Torrens) Act passed. S.A.—Stuart crossed the Continent from south to north. W.A.—First export of pearl-shell.
- 1863 Vic.—Intercolonial Conference at Melbourne. S.A.—Northern Territory taken over. W.A.—Initiation of settlement in the north-west district. Henry Maxwell Lefroy discovered and traversed area now comprised in the Coolgardie-Kalgoorlie gold-field.
- 1864 Qld.—First sugar made from Queensland cane.
- 1865 N.S.W.—Destruction by fire of St. Mary's Cathedral, Sydney.
- 1866 N.S.W.—Passage of Public Schools Act of (Sir) Henry Parkes. S.A.—Introduction of camels for exploration, etc.
- 1867 Vic.—Imposition of protective tariff. Qld.—Discovery of gold at Gympie.
- 1868 W.A.—Arrival of *Hougomont*, last convict ship.
- 1869 Vic.—Record gold nugget "Welcome Stranger" 2,284 oz. found near Dunolly. W.A.—First telegraph line opened from Perth to Fremantle.
- 1870 N.S.W.—Intercolonial Exhibition opened at Sydney. Imperial troops withdrawn. Vic.—Intercolonial Congress at Melbourne. S.A.—Commencement of transcontinental telegraph.
- 1871 N.S.W.—Permanent military force raised. W.A.—Forrest's explorations. Tas.—Discovery of tin at Mount Bischoff.
- 1872 Vic.—Mint opened. S.A.—Cable from Java to Port Darwin. Completion of transcontinental telegraph line.
- 1873 N.S.W.—Intercolonial Conference at Sydney. First volunteer encampment.—Inauguration of mail service with San Francisco.
- 1874 N.S.W.—Triennial Parliaments Act passed. Intercolonial Conference. S.A.—University of Adelaide founded. W.A.—John and Alexander Forrest arrived at Overland Telegraph from Murchison.
- 1875 Qld.—Transfer of Port Albany Settlement to Thursday Island.
- 1876 N.S.W.—Completion of cable—Sydney to Wellington. W.A.—Giles crossed colony from east to west. Tas.—Death of Truganini, last representative of Tasmanian aboriginals.
- 1877 W.A.—Opening of telegraphic communication with South Australia.
Population of Australia reached 2,000,000.
- 1878 Qld.—Restriction of Chinese immigration.
Introduction of telephone into Australia.
- 1879 N.S.W.—First artesian bore at Kallara Station, near Bourke. First steam tramway. W.A.—A. Forrest's explorations in the Kimberley district, and discovery of the Fitzroy pastoral country.

Year.

- 1880 N.S.W.—Public Instruction Act passed. Vic.—First Australian Telephone Exchange opened in Melbourne.
Federal Conference at Melbourne and Sydney.
- 1881 N.S.W.—Further restrictions on Chinese immigration.
First Australia-wide censuses on same date taken.
- 1882 W.A.—Nugget of gold found between Roebourne and Cossack.
- 1883 N.S.W.—Discovery of silver at Broken Hill. Completion of railway between New South Wales and Victoria. Qld.—Annexation of New Guinea—repudiated by Imperial authorities.
Federal Conference held at Sydney. Federal Council created.
- 1884 Federation Bill passed in Victoria and rejected in New South Wales. British protectorate declared over New Guinea.
- 1885 N.S.W.—Military contingent sent to the Sudan. Opening of the Broken Hill Proprietary Silver Mines. W.A.—Gold found by prospectors on the Margaret and Ord Rivers in the Kimberley district. Tas.—Silver-lead discovered at Mount Zeehan.
- 1886 Tas.—Discovery of gold and copper at Mount Lyell.
First session of Federal Council held at Hobart on 26th January.
- 1887 W.A.—Gold discovered at Southern Cross.
First "Colonial" Conference in London. Australasian Naval Defence Force Act passed.
- 1888 N.S.W.—Restrictive legislation against Chinese, imposing poll-tax of £100. Qld.—Railway communication opened between Sydney and Brisbane.
Conference of Australian Ministers at Sydney to consider question of Chinese immigration. First meeting of the Australasian Association for the Advancement of Science held in Sydney.
- 1889 Qld.—Railway communication established between Brisbane and Adelaide. W.A.—Framing of new Constitution. Tas.—University of Tasmania founded.
Population of Australia reached 3,000,000.
- 1890 W.A.—Responsible Government granted.
Meeting at Melbourne of Australasian Federation Conference.
- 1891 N.S.W.—Arrival of Australian Auxiliary Squadron. Cessation of assisted immigration. W.A.—Discovery of gold on the Murchison.
First Federal Convention in Sydney, draft bill framed and adopted.
- 1892 W.A.—Discovery of gold at Coolgardie.
- 1893 Financial crisis, chiefly affecting the eastern States.
- 1894 S.A.—Women's suffrage granted—first State to do so.
- 1895 N.S.W.—Free-trade tariff. Land and income taxes introduced.
Conference of Premiers on Federation at Hobart.
- 1896 N.S.W.—People's Federal Convention at Bathurst. Vic.—Wages Board system established by Act of Parliament.
- 1897–8 Sessions of Federal Convention at Adelaide, Sydney and Melbourne.
- 1898 Draft Federal Constitution Bill submitted to electors in Victoria, New South Wales, South Australia and Tasmania. Requisite statutory number of votes not obtained in New South Wales.
- 1899 First contingent of Australian troops sent to South Africa. Conference of Premiers in Melbourne to consider amendments to Federal Constitution Bill. Referendum—Bill accepted by New South Wales, Victoria, Queensland, South Australia and Tasmania. First Labour Government (Queensland).
- 1900 N.S.W.—Old-age pensions instituted.
Contingents of naval troops sent to China. Commonwealth Constitution Act received Royal Assent, 9th July. Proclamation of Commonwealth signed 17th September. Mr. (afterwards Sir) Edmund Barton formed first Federal Ministry.
- 1901 Proclamation of the Commonwealth at Sydney. First Federal Parliament opened at Melbourne by the Duke of Cornwall and York. Interstate free-trade established.

Year.

- 1902 Completion of Pacific Cable (all-British). First Federal Tariff.
- 1903 Coolgardie and Kalgoorlie Water Supply Scheme completed. Inauguration of the Federal High Court.
- 1904 Commonwealth Conciliation and Arbitration Act.
- 1905 Population of Australia reached 4,000,000. Re-introduction of assisted immigration in New South Wales.
- 1906 Wireless telegraphy installed between Queenscliffe, Vic., and Devonport, Tas. Papua taken over by Commonwealth. Excise Tariff Act imposed duties on agricultural machinery except when manufactured "under conditions as to the remuneration of labour which are declared to be fair and reasonable"
- 1907 First telephone trunk line service between Capital Cities, i.e., Sydney and Melbourne. *Imperial Conference in London*. Declaration of first basic wage in "Harvester Judgment".
- 1908 Canberra chosen as site of Australian Capital.
- 1909 Imperial Defence Conference in London. Visit of Lord Kitchener to report and advise on Australian military defence. Queensland University founded.
- 1910 Penny Postage. Arrival of *Yarra* and *Parramatta*, first vessels built for the Royal Australian Navy. Australian Notes Act passed and first Commonwealth notes issued. Admiral Sir R. Henderson visited Australia to advise on naval defence.
- 1911 First Federal Census. Transfer of Australian Capital Territory and Northern Territory to Commonwealth. Introduction of compulsory military training. University of Western Australia founded.
- 1912 Opening of Commonwealth Bank. First payments of Maternity Bonus. First sod turned at Port Augusta of Trans-Australian Railway.
- 1913 Australian Capital named Canberra and foundation stone laid. Appointment of Interstate Commission.
- 1914 Visit of General Sir Ian Hamilton to report on military defence scheme. Double dissolution of Federal Parliament. Transfer of Norfolk Island to Commonwealth.
European War declared 4th August. German possessions in South-West Pacific seized by Australian Naval and Military Expeditionary Force. German cruiser *Emden* destroyed by H.M.A.S. *Sydney* at Cocos Islands, 9th November. Australian and New Zealand Army Corps (A.N.Z.A.C.) formed under Sir William Birdwood.
- 1915 Opening of Broken Hill Proprietary's Ironworks at Newcastle, N.S.W.
Australian and New Zealand troops landed at Gallipoli, 25th April. Evacuation, 18th-20th December. Australian warships with Grand Fleet.
- 1916 Purchase of steamships by the Commonwealth.
Australian and New Zealand mounted troops organized in mounted divisions and camel corps, operating thereafter in Egypt, Palestine and Syria. Other troops transferred to France. First proposal for compulsory military service overseas defeated by referendum.
- 1917 National Ministry formed under Rt. Hon. W. M. Hughes. Transcontinental (Kalgoorlie-Port Augusta) Railway completed.
Australian Flying Corps operating with R.F.C. in Palestine and France. Second proposal for compulsory military service overseas defeated by referendum.
- 1918 Population of Australia reached 5,000,000. Australia House (Strand, London) opened by the King.
Armistice with Germany, 11th November. Repatriation Commission created.
- 1919 Peace Conference. Return of Australian troops. Flight England to Australia by Capt. (Sir) Ross Smith and Lieut. (Sir) Keith Smith. Peace Treaty signed at Versailles, 28th June.
- 1920 Visit to Australia of H.R.H. the Prince of Wales. Imperial Statistical Conference in London.

Year.

- 1921 Mandate given to Australia over Territory of New Guinea. First direct wireless press message, England to Australia. Second Federal Census.
- 1922 First lock on River Murray opened at Blanchetown, South Australia. Queensland Legislative Council abolished.
- 1923 First sod turned on the site of Federal Parliament House at Canberra.
- 1924 Directorate of Commonwealth Bank appointed. Australian Loan Council formed.
- 1925 Population of Australia reached 6,000,000. Solar Observatory established at Canberra.
- 1926 Council for Scientific and Industrial Research established. Imperial Conference. Dominion Status defined.
- 1927 Transfer of Seat of Commonwealth Government from Melbourne to Canberra. Beam wireless established. Financial agreement between Commonwealth and States.
- 1928 State Debts referendum carried.
- 1929 Commonwealth Bank empowered to mobilize gold reserve. Abolition of peacetime compulsory military training in favour of voluntary system.
- 1930 Effects of world-wide severe economic depression felt throughout Australia. Brisbane—Grafton (N.S.W.) railway, first step towards uniform gauge railway communication between capitals of mainland States, opened. First Australian—Rt. Hon. Sir Isaac Alfred Isaacs, G.C.M.G., Chief Justice of the High Court—appointed Governor-General of Australia.
- 1931 Depression continued. Initiation of Premiers' Conference plan to meet the financial situation. Commonwealth Bank Act amended to provide for temporary large reserve against notes. England departed from gold standard. Commonwealth Bank assumed control of exchange rate and lowered it to 125 (previously 130).
- 1932 Sydney Harbour Bridge opened. Australian Broadcasting Commission established. Legislation passed enabling note reserve to be held in sterling securities. Imperial Economic Conference at Ottawa.
- 1933 World Economic Conference in London. Secession Referendum carried (Western Australia). Antarctica and Ashmore and Cartier Islands taken over by the Commonwealth. Third Federal Census.
- 1934 Inauguration of England—Australia Air Mail Service.
- 1935 Empire Statistical Conference at Ottawa.
- 1936 Joint Commonwealth and State Marketing Schemes invalidated by decision of the Privy Council in the James case. Tasmania linked with mainland by submarine telephone cable.
- 1937 Imperial Conference in London. Report of the Royal Commission on Monetary and Banking Systems in Australia.
- 1938 New Defence Programme involving expenditure of £63,000,000 over three years. New Trade Treaty with Japan.
- 1939 Population of Australia reached 7,000,000.
War declared on Germany, 3rd September. Royal Australian Navy placed at disposal of Great Britain. Advance party of Australians embarked for Middle East, 15th December.
- 1940 Exchange of Ministers between Australia and United States of America marked Australia's entry into field of direct diplomatic representation with countries other than the United Kingdom.
First Australian convoy (6th Australian Division) sailed for Middle East. Cruiser *Sydney* crippled Italian cruiser *Bartolomeo Colleoni*.

Year.

- 1941 Establishment of Commonwealth Child Endowment Scheme. United States Congress passed Lend-Lease Bill.
Arrival of units of Eighth Australian Division in Malaya. *Sydney* lost after fight with *Kormoran*. R.A.A.F. in defence of Britain, in Middle East and at Singapore. Australian forces engaged in Middle East, Greece, Crete and Syria. Japanese attack on Pearl Harbour. Australia declared war on Japan, 9th December.
- 1942 Federal uniform taxation adopted. Commonwealth widows' pensions introduced. Rationing of commodities.
Japanese landed at Rabaul. Fall of Singapore. Darwin bombed. United States armed forces landed in Australia. Headquarters of South-West Pacific Command set up by General Douglas MacArthur in Melbourne. Coral Sea Battle. Japanese midget submarines in Sydney Harbour. Owen Stanley Ranges offensive. Ninth Australian Division at El Alamein (North Africa). Kokoda recaptured.
- 1943 Price Stabilization Scheme. Mortgage Bank Department of Commonwealth Bank opened. National Works Council formed.
Australian forces combined with American forces to recapture many places in New Guinea. Commencement of long series of amphibious operations. R.A.A.F. from 1943 till end of war operated on all fronts.
- 1944 Pay-as-you-earn taxation operated from 1st July. Referendum refused Commonwealth Government increased powers in post-war period.
Australian advances in northern New Guinea. Allied invasion of France. Australians landed on New Britain; took over from Americans in Bougainville, Solomon Islands, and at Aitape, New Guinea.
- 1945 Captain Cook Dock opened. Re-establishment and Employment Act. Banking Act to regulate banking and to protect the currency and public credit. Australia ratified United Nations Charter.
Cessation of hostilities in Europe, 8th May. Cessation of hostilities against Japan, 15th August. General demobilization commenced.
- 1946 Cessation of man-power controls. Commonwealth Government accepted responsibility for supply and maintenance of BCOF in Japan. Inauguration of Commonwealth Employment Service. Joint Organization (Wool Disposal) commenced operations. Act to establish National University at Canberra. Coal Industry Act providing, *inter alia*, for a joint Commonwealth-State authority. Commonwealth and State agreement on housing. Trans-Australia Airlines (Government) began operations. Constitution Alteration Referendum granted powers in regard to social services to Commonwealth. Double taxation relief agreement between Australia and Britain. Approval for establishment of guided missile range in Central Australia.
- 1947 End of demobilization. Census of Australia—first since 1933. Full High Court declared invalid section of Banking Act 1945 prohibiting banks from conducting business for State authorities. Legislation to nationalize trading banks enacted (*see* 1948). Australian National Antarctic Research Expedition to establish scientific research station at Heard Island. First "displaced persons" reached Australia.
- 1948 Forty-hour week effective throughout Australia. Membership of Commonwealth Parliament increased. Constitution Alteration (Rents and Prices) proposal defeated. High Court declared invalid vital sections of Banking Act 1947. International Trade Organization Act (General Agreement on Tariffs and Trade and Havana Charter for International Trade Organization).
- 1949 Nationality and Citizenship Act operative. Broadcasting Control Board came into operation. New Guinea placed under international trusteeship and administrative union of Papua and New Guinea established. Certain Australian aboriginals for first time granted franchise at Federal elections. Establishment

Year.

- of New South Wales University of Technology. Australian Whaling Commission established. Reduction of 25 per cent. in Australia's imports from dollar areas. Devaluation of sterling against American dollar, and commensurate devaluation of Australian pound to two dollars twenty-four cents. Commencement of Snowy Mountains Hydro-electric Power Scheme. Australia's population reached 8,000,000.
- 1950 Severe flooding in New South Wales. Arrival of Field-Marshal Sir William Slim, Chief of Imperial General Staff, for defence talks. Following attacks by forces of North Korea on forces of Republic of Korea, United Nations called on members to furnish assistance to Republic of Korea. Australian naval and air forces in vicinity of Korea placed at disposal of United Nations. Loan of \$100,000,000 for Australia by International Bank for Reconstruction and Development. Inauguration of modified free medicine scheme. All volunteers in Australian Regular Army and Citizen Military Forces to be liable for service anywhere in the world—but only in the event of a major war. Adult franchise for Victorian Legislative Council replaced existing franchise dependent on property qualifications. National Service Bill to establish a system of national training for defence forces of Australia introduced in House of Representatives. Commonwealth Government to contribute £31,250,000 to Colombo Plan for Co-operative Economic Development in South and South-East Asia and £3,500,000 for technical assistance programme. Conference of Commonwealth Prime Ministers in London.
- 1951 Opening of Jubilee celebrations to mark the fiftieth year of Australian federation. British Government's confirmation of transfer of Heard Island and the Macdonald Islands (Southern Indian Ocean) to Australia. Governor-General granted double dissolution of nineteenth Parliament and opened the twentieth Parliament with special Jubilee ceremonies. Official cessation of hostilities with Germany. Conferences at all levels of business, finance, and working classes called by Prime Minister to discuss *methods of dealing with adverse economic trends*. Security Treaty signed in Washington by the United States of America, Australia and New Zealand for action in the event of an armed attack in the Pacific. Japanese Peace Treaty signed at San Francisco. Third Conference of Government Statisticians of the British Commonwealth held in Canberra. Opening of new Legislative Council of Papua and New Guinea, which included, for the first time in the history of Australian Legislature, representatives of the native peoples.
- 1952 Nuclear experiments commenced at National University, Canberra. Refusal by Commonwealth Conciliation Commissioner of an application by eleven metal trades unions for marginal wage increases ("Galvin" Award) affected more than 250,000 metal trades workers throughout Australia. Widespread bushfires in south-eastern Australia. Important high-grade uranium deposits discovered at Rum Jungle, Northern Territory. 1st Battalion, The Royal Australian Regiment, sailed from Sydney for service in Korea. Commonwealth Bank prohibited the establishment of further import credits until licences had been obtained for the goods involved. Severe restrictions imposed on imports from all sources and on amounts available for Australians travelling overseas. Agreement between the Commonwealth and South Australian Governments and the Combined Development Agency of the British and American Governments, on the development of uranium deposits at Radium Hill, South Australia. An amendment to the Conciliation and Arbitration Act provided for a limited right of appeal to the Commonwealth Court of Conciliation and Arbitration from decisions of Conciliation Commissioners, and for an increase in the number of Judges. Central and south-west New South Wales experienced one of the worst floods in history. Representatives of New Zealand, the United States of America and Australia met at Honolulu to consider the Pacific defence pact (A.N.Z.U.S.). Qantas Empire Airways began first direct service between Sydney and Johannesburg, South Africa. Commonwealth Government disposed of shares in Commonwealth Oil Refineries to the Anglo-Iranian Oil Co. Britain's first atomic weapon detonated on the Monte Bello Islands, near the north-west coast of Australia. British Commonwealth Economic Conference in London attended by Prime Minister of Australia.

Year.

- 1953 Television Act authorized the establishment in Australia of both National and Commercial television transmitting stations. Commonwealth Bank Act 1953 and Banking Act 1953 passed. Premiers' Conference in Canberra failed to reach agreement on return of income tax powers to States. 2nd Battalion sailed from Sydney for service in Korea. Bill introduced into Northern Territory Legislative Council to give citizenship rights to Northern Territory aboriginals, except those committed to State care. Atomic Energy Act 1953 established Atomic Energy Commission. National Health Bill 1953 consolidated legislation relating to health services. Australia and United States of America signed conventions to end double taxation between the two countries. Coronation of Her Majesty Queen Elizabeth the Second. Britain and Australia signed agreement for reciprocity in social services benefits. Conference of Commonwealth Prime Ministers on defence, economic and political issues held in London. Commonwealth Medical Benefits Scheme commenced. Korean armistice signed by United Nations and Communist Forces at Panmunjom. Pearl Fisheries Act providing for stricter control of pearl fisheries. Commonwealth Court of Conciliation and Arbitration refused applications by employers for reduction of current basic wages and for an increase of standard hours of work, and also refused applications by unions for increases of basic wages. The employers' applications for abandonment of the system of automatic adjustment of the basic wage in accordance with retail price index numbers were, however, granted. Oil discovered at Exmouth Gulf, about 680 miles north of Perth.
- 1954 Her Majesty the Queen and His Royal Highness the Duke of Edinburgh made first tour of Australia by reigning sovereign. Australian and Japanese Governments submitted dispute over extent of Australian sovereignty over sea-bed and control of pearl fisheries to the International Court of Justice and agreement signed on interim régime to regulate Japanese pearling in Australian waters. Australian Antarctic Research Expedition established a station at Mawson to conduct meteorological and other research. An Australian Services mission visited Singapore for a conference between Service representatives of the United Kingdom, the U.S.A., Australia, and New Zealand. Inaugural meeting of Nuclear Research Foundation. Mr. and Mrs. Vladimir Petrov of the Soviet Embassy granted political asylum. Soviet Government recalled its Embassy in Australia, and Ambassador and staff sailed from Fremantle on 29th April. Australian Embassy left Moscow on same date. Royal Commission into espionage in Australia set up. Political conference on Korea and Indo-China opened in Geneva. Royal Commission into Television recommended introduction of television into Australia as soon as practicable. Australia took part in Five Power military talks, at Washington, on South-East Asia. Premier of South Australia announced two new uranium finds in north-east of State. Australian population census taken. Carnegie Corporation granted £250,000 to help finance the building of a giant radio telescope. Australia at the Manila Conference signed a treaty pledging collective defence against aggression in South-East Asia and the South-West Pacific. 3rd Battalion withdrawn from Korea. At Rum Jungle, Prime Minister officially opened first uranium treatment plant established in Australia. National Joint Production Council formed representing both management and workers. Atomic Energy Commission authorized to construct an advanced type of nuclear reactor and research laboratories as part of a programme of co-operation in atomic research with the United Kingdom. Control of Cocos Islands handed over to Australia by Great Britain. Privy Council ruled that New South Wales State Transport (Co-ordination) Act was invalid insofar as it applied to interstate transport.
- 1955 Harbour at Cockburn Sound, W.A., opened to provide shipping facilities for Kwinana. Commonwealth Government announced that about 135 Japanese pearl divers would be permitted to enter Australia to operate with pearling fleets from Broome to Darwin. Conference of British Commonwealth Prime Ministers held in London. Australia's first aluminium plant began production. Minister for External Affairs attended first council meeting of signatories to Manila Treaty. Prime Minister visited Washington as guest of President Eisenhower to talk on defence policy and Australia's role in South-East Asia. First power generated

Year.

1955—
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from Snowy Mountains fed into New South Wales electricity system. Disastrous floods covered large areas of central west New South Wales and Hunter Valley. Australian population reached 9,000,000. All price control ended in New South Wales. Announced that Australia would make Salk polio vaccine at Commonwealth Serum Laboratories, Melbourne. Commonwealth Government announced licensing of four commercial television stations for Australia. Major contracts let to A.W.A. Limited for construction of national television stations in Melbourne and Sydney. Australia's 1955-56 immigration programme increased to a basic intake of 125,000 migrants, including 70,000 assisted-passage. Privileges committee of Commonwealth Parliament found Messrs. Brown and Fitzpatrick guilty of serious breach of privilege. House of Representatives committed both to prison for three months. Commonwealth Full High Court declared that recent legislation imposing a road tax on interstate hauliers was invalid. South Australian State Government's uranium treatment plant at Port Pirie began operations. Prime Minister announced Australia's acceptance of British invitation to join expedition to cross Antarctic in summer of 1957-58. First International Wool Textile Research Conference to be held in Australia opened in Sydney. First F.A.O. Conference to be held in Australia opened in Brisbane. First S.E.A.C.D.T. defence talks to be held in Australia began in Melbourne. Australian task force left for Malaya. New £30 million hot-strip steel mill of Australian Iron and Steel Ltd. at Port Kembla (N.S.W.) opened. Report of Royal Commission on Espionage tabled in House of Representatives. Minister for Health announced that Commonwealth Government had decided to apply means test to Pensioner Medical Service, to apply to all pensions granted under scheme after 31st October. New South Wales Government reintroduced quarterly automatic basic wage adjustments. Cocos (Keeling) Islands became Territory under authority of Commonwealth. Government of Victoria issued High Court writ for declaration that present system of uniform taxation is illegal.

1956

Dr. Roberto Regala appointed first Philippines Ambassador to Australia. Rent control lifted in Tasmania. S.E.A.T.O. military advisers conference opened in Melbourne. Floods in Queensland wiped out whole of south-west Queensland's tobacco crops, loss estimated at £1 million. Thousands of sheep lost. In New South Wales, wide area threatened by floods, 8,000 homeless near Sydney. Record floods also in Victoria and north-eastern Tasmania. Secretary-General of United Nations paid short visit to Australia. High Court ruled by 4-3 majority that Arbitration Court had no power to impose penalties on those disobeying its orders. Australia's first electric main railway line, 98 mile section from Melbourne to Traralgon, Gippsland, opened. Prime Minister in Supplementary Budget announced immediate increases in company and sales taxation and excise and customs duties. The Australian Trade Commissioner, at Hong Kong, had discussions at Peking with communist China on possible Trade expansion between Australia and China. Australia and Netherlands completed agreement under which 75,000 Dutch settlers would come to Australia in next five years. Northern Territory Legislative Council approved agreement between Commonwealth Government and Australian-American backed company giving company an option on 750,000 acres of sub-coastal plains for rice growing. Basic salary of Federal Members of Parliament and Senators increased by £600 per annum. Lengthy industrial dispute in Queensland shearing industry. Australia and United Kingdom agreed on new multi-million pound programme for Woomera rocket range. Sweeping changes made in Commonwealth system of conciliation and arbitration by new Conciliation and Arbitration Act (*see p. 156*). States of New South Wales, Victoria, South Australia and Tasmania marked centenary of responsible government by special ceremonies. Australia's first ambassador to Burma appointed. Bilateral agreement signed between Australia and U.S.A. for peaceful uses of atomic energy. As result of decision by Privy Council, New South Wales liable for repayment of £1 million to interstate road hauliers in respect of licence fees and mileage charges paid under protest since July, 1952 (*see 1954*). All-party committee appointed by Commonwealth Parliament to consider possible changes in Australian constitution and sittings began in Melbourne. First Commissioner for Federation of Malaya in Australia appointed. Dispute over control of Suez Canal resulted in London conference of Canal users. Australian Prime Minister appointed

Year.

1956—

contd.

as chairman of committee to place views of conference before the Egyptian President. Diplomatic relations between Australia and Egypt subsequently broken off. Federal Government decided to reduce immigration from southern European countries. Regular television transmissions commenced in Australia (Sept. 16). First atomic tests on Australian mainland at Maralinga (South Australia). £24 million Eildon Dam, largest water storage scheme in southern hemisphere, officially opened by Premier of Victoria. Australian Government agreed to provide sanctuary for up to 10,000 refugees from Hungarian political oppression. Australia and United Kingdom agreed on comprehensive trade pact to replace 24-year-old Ottawa Agreement. Olympic games held in Melbourne, opened by H.R.H. the Duke of Edinburgh; best performance by Australian athletes in history of games. Antarctic expedition sailed with intention of establishing new station at Vestfold Hills as well as extending existing bases.

STATISTICAL SUMMARY, AUSTRALIA.

NOTE.—(1) In most cases where figures are available back to 1861, these were shown in the Official Year Book No. 39, pp. xxviii-xxix.

(2) Most of the statistics in this Summary relate to the periods shown in the table headings. In those comparatively few cases where the statistics relate to other periods, this is indicated in footnotes.

Item.	Year ended 30th June—							
	1892.	1902.	1912.	1922.	1932.	1942.	1952.	1956.
DEMOGRAPHY(a)—								
Population(b)	{ '000 Males .. 1,737	{ '000 Males .. 2,005	{ '000 Males .. 2,382	{ '000 Males .. 2,799	{ '000 Males .. 3,333	{ '000 Males .. 3,599	{ '000 Males .. 4,311	{ '000 Males .. 4,715
	{ '000 Females .. 1,504	{ '000 Females .. 1,820	{ '000 Females .. 2,192	{ '000 Females .. 2,712	{ '000 Females .. 3,220	{ '000 Females .. 3,545	{ '000 Females .. 4,217	{ '000 Females .. 4,598
	{ '000 Persons .. 3,241	{ '000 Persons .. 3,825	{ '000 Persons .. 4,574	{ '000 Persons .. 5,511	{ '000 Persons .. 6,553	{ '000 Persons .. 7,144	{ '000 Persons .. 8,528	{ '000 Persons .. 9,313
Net Oversea Migration	{ '000 .. 26.9	{ '000 .. 3.0	{ '000 .. 74.4	{ '000 .. 17.5	{ '000 .. -10.1	{ '000 .. 5.2	{ '000 .. 111.4	{ '000 .. -97.3
Marriages	{ Rate(c) .. 24	{ Rate(c) .. 28	{ Rate(c) .. 39	{ Rate(c) .. 47	{ Rate(c) .. 39	{ Rate(c) .. 75	{ Rate(c) .. 77	{ Rate(c) .. 72
Divorces(d) and Judicial Separations	{ Rate(c) .. 7.5	{ Rate(c) .. 7.3	{ Rate(c) .. 8.8	{ Rate(c) .. 8.6	{ Rate(c) .. 6.0	{ Rate(c) .. 10.6	{ Rate(c) .. 9.2	{ Rate(c) .. 7.8
Births	{ '000 .. 190	{ '000 .. 399	{ '000 .. 522	{ '000 .. 1,502	{ '000 .. 1,955	{ '000 .. 3,330	{ '000 .. 7,327	{ '000 .. 6,782
	{ Rate(c) .. 110	{ Rate(c) .. 103	{ Rate(c) .. 122	{ Rate(c) .. 136	{ Rate(c) .. 119	{ Rate(c) .. 135	{ Rate(c) .. 193	{ Rate(c) .. 208
Deaths	{ '000 .. 47	{ '000 .. 46	{ '000 .. 48	{ '000 .. 54	{ '000 .. 57	{ '000 .. 71	{ '000 .. 82	{ '000 .. 82
	{ Rate(c) .. 14.8	{ Rate(c) .. 12.2	{ Rate(c) .. 10.7	{ Rate(c) .. 9.9	{ Rate(c) .. 8.7	{ Rate(c) .. 10.0	{ Rate(c) .. 9.7	{ Rate(c) .. 8.9
Infant Deaths	{ '000 .. 12.7	{ '000 .. 10.7	{ '000 .. 8.4	{ '000 .. 9.0	{ '000 .. 5.0	{ '000 .. 5.3	{ '000 .. 4.9	{ '000 .. 4.6
	{ Rate(e) .. 115.3	{ Rate(e) .. 103.6	{ Rate(e) .. 68.5	{ Rate(e) .. 65.7	{ Rate(e) .. 42.1	{ Rate(e) .. 39.7	{ Rate(e) .. 25.2	{ Rate(e) .. 22.0
WAGES (ADULT MALES)(a)—								
Nominal Weekly Wage Index Numbers	{ (f) .. (f)	{ (f) .. 848	{ (f) .. 1,000	{ (f) .. 1,826	{ (f) .. 1,752	{ (f) .. 1,997	{ (f) .. 4,495	{ (f) .. 5,773
Real Wage Index Numbers(g)	{ (f) .. (f)	{ (f) .. 1,000	{ (f) .. 1,000	{ (f) .. 1,087	{ (f) .. 1,210	{ (f) .. 1,194	{ (f) .. 1,439	{ (f) .. 1,454
PRODUCTION—								
Agricultural(h)—								
Wheat	{ Area mill. acs. .. 3.3	{ Area mill. acs. .. 5.1	{ Area mill. acs. .. 7.4	{ Area mill. acs. .. 9.7	{ Area mill. acs. .. 14.7	{ Area mill. acs. .. 12.0	{ Area mill. acs. .. 10.4	{ Area mill. acs. .. 10.2
	{ Yield mill. bus. .. 26	{ Yield mill. bus. .. 39	{ Yield mill. bus. .. 72	{ Yield mill. bus. .. 129	{ Yield mill. bus. .. 191	{ Yield mill. bus. .. 167	{ Yield mill. bus. .. 160	{ Yield mill. bus. .. 195
	{ Av. Yield bus. '000 acs. .. 7.7	{ Av. Yield bus. '000 acs. .. 7.5	{ Av. Yield bus. '000 acs. .. 9.6	{ Av. Yield bus. '000 acs. .. 13.3	{ Av. Yield bus. '000 acs. .. 12.9	{ Av. Yield bus. '000 acs. .. 13.9	{ Av. Yield bus. '000 acs. .. 15.4	{ Av. Yield bus. '000 acs. .. 19.2
Oats	{ Area '000 acs. .. 246	{ Area '000 acs. .. 461	{ Area '000 acs. .. 617	{ Area '000 acs. .. 733	{ Area '000 acs. .. 1,085	{ Area '000 acs. .. 1,460	{ Area '000 acs. .. 2,365	{ Area '000 acs. .. 3,354
	{ Yield mill. bus. .. 5.7	{ Yield mill. bus. .. 9.8	{ Yield mill. bus. .. 9.6	{ Yield mill. bus. .. 12.1	{ Yield mill. bus. .. 15.2	{ Yield mill. bus. .. 22.3	{ Yield mill. bus. .. 34.5	{ Yield mill. bus. .. 56.5
	{ Av. Yield bus. '000 acs. .. 23.3	{ Av. Yield bus. '000 acs. .. 21.2	{ Av. Yield bus. '000 acs. .. 15.5	{ Av. Yield bus. '000 acs. .. 16.6	{ Av. Yield bus. '000 acs. .. 14.0	{ Av. Yield bus. '000 acs. .. 15.3	{ Av. Yield bus. '000 acs. .. 14.6	{ Av. Yield bus. '000 acs. .. 16.8
Barley	{ Area '000 acs. .. 68	{ Area '000 acs. .. 75	{ Area '000 acs. .. 116	{ Area '000 acs. .. 299	{ Area '000 acs. .. 342	{ Area '000 acs. .. 784	{ Area '000 acs. .. 1,118	{ Area '000 acs. .. 1,894
	{ Yield mill. bus. .. 1.2	{ Yield mill. bus. .. 1.5	{ Yield mill. bus. .. 2.1	{ Yield mill. bus. .. 6.1	{ Yield mill. bus. .. 6.3	{ Yield mill. bus. .. 18.0	{ Yield mill. bus. .. 21.9	{ Yield mill. bus. .. 41.7
	{ Av. Yield bus. '000 acs. .. 17.3	{ Av. Yield bus. '000 acs. .. 20.4	{ Av. Yield bus. '000 acs. .. 17.7	{ Av. Yield bus. '000 acs. .. 20.4	{ Av. Yield bus. '000 acs. .. 18.4	{ Av. Yield bus. '000 acs. .. 23.0	{ Av. Yield bus. '000 acs. .. 19.6	{ Av. Yield bus. '000 acs. .. 22.0
Maize	{ Area '000 acs. .. 284	{ Area '000 acs. .. 295	{ Area '000 acs. .. 340	{ Area '000 acs. .. 305	{ Area '000 acs. .. 269	{ Area '000 acs. .. 301	{ Area '000 acs. .. 170	{ Area '000 acs. .. 167
	{ Yield mill. bus. .. 9.3	{ Yield mill. bus. .. 7.0	{ Yield mill. bus. .. 8.9	{ Yield mill. bus. .. 7.8	{ Yield mill. bus. .. 7.1	{ Yield mill. bus. .. 7.4	{ Yield mill. bus. .. 4.0	{ Yield mill. bus. .. 4.8
	{ Av. Yield bus. '000 acs. .. 32.6	{ Av. Yield bus. '000 acs. .. 23.9	{ Av. Yield bus. '000 acs. .. 26.3	{ Av. Yield bus. '000 acs. .. 25.7	{ Av. Yield bus. '000 acs. .. 26.2	{ Av. Yield bus. '000 acs. .. 24.7	{ Av. Yield bus. '000 acs. .. 23.7	{ Av. Yield bus. '000 acs. .. 28.4
Hay	{ Area '000 acs. .. 942	{ Area '000 acs. .. 1,688	{ Area '000 acs. .. 2,518	{ Area '000 acs. .. 2,995	{ Area '000 acs. .. 2,635	{ Area '000 acs. .. 2,758	{ Area '000 acs. .. 1,549	{ Area '000 acs. .. 2,241
	{ Yield '000 tons .. 1,067	{ Yield '000 tons .. 2,025	{ Yield '000 tons .. 2,868	{ Yield '000 tons .. 3,902	{ Yield '000 tons .. 3,167	{ Yield '000 tons .. 3,575	{ Yield '000 tons .. 2,345	{ Yield '000 tons .. 3,625
	{ Av. Yield tons '000 acs. .. 1.13	{ Av. Yield tons '000 acs. .. 1.20	{ Av. Yield tons '000 acs. .. 1.14	{ Av. Yield tons '000 acs. .. 1.30	{ Av. Yield tons '000 acs. .. 1.20	{ Av. Yield tons '000 acs. .. 1.30	{ Av. Yield tons '000 acs. .. 1.51	{ Av. Yield tons '000 acs. .. 1.62
Potatoes	{ Area '000 acs. .. 113	{ Area '000 acs. .. 110	{ Area '000 acs. .. 130	{ Area '000 acs. .. 149	{ Area '000 acs. .. 145	{ Area '000 acs. .. 99	{ Area '000 acs. .. 118	{ Area '000 acs. .. 94
	{ Yield '000 tons .. 380	{ Yield '000 tons .. 323	{ Yield '000 tons .. 301	{ Yield '000 tons .. 388	{ Yield '000 tons .. 397	{ Yield '000 tons .. 333	{ Yield '000 tons .. 509	{ Yield '000 tons .. 402
	{ Av. Yield tons '000 acs. .. 3.37	{ Av. Yield tons '000 acs. .. 2.94	{ Av. Yield tons '000 acs. .. 2.31	{ Av. Yield tons '000 acs. .. 2.60	{ Av. Yield tons '000 acs. .. 2.74	{ Av. Yield tons '000 acs. .. 3.35	{ Av. Yield tons '000 acs. .. 4.31	{ Av. Yield tons '000 acs. .. 4.29
Sugar-cane	{ Area (i) '000 acs. .. 45	{ Area (i) '000 acs. .. 87	{ Area (i) '000 acs. .. 101	{ Area (i) '000 acs. .. 128	{ Area (i) '000 acs. .. 242	{ Area (i) '000 acs. .. 255	{ Area (i) '000 acs. .. 282	{ Area (i) '000 acs. .. 373
	{ Yield '000 tons .. 738	{ Yield '000 tons .. 1,368	{ Yield '000 tons .. 1,682	{ Yield '000 tons .. 2,437	{ Yield '000 tons .. 4,213	{ Yield '000 tons .. 5,154	{ Yield '000 tons .. 5,327	{ Yield '000 tons .. 8,901
	{ Av. Yield tons '000 acs. .. 16.2	{ Av. Yield tons '000 acs. .. 15.7	{ Av. Yield tons '000 acs. .. 16.7	{ Av. Yield tons '000 acs. .. 19.0	{ Av. Yield tons '000 acs. .. 17.4	{ Av. Yield tons '000 acs. .. 20.3	{ Av. Yield tons '000 acs. .. 18.9	{ Av. Yield tons '000 acs. .. 23.9
Vineyards	{ Area '000 acs. .. 49	{ Area '000 acs. .. 64	{ Area '000 acs. .. 61	{ Area '000 acs. .. 92	{ Area '000 acs. .. 113	{ Area '000 acs. .. 130	{ Area '000 acs. .. 136	{ Area '000 acs. .. 135
	{ Wine mill. gals. .. 3.4	{ Wine mill. gals. .. 5.3	{ Wine mill. gals. .. 5.0	{ Wine mill. gals. .. 8.5	{ Wine mill. gals. .. 14.2	{ Wine mill. gals. .. 16.0	{ Wine mill. gals. .. 35.3	{ Wine mill. gals. .. 22.9
Total Area of Crops	{ mill. acs. .. 5.4	{ mill. acs. .. 8.4	{ mill. acs. .. 12.1	{ mill. acs. .. 15.4	{ mill. acs. .. 21.2	{ mill. acs. .. 20.5	{ mill. acs. .. 19.8	{ mill. acs. .. 22.5
Pastoral, Dairying, etc.—								
Livestock(j)	{ Horses mill. .. 1.6	{ Horses mill. .. 1.6	{ Horses mill. .. 2.3	{ Horses mill. .. 2.4	{ Horses mill. .. 1.8	{ Horses mill. .. 1.6	{ Horses mill. .. 0.9	{ Horses mill. .. 0.8
	{ Cattle .. 11.1	{ Cattle .. 8.5	{ Cattle .. 11.8	{ Cattle .. 14.4	{ Cattle .. 12.3	{ Cattle .. 13.6	{ Cattle .. 14.9	{ Cattle .. 16.5
	{ Sheep .. 106	{ Sheep .. 72	{ Sheep .. 97	{ Sheep .. 86	{ Sheep .. 111	{ Sheep .. 125	{ Sheep .. 118	{ Sheep .. 139
	{ Pigs .. 0.9	{ Pigs .. 0.9	{ Pigs .. 1.1	{ Pigs .. 1.0	{ Pigs .. 1.2	{ Pigs .. 1.5	{ Pigs .. 1.0	{ Pigs .. 1.2
Wool(k)	{ '000 tons .. (a) 634	{ '000 tons .. (a) 539	{ '000 tons .. (a) 798	{ '000 tons .. (a) 723	{ '000 tons .. 1,007	{ '000 tons .. 1,167	{ '000 tons .. 1,080	{ '000 tons .. 1,410
Butter	{ '000 tons .. (a) 19	{ '000 tons .. (a) 46	{ '000 tons .. (a) 95	{ '000 tons .. (a) 119	{ '000 tons .. 175	{ '000 tons .. 168	{ '000 tons .. 135	{ '000 tons .. 209
Cheese	{ '000 tons .. (a) 4.5	{ '000 tons .. (a) 5.3	{ '000 tons .. (a) 7.1	{ '000 tons .. (a) 14.6	{ '000 tons .. 14.0	{ '000 tons .. 30.1	{ '000 tons .. 40.6	{ '000 tons .. 38.7
Meat(l)—								
Beef and Veal	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)
Mutton and Lamb	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)
Pork	{ .. (f) .. (f)							
Bacon and Ham	{ .. (a) 7.5	{ .. (a) 15.2	{ .. (a) 23.8	{ .. (a) 26.2	{ .. (a) 31.8	{ .. (a) 42.5	{ .. (a) 36.6	{ .. (a) 37.5
Total Meat	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)	{ .. (f) .. (f)

(a) Year ended previous December. (b) At 31st December of previous year. (c) Number per 1,000 of mean population. (d) Decreases made absolute, including decreases for nullity of marriage. (e) Number per 1,000 live births. (f) Not available. (g) Index of nominal weekly wage rates for adult males divided by the "C" Series Retail Price index number. (h) Season ending in year shown. (i) Cane cut for crushing. (j) As at 31st December of previous year for years to 1942, as at 31st March thereafter. (k) In terms of greasy. (l) Bone-in weight in terms of fresh meat; cured weight, bacon and ham.

STATISTICAL SUMMARY, AUSTRALIA—continued.

NOTE.—See headnotes on page 1123.

Item.	Year ended 30th June—							
	1892.	1902.	1912.	1922.	1932.	1942.	1952.	1956.
PRODUCTION—continued.								
Mineral(a)(b)—								
Copper(c) .. '000 tons	(d)	(d)	(d)	(d)	13.5	20.9	17.9	45.5
Gold(c) .. '000 fine oz.	1,243	3,300	2,484	758	595	1,497	896	1,049
Lead(c) .. '000 tons	3.5	11.8	22.2	57.7	162.6	275.5	212.0	295.9
Zinc(c) .. " "	(e)	(e)	190.3	20.7	97.5	170.0	189.2	256.6
Black Coal .. Mill. tons	4.4	6.9	10.6	12.8	8.4	14.2	17.6	19.3
Brown Coal .. " "	..	..	(e)	0.1	2.2	4.6	7.8	10.1
Forestry—								
Sawn output of native timber mill. sup. ft.	(d)	(a) 452	(a) 605	590	237	914	1,393	1,454
Factories—								
Number of factories '000			14.5	18.0	21.7	27.0	45.8	52.4
Persons employed ..	(f)	(f)	312	379	337	725	978	1,060
Salaries and wages paid £m.			28	68	56	180	612	853
Value of production(g)—								
Chemicals, etc. ..			1.1	3.2	7.9	24.8	63.7	119.2
Industrial metals, etc. ..			12.0	23.6	22.8	119.9	413.1	595.4
Textiles, etc. ..	(d)	(d)	7.5	19.2	6.9	21.0	56.6	81.5
Clothing ..					11.1	23.6	81.1	102.5
Food, etc. ..			11.8	27.2	28.7	53.2	141.1	197.8
Paper, etc. ..			4.2	9.0	9.6	17.1	68.2	99.1
All groups ..	23.3	29.1	47.5	112.5	111.0	316.5	1,024.0	1,498.8
Value of land and buildings ..			32.5	67.3	106.6	156.3	360.2	655.6
Value of plant and machinery ..	(d)	(d)	31.4	78.1	121.5	169.2	412.5	803.5
Net value of production(h)—								
Agriculture .. £m.	17.0	23.8	38.8	81.9	49.7	64.0	246.7	279.5
Pastoral ..	31.3	27.2	52.7	75.1	43.0	85.4	400.5	444.8
Dairying ..	6.0	7.6	16.1	35.3	22.6	34.3	103.8	155.2
Poultry ..	1.9	2.0	4.0	9.0	5.7	6.5	31.5	30.2
Bee-farming ..	0.1	0.1	0.1	0.1	0.1	0.4	0.8	1.7
Total, Rural ..	56.3	60.7	111.7	201.4	121.1	190.6	783.3	911.4
Trapping ..	(d)	(d)	(d)	(d)	1.5	5.0	6.7	6.0
Forestry ..			4.8	9.1	3.9	10.2	37.9	49.5
Fisheries ..	4.4	2.8	1.1	1.4	1.4	1.8	5.7	8.9
Mines and Quarries(i)	12.1	22.0	23.3	20.0	13.5	33.4	97.2	132.5
Total, Non-Rural ..	16.5	24.8	29.2	30.5	20.3	50.4	147.5	196.9
Total, Primary ..	72.8	85.5	140.9	231.9	141.4	241.0	930.8	1,108.3
Factories(g) ..	23.3	29.1	47.5	112.5	111.0	316.5	1,024.0	1,498.8
Total All Industries ..	96.1	114.6	188.4	344.4	252.4	557.5	1,954.8	2,607.1
BUILDING(j)—								
Permits, New Dwellings { '000	(d)	(d)	(d)	(d)	2.1	9.7	32.8	40.3
„ All Buildings(k) £m.					1.5	9.6	80.4	132.5
					4.6	13.5	116.4	226.7
OVERSEA TRADE—								
Imports .. £m. f.o.b.	(a) 34	(a) 38	(a) 61	94	52	174	1,053	821
Exports .. " "	36	50	79	128	108	169	675	782
Principal Exports(l)—								
Wool .. Mill. lb.(m) ..	641	529	734	946	903	938	1,036	1,264
.. £m. f.o.b. ..	20	15	26	48	32	58	323	338
Wheat .. '000 tons ..	258	543	1,477	2,677	3,413	598	1,685	1,903
.. £m. f.o.b. ..	1.9	2.8	9.6	28.6	19.2	4.6	55.3	46.5
Flour .. '000 short tons	33	97	176	360	611	414	789	667
.. £m. f.o.b. ..	0.3	0.6	1.4	5.5	3.8	4.2	33.0	19.7
Butter .. mill. lb. ..	4	35	102	127	202	130	25	185
.. £m. f.o.b. ..	0.2	1.4	4.6	8.0	10.3	8.1	4.6	29.0

(a) Year ended previous December. (b) Breaks in the continuity of the series occurred in 1931 and 1951. (c) Mine production, i.e., metal content of minerals produced. (d) Not available. (e) Less than .05. (f) Owing to variation in classification, effective comparison is impossible. (g) For definition see page 227. (h) Gross value from 1891 to 1921-22. Prior to 1922 figures are for years ended previous December. For definitions of gross and net value see page 1047. (i) Incomplete. (j) Six capital cities and suburbs. (k) Includes additions and alterations. (l) Australian produce except gold, which includes re-exports. (m) In terms of greasy.

STATISTICAL SUMMARY, AUSTRALIA—continued.

NOTE.—See headnotes on page 1123.

Item.	Year ended 30th June—							
	1892.	1902.	1912.	1922.	1932.	1942.	1952.	1956.
OVERSEA TRADE—continued.	(a)	(a)	(a)					
Principal Exports(b)—continued.								
Hides and Skins £m. f.o.b.	0.9	1.3	3.2	3.1	2.3	6.0	17.1	20.9
Meats	0.5	2.6	4.3	5.5	6.4	14.1	35.5	60.5
Fruit(c) .. .. .	..	0.2	0.5	3.0	4.8	4.0	19.5	32.6
Sugar .. .. .	..	(d)	(d)	(d)	2.5	2.6	6.9	24.8
Gold	5.7	14.3	12.0	3.5	11.9	9.2	7.0	8.3
Silver and Lead(e)	1.9	2.3	3.2	2.7	2.9	7.4	32.1	32.2
Ores and Concentrates .. .. .	..	(d)	3.7	0.8	0.2	1.3	20.4	15.7
Principal Imports—			(a)					
Vegetable foodstuffs, etc.		3.6	3.7	4.0	2.6	6.1	25.0	22.1
Apparel, etc.		10.9	16.2	31.0	15.4	32.7	203.6	111.3
Oil, etc.		1.2	1.6	4.7	5.5	16.2	87.5	99.6
Metals, etc.		7.8	14.0	22.8	7.4	71.8	392.9	322.0
Rubber, etc.		0.5	1.4	1.7	0.8	3.2	35.1	22.0
Paper, etc.		1.6	2.6	4.4	4.4	4.3	68.8	44.2
TRANSPORT AND COMMUNICATION—								
Shipping—	(a)	(a)	(a)					
Oversea Vessels, } No.	3,778	4,028	4,174	3,111	3,057	2,544	4,136	4,882
Entrances and } mill. tons	4.7	6.5	10.0	9.1	11.4	10.8	18.2	22.3
Clearances								
Oversea Cargo—								
Discharged mill. tons(g)			(f)	2.4	3.0	5.5	14.4	15.9
Shipped " (g)			(f)	5.8	6.7	4.2	5.7	8.2
Interstate Vessels, } No.	(f)	(f)	9,605	9,782	7,957	9,100	7,524	9,322
Entrances and } mill. tons			13.1	12.8	11.1	12.9	15.8	19.1
Clearances								
Interstate Cargo Shipped mill. tons(g)			(f)	5.5	4.0	10.0	9.0	12.9
Government Railways—	(h)	(h)	(h)					
Route-miles '000	10.4	12.8	16.8	23.5	27.0	27.2	26.8	26.5
Passenger-journeys mill.	84	115	228	335	303	475	501	515
Goods and livestock carried mill. tons	9.4	15.5	25.5	31.5	26.1	38.9	44.3	46.8
Train-miles run mill.	29.7	38.2	55.2	56.1	63.8	88.5	93.4	96.2
Tramways and Omnibuses—								
Passenger-journeys—								
Trams mill.			360	569	589	874	689	593
Omnibuses(i) " } (f)			(f)	(f)	(f)	193	330	334
Motor vehicles on the register—								
Cars '000			(f)	102	420	451	1,031	1,472
Commercial vehicles " }			(f)	96	251	581	679	
Civil Aviation (Internal)—								
Plane-miles flown mill.					2.5	7.8	41.8	43.7
Passengers carried '000					57	152	1,829	2,020
Passenger-miles mill.					(f)	76	722	828
Freight car- f '000 short tons					0.1	1.2	57.5	84.4
ried mill. ton-miles					(f)	0.9	26.7	38.9
Postal—	(a)	(a)	(a)					
Postal matter dealt with(j) mill. articles	242	324	595	702	(k) 871	(k) 1,100	(k) 1,485	(k) 1,705
Telegrams and cablegrams mill.	10.0	9.9	13.3	16.8	13.9	26.1	29.8	25.4
Telephones—								
Instruments '000	7	29	103	259	485	739	1,301	1,704
Lines	(f)	25	85	196	364	531	927	1,207
Calls—Trunk mill.	(f)	(f)	(f)	14.0	28.9	45.3	69.4	99.1
Local " } (f)				221	369	664	968	1,186
Broadcast Listeners' Licences '000	..	..	..	(l) 36	369	1,320	1,961	2,089
PUBLIC FINANCE—								
Commonwealth—								
Consolidated Revenue Fund—		(h)	(h)					
Revenue £m.	..	11	21	64	72	210	1,017	1,138
Expenditure .. .. . " .. .. .	..	4	15	64	72	210	1,017	1,138
Net loan fund expenditure .. .. . " .. .. .	..	..	1	5	4	213	55	70
Taxation collections .. .. . " .. .. .	..	9	16	50	54	180	934	1,004

(a) Year ended previous December. (b) Australian produce except gold, which includes re-exports. (c) Excludes fruit juices. (d) Less than .05. (e) Includes concentrates. (f) Not available. (g) Tons weight plus tons measurement. (h) Year ended 30th June. (i) Government and municipal only. (j) Letters, postcards lettercards and newspapers. (k) Includes packets. (l) Year 1923-24.

STATISTICAL SUMMARY, AUSTRALIA—continued.

NOTE.—See headnotes on page 1123.

Item.	Year ended 30th June—							
	1892.	1902.	1912.	1922.	1932.	1942.	1952.	1956.
PUBLIC FINANCE—continued.								
State—								
Consolidated Revenue Funds—								
Revenue	£m.	(a) 28	41	85	100	152	389	526
Expenditure .. ..	..	(a) 29	41	87	121	149	392	541
Net loan expenditure(b)	..	(a) 9	16	34	6	8	198	156
Taxation collections ..	..	(a) 3	5	18	33	57	63.	98
Public Debt(c)—								
Commonwealth	£m.	..	6	354	319.	638	1,869	1,927
State .. ..	..	(d) 155	279	519	789	911	1,396	1,962
Total .. ..	..	(d) 155	285	873	1,108	1,549	3,265	3,889
Overseas .. ..	..	(a)	194	412	522	516	406	448
In Australia .. ..	..	(a)	91	461	586	1,033	2,859	3,441
Private Finance—								
Commonwealth Note Issue(e) £m.	..	(a)	8	54	51	103	303	374
All cheque-paying banks—								
Advances(f) .. ..	..	(d) 125	94	109	183	261	817	972
Deposits(f) .. ..	..	(d) 98	91	143	289	319	483	1,353
Bank clearings(d) ..	..	(a)	338	662	1,702	2,828	12,160	13,812
Savings bank deposits(g)	..	(d) 15	31	59	154	198	892	1,141
Life Assurance(d)(h)—								
Ordinary—								
Policies	'000	..	414	484	730	871	1,340	2,553
Sum assured	£m.	..	108	109	181	285	463	1,212
Industrial—								
Policies	'000	(a)	236	467	973	1,550	2,780	3,843
Sum assured	£m.	..	5	10	30	67	127	254
Total—								
Policies	'000	..	650	951	1,703	2,421	4,120	6,396
Sum assured	£m.	..	113	119	211	352	590	1,466
SOCIAL STATISTICS—								
Commonwealth Social Services—								
Age and Invalid Pensions { '000(c) 90 144 256 336 420 529								
.. .. £m. 2.2 5.4 11.1 19.3 59.8 101.6								
Child Endowment, Claims in force { '000(c) 488 1,205 1,340								
.. .. £m. 11.3 46.6 60.4								
Total Commonwealth Health and Social Services(i) £m. 2.2 6.1 11.5 30.9 137.6 214.9								
War Pensions... { '000(c) 225 274 220 525 600								
.. .. £m. 7.0 7.4 7.5 31.8 43.2								
Service Pensions. { '000(c) 14 17 35								
.. .. £m. 0.6 F.8 4.1								
State Social Services(j)—								
Education(d)—								
Government Schools—								
Schools:	'000	6.2	7.0	8.0	9.4	10.1	9.5	7.6
Staff .. ..	..	12.6	14.5	17.0	26.1	33.8	32.1	36.7
Students .. ..	..	561	638	639	819	937	887	1,013
Non-government Schools—								
Schools:	'000	2.0	2.5	1.9	1.7	1.8	1.9	2.1
Staff .. ..	..	6.0	8.3	7.8	8.8	10.0	11.4	13.3
Students .. ..	..	125	149	161	199	221	257	326
Universities(k)—								
Number .. ..	..	4	4	5	6	6	8	9
Staff(l) .. ..	..	(a)	249	482	703	1,416	3,082	3,378
Students	'000	1.6	1.8	3.4	8.0	9.8	13.9	31.7
Public Hospitals—								
Number .. ..	..	(d)	285	355	404	513	566	675
Staff—Medical	'000	(a)	1.1	1.5	3.2	3.9	6.9	8.1
Nursing .. ..	..	(a)	5.1	6.8	9.3	15.4	24.6	28.8
In-patients, cases treated ..	..	m n 54	(n) 91	134	215	371	595	896
POLICE AND PRISONS(d)—								
Police	'000	5.3	5.8	6.4	6.9	8.6	9.7	12.9
Prisons .. ..	..	(a)	104	91	85	70	69	74
Prisoners	'000	(a)	4.3	3.1	2.9	4.2	4.4	5.1
PRICES(d)—								
"C" Series Retail Price Index ..	..	..	1,000	1,680	1,448	1,673	3,124	3,970

(a) Not available. (b) Loan Expenditure in works, services, etc. (c) At 30th June.
(d) Year ended previous December. (e) At end of June. (f) Figures for 1892 are averages of weekly balance for the December quarter; the remainder are for the June quarter. (g) 1891 at 31st December, thereafter at 30th June. (h) Existing business in Australia. (i) Excludes war and service pensions. (j) Includes Northern Territory and Australian Capital Territory. (k) Excludes Australian National University. (l) Teaching and research staff. Includes part-time. (m) Year 1891-92 for Victoria. (n) South Australia includes Adelaide Hospital only.

APPENDIX.

(Some recent information which has come to hand since the various chapters were sent to press is given hereunder in summarized form. For further or more detailed information, and for the latest available statistics, reference should be made to other publications issued by this Bureau (*see pp. 1082-4*), notably the *Monthly Review of Business Statistics* and the *Quarterly Summary of Australian Statistics*.)

CHAPTER II.—PHYSIOGRAPHY.

§ 2. Climate and Meteorology of Australia.

Rainfall: Australian Capital Cities, p. 48.—Rainfall recorded in Australian capital cities during 1956 was as follows:—Canberra, 40.46 ins.; Perth, 37.35 ins.; Adelaide, 27.24 ins.; Brisbane, 59.18 ins.; Sydney, 67.33 ins.; Melbourne, 30.96 ins.; Hobart, 36.63 ins.

CHAPTER III.—GENERAL GOVERNMENT.

§ 1. Scheme of Parliamentary Government.

Commonwealth Parliamentary Allowances, p. 65.—The annual salaries of senators and members of the House of Representatives were increased by £600 to £2,350 from 1st July, 1957. The Parliamentary Allowances Act also provided that senators would receive an annual expense allowance of £700, members in metropolitan electorates £600, and country members £800. Expense allowances which were previously non-taxable became subject to normal income-tax provisions, and stamp allowances and gold passes were abolished.

§ 2. Parliaments and Elections.

State Parliaments, pp. 69-72.—The thirty-fourth Queensland Parliament was dissolved on 13th June, 1957. The thirty-fifth Parliament was opened on 27th August, 1957.

§ 3. Administration and Legislation.

Governors and State Ministers, pp. 76-78.—(i) *New South Wales.* On 1st August, 1957, Lieut.-General Eric Winslow Woodward, C.B., C.B.E., D.S.O., was sworn in as Governor of New South Wales in succession to Lieut.-General Sir John Northcott, K.C.M.G., K.C.V.O., C.B.

(ii) *Queensland*. Subsequent to elections held on 3rd August, 1957, a new ministry took office on 12th August, 1957. It was constituted as follows:—

Premier and Chief Secretary and Vice-President of the Executive Council—

THE HON. G. F. R. NICKLIN.

Minister for Labour and Industry—

THE HON. K. J. MORRIS.

Minister for Education—

THE HON. J. C. A. PIZZEY.

Attorney-General—

THE HON. A. W. MUNRO.

Treasurer and Minister for Housing—

THE HON. T. A. HILEY.

Minister for Development, Mines and Main Roads—

THE HON. E. EVANS.

Minister for Public Lands and Irrigation—

THE HON. A. G. MÜLLER.

Minister for Health and Home Affairs—

THE HON. H. W. NOBLE.

Minister for Agriculture and Stock—

THE HON. O. O. MADSEN.

Minister for Public Works and Local Government—

THE HON. J. A. HEADING.

Minister for Transport—

THE HON. G. W. W. CHALK.

Leaders of the Opposition, Commonwealth and State Parliaments, p. 78.—Victoria: The Hon. A. E. Shepherd. Queensland: L. A. Wood. Western Australia: The Hon. D. Brand.

§ 5. Cost of Parliamentary Government, p. 81.

The cost of Parliamentary Government, Commonwealth and individual States, for the year 1955–56 was as follows:—

Commonwealth, £2,532,246 (5s. 5d. per head); New South Wales, £742,753 (4s. 3d.) Victoria, £586,940 (4s. 7d.); Queensland, £474,515 (7s. 0d.); South Australia, £372,493 (8s. 11d.); Western Australia, £444,527 (13s. 3d.); Tasmania, £224,940 (14s. 1d.); and total, £5,378,414 (11s. 7d.)

The amounts expended under the major headings for all Governments during 1955–56 were:—Governor-General or Governor, £348,730; Ministry, £278,973; Parliament, £3,343,183; Electoral, £1,327,429.

CHAPTER VI.—LABOUR, WAGES AND PRICES.

A. RETAIL PRICES AND PRICE INDEXES.

§ 4. Tabular Statements of Retail Price Index Numbers.

The Interim Retail Price Index, p. 148.—Very large seasonal fluctuations in prices of potatoes and onions, first upward then downward, affected the movement of the Food Group and the All Groups index numbers in most cities from September quarter, 1956 to March quarter, 1957, and caused disparate movements in the indexes for respective cities.

In order to provide an indication of the trend of the indexes in respect of items not materially affected by seasonal factors, a Food Group Index and an All Groups Index which exclude potatoes and onions are shown in the following table in comparison with the indexes including potatoes and onions.

The table shows the interim retail price index numbers for the years ended June, 1956 and June, 1957 and for the quarters from September, 1955 to June, 1957, for each capital city and for the six capital cities combined.

INTERIM RETAIL PRICE INDEX NUMBERS.

(Base of each Index: Year 1952-53 = 100.)

City.	Year ended June, 1956.	Year ended June, 1957.	1955.		1956.				1957.	
			Sept. Qtr.	Dec. Qtr.	Mar. Qtr.	June Qtr.	Sept. Qtr.	Dec. Qtr.	Mar. Qtr.	June Qtr.

GROUP I.—FOOD (EXCLUDING POTATOES AND ONIONS).

Sydney ..	106.7	111.4	105.3	105.7	106.9	109.1	111.3	110.8	111.8	111.8
Melbourne ..	109.9	114.2	108.4	108.8	109.9	112.8	113.2	113.8	114.5	115.2
Brisbane ..	104.7	108.4	103.9	103.9	104.7	106.4	107.5	107.2	108.6	110.1
Adelaide ..	108.7	111.1	107.6	106.9	108.3	111.9	111.4	109.7	110.7	112.7
Perth ..	111.0	115.8	108.9	109.5	112.1	113.5	115.2	114.3	115.8	118.0
Hobart ..	111.3	115.3	109.2	111.0	111.7	113.1	114.1	115.7	115.5	115.9
Six Capitals(a) ..	108.1	112.4	106.7	107.0	108.2	110.7	111.9	111.6	112.6	113.3

GROUP I.—FOOD (INCLUDING POTATOES AND ONIONS).

Sydney ..	109.0	114.4	106.5	107.2	109.1	113.1	118.9	114.2	112.1	112.4
Melbourne ..	112.9	118.6	110.1	111.5	112.6	117.2	122.4	120.2	115.4	116.5
Brisbane ..	108.1	112.1	106.8	105.6	108.7	111.1	115.9	111.6	109.9	111.1
Adelaide ..	111.1	114.9	109.2	109.7	110.1	115.2	119.5	115.7	110.9	113.4
Perth ..	111.3	116.8	109.6	109.8	112.0	113.9	116.3	115.4	116.7	118.8
Hobart ..	113.6	118.3	110.5	113.4	114.7	115.8	119.2	120.4	116.7	117.0
Six Capitals(a) ..	110.6	115.8	108.2	109.0	110.6	114.5	119.6	116.2	113.2	114.2

GROUP II.—CLOTHING AND DRAPERY.

Sydney ..	103.0	105.9	103.0	103.1	102.8	103.1	103.5	105.7	106.6	107.6
Melbourne ..	103.9	106.4	103.8	103.9	104.0	104.0	104.4	105.8	106.6	109.0
Brisbane ..	103.3	105.8	103.5	103.2	103.1	103.2	103.7	104.9	106.7	107.9
Adelaide ..	102.9	103.9	102.8	103.3	103.1	102.5	102.7	103.2	104.1	105.5
Perth ..	103.0	105.4	102.7	103.1	103.0	103.3	103.7	104.4	106.0	107.3
Hobart ..	104.6	107.8	103.9	104.4	104.5	105.4	106.0	106.8	108.6	109.6
Six Capitals(a) ..	103.3	105.8	103.3	103.4	103.3	103.4	103.8	105.3	106.3	107.9

GROUP III.—RENT(b)—(4 AND 5 ROOMED HOUSES).

Sydney ..	111.3	113.5	110.6	111.1	111.7	112.0	112.0	112.4	114.2	115.4
Melbourne ..	111.9	123.3	102.7	102.9	120.7	121.3	122.0	122.4	123.6	125.2
Brisbane ..	107.0	111.0	106.4	106.4	107.3	107.8	108.8	110.3	111.7	113.3
Adelaide ..	114.9	124.8	112.1	113.6	116.1	118.0	121.2	123.7	126.3	128.1
Perth ..	159.1	169.2	154.9	157.0	160.4	164.1	166.7	168.5	169.7	171.8
Hobart ..	126.1	151.9	109.5	110.3	139.4	145.2	147.8	150.9	153.9	155.0
Six Capitals(a) ..	115.5	122.5	111.4	112.0	118.8	119.7	120.6	121.5	123.1	124.6

GROUP IV.—OTHER ITEMS.(c)

Sydney ..	103.6	121.5	101.5	103.2	103.6	106.2	118.0	121.4	122.5	124.1
Melbourne ..	109.6	116.4	102.9	110.1	110.7	114.6	115.7	116.4	116.7	116.9
Brisbane ..	110.1	117.9	106.0	109.6	110.0	114.7	116.1	118.0	118.6	119.0
Adelaide ..	103.7	107.9	102.7	102.7	102.8	106.6	106.8	107.9	108.3	108.5
Perth ..	106.4	113.7	104.5	105.1	106.2	109.9	110.3	114.5	114.8	115.3
Hobart ..	110.3	120.1	108.9	109.0	109.9	113.5	119.3	119.7	120.3	121.1
Six Capitals(a) ..	106.4	117.8	102.8	106.2	116.7	110.1	115.6	117.8	118.5	119.3

NOTE.—For footnotes see next page.

INTERIM RETAIL PRICE INDEX NUMBERS—*continued.*

(Base of each Index : Year 1952-53 = 100.)

City.	Year ended June, 1956.	Year ended June, 1957.	1955.			1956.			1957.	
			Sept. Qtr.	Dec. Qtr.	Mar. Qtr.	June Qtr.	Sept. Qtr.	Dec. Qtr.	Mar. Qtr.	June Qtr.
ALL GROUPS (EXCLUDING POTATOES AND ONIONS).										
Sydney ..	105.3	113.0	104.1	104.8	105.3	107.0	111.2	112.6	113.7	114.5
Melbourne ..	108.4	113.5	105.1	107.3	109.4	111.6	112.3	113.1	113.7	114.8
Brisbane ..	105.9	110.3	104.6	105.4	105.8	107.7	108.7	109.5	110.9	112.0
Adelaide ..	106.3	109.5	105.4	105.4	106.1	108.4	108.6	108.7	109.7	111.0
Perth ..	112.6	117.9	110.8	111.5	113.1	115.0	116.1	117.2	118.4	119.9
Hobart ..	110.6	118.0	107.7	108.6	111.9	114.1	116.4	117.7	118.5	119.2
Six Capitals(a) ..	107.0	113.0	105.1	106.3	107.4	109.4	111.5	112.5	113.5	114.5
ALL GROUPS (INCLUDING POTATOES AND ONIONS).										
Sydney ..	106.1	114.1	104.6	105.4	106.2	108.5	114.0	113.8	113.7	114.7
Melbourne ..	109.5	115.1	105.8	108.3	110.4	113.3	115.7	115.5	114.1	115.3
Brisbane ..	107.1	111.7	105.6	106.0	107.3	109.5	111.9	111.2	111.4	112.4
Adelaide ..	107.2	110.9	106.0	106.4	106.8	109.7	111.6	110.9	109.7	111.3
Perth ..	112.7	118.3	111.1	111.6	113.1	115.2	116.6	117.6	118.7	120.2
Hobart ..	111.5	119.1	108.2	109.6	113.0	115.1	118.3	119.4	118.9	119.6
Six Capitals(a) ..	108.0	114.3	105.7	107.0	108.3	110.8	114.4	114.2	113.7	114.8

(a) Weighted average. (b) The rent index numbers measure the proportionate rise and fall in the average weekly rentals paid for houses of four and five rooms taking corresponding houses throughout. See footnote (b) on page 149. (c) A group of items under the following headings—Electricity, Gas, and Firewood; Household Sundries; Services; Cinema Admission, Radio Licence, and Newspapers; Fares; and Tobacco and Cigarettes.

§ 5. The "C" Series Retail Price Index.

"C" Series Retail Price Index, Six Capital Cities, p. 151.—For the reason mentioned in §4 (page 1128) (The Interim Retail Price Index), the following table also includes a Food Group Index and an All Groups Index which exclude the price movement of potatoes and onions. This table shows "C" Series index numbers for the year 1956 and for quarters from September, 1955 to June, 1957 for the six capital cities combined.

"C" SERIES RETAIL PRICE INDEX NUMBERS: SIX CAPITAL CITIES COMBINED.

(Base of each Group: Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

Period.	Food and Groceries. (a)		Rent (4 and 5 Roomed Houses.(b))	Clothing.	Miscel- laneous.	Total "C" Series Index.(a)	
	A	B				A	B
Year—1956 ..	2,923	3,084	1,325	3,261	2,236	2,489	2,547
Quarter—							
1955—September ..	2,810	2,854	1,232	3,243	2,081	2,394	2,411
December ..	2,831	2,891	1,238	3,248	2,128	2,413	2,435
1956—March ..	2,851	2,926	1,310	3,243	2,137	2,437	2,465
June ..	2,922	3,054	1,320	3,248	2,212	2,480	2,528
September ..	2,966	3,244	1,330	3,260	2,273	2,511	2,612
December ..	2,954	3,111	1,339	3,292	2,320	2,526	2,583
1957—March ..	2,973	2,982	1,357	3,323	2,336	2,547	2,550
June ..	2,977	2,997	1,373	3,354	2,368	2,565	2,572

(a) Indexes in columns "A" exclude (as from and including September quarter, 1955), and those in columns "B" include, the price movement of potatoes and onions. (b) See footnote (b) on page 149.

B. WHOLESALE PRICES AND PRICE INDEXES.

§ 2. Wholesale Price (Basic Materials and Foodstuffs) Index.

Index Numbers, p. 153.—During 1956, supplies and prices of potatoes and onions fluctuated violently upward and downward between abnormally wide limits. These fluctuations were so great as to dominate the movement of the sections of the index in which these items were included, namely, "Foodstuffs and Tobacco" and "Goods Principally Home Produced" as well as the "Total All Groups" index number. In the circumstances of the case, neither seasonal adjustment nor conversion of the index to a "changing weights" formula could be applied to eliminate these transient fluctuations. Accordingly, in order to provide a representative measure of general trend in wholesale prices, the index was reconstructed as from the base period (three years ended June, 1939 = 100), by omitting potatoes and onions.

The table below shows index numbers for each year from the base period and for the twelve months to June, 1957 including the reconstructed indexes mentioned above for "Foodstuffs and Tobacco", "Goods Principally Home Produced" and "Total All Groups".

WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS.

(Base of each Group: Average, 3 years ended June, 1939 = 100.)

Period.	Basic Materials.							Foodstuffs and Tobacco. (b)	Basic Materials and Foodstuffs.		
	Metals and Coal.	Oils, Fats and Waxes.	Textiles.	Chemicals.	Rubber and Hides.	Building Materials.	Total.		Goods principally Imported. (a)	Goods principally Home-produced. (b)	Total All Groups. (b)
1936-37	96	99	118	99	111	99	99	98	99	98	99
1937-38	101	101	100	100	97	104	102	102	102	101	101
1938-39	103	100	82	101	92	97	99	101	99	100	100
1939-40	105	115	104	107	116	108	109	99	111	101	104
1940-41	107	137	111	124	126	128	122	107	133	106	114
1941-42	117	151	118	137	135	135	133	116	153	112	124
1942-43	129	167	147	142	138	163	149	126	176	120	136
1943-44	131	170	150	143	140	174	153	130	182	122	140
1944-45	131	168	152	143	140	175	152	132	182	124	141
1945-46	130	156	152	142	140	177	149	136	178	127	142
1946-47	132	145	191	140	131	180	149	139	177	130	144
1947-48	146	161	283	148	126	190	166	154	192	145	159
1948-49	185	173	342	159	130	198	188	174	201	172	180
1949-50	214	184	434	187	143	225	214	196	223	196	204
1950-51	256	196	641	242	292	268	264	229	256	240	244
1951-52	343	220	577	314	298	370	321	276	288	300	297
1952-53	392	234	607	350	224	404	350	293	292	331	319
1953-54	388	222	566	323	191	363	332	308	271	339	319
1954-55	391	214	510	314	246	372	330	315	277	340	322
1955-56	404	220	456	317	328	415	345	325	292	352	334
1956-57	409	241	520	344	302	463	367	324	311	357	344
1956-57—											
July	410	232	461	344	314	444	358	330	301	360	343
Aug.	409	240	481	344	315	445	362	329	303	361	344
Sept.	411	241	513	344	312	467	368	329	309	363	347
Oct.	410	241	503	344	306	467	367	325	310	359	344
Nov.	413	241	522	344	306	467	369	319	314	354	342
Dec.	412	241	528	344	307	467	369	321	315	355	343
Jan.	412	240	533	344	307	467	369	321	316	354	343
Feb.	409	244	544	344	298	467	370	324	318	356	345
Mar.	407	244	532	344	296	467	368	324	315	356	344
Apr.	407	244	547	344	289	467	369	324	313	358	344
May	403	244	548	344	289	467	367	317	311	352	340
June	402	240	527	345	288	467	365	328	307	360	345

(a) Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in price of all imports. (b) The indexes for "Foodstuffs and Tobacco", "Goods Principally Home-produced" and "Total All Groups" have been reconstructed as from the base period by excluding potatoes and onions.

D. WAGES.

§ 2. Rates of Wage and Hours of Labour.

Weekly Rates of Wage, pp. 159-60.—The following table shows for each State and Australia the weighted average nominal weekly rates of wage payable, and the index numbers based thereon, for adult males and for adult females, at 31st March and 30th June, 1957.

WEEKLY WAGE RATES OF ADULT MALES AND FEMALES.
(WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX NUMBERS OF WAGE RATES.)

Date.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust. (a)
ADULT MALES—RATES OF WAGE.							
	s.	s.	s.	s.	s.	s.	<i>s.</i>
31st March, 1957 ..	327.06	311.32	303.86	295.19	318.78	318.46	315.73
30th June, 1957 ..	329.52	316.64	304.57	306.41	321.16	326.85	319.73
ADULT MALES—INDEX NUMBERS.							
<i>(Base: Weighted Average Wage for Australia (51.25s.), 1911 = 1,000.)</i>							
31st March, 1957 ..	6,382	6,075	5,929	5,760	6,220	6,214	6,161
30th June, 1957 ..	6,430	6,178	5,943	5,979	6,267	6,378	6,239
ADULT FEMALES—RATES OF WAGE.							
	s.	s.	s.	s.	s.	s.	<i>s.</i>
31st March, 1957 ..	215.42	216.17	201.21	207.45	203.53	207.82	212.77
30th June, 1957 ..	219.42	222.14	207.91	216.47	209.61	215.35	218.42
ADULT FEMALES—INDEX NUMBERS.							
<i>(Base: Weighted Average for Australia (27.17s.), 30th April, 1914 = 1,000.)</i>							
31st March, 1957 ..	7,929	7,956	7,406	7,635	7,491	7,649	7,831
30th June, 1957 ..	8,076	8,176	7,652	7,967	7,715	7,926	8,039

(a) Weighted average for Australia.

§ 3. Average Weekly Wage Earnings.

Average Weekly Total Wages Paid and Average Earnings, p. 165.—Particulars of average weekly total wages paid and average earnings per employed male unit for the year 1956-57 are shown in the following table:—

AVERAGE WEEKLY TOTAL WAGES PAID AND AVERAGE EARNINGS, 1956-57.

Particulars.	N.S.W.(a)	Vic.	Qld.	S.A.(b)	W.A.	Tas.	Aust.
Average Weekly Total Wages Paid . . . £'000.	20,167	14,111	6,218	4,387	2,979	1,596	49,458
Average Weekly Earnings per Employed Male Unit £	19.20	19.13	16.24	17.70	17.02	17.73	18.43

(a) Includes the Australian Capital Territory. (b) Includes the Northern Territory. (c) Male units represent total male employment plus a proportion of female employment based on the approximate ratio of female to male earnings. The same ratio has been used in each State, and because the average ratio of female to male earnings may vary between States, precise comparisons between average earnings in different States cannot be made on the basis of the figures above.

§ 4. Basic Wages in Australia.

Basic Wage Inquiry, 1956-57.—Following a summons filed on 26th October, 1956, by the Amalgamated Engineering Union and others, the Commonwealth Conciliation and Arbitration Commission in Presidential Session (consisting of Kirby C.J., Wright and Ashburner J.J.) on 13th November, 1956, commenced to hear claims for alteration of the basic wage prescribed in the Metal Trades Award. The claims made were: 1. "For the increase of the basic wage in all its manifestations to the amount it would have reached if there had remained in the award provisions for automatic quarterly adjustments which had been deleted in September, 1953," 2. "For the re-insertion in the award

of the provisions for the automatic quarterly adjustment of the basic wage” In accordance with past practice this application in respect of the Metal Trades Award was treated by the Commission as a general application for variation of the basic wage in all Federal awards.

The claims of the unions were opposed by the respondent employers. The Attorney-General for the Commonwealth intervened in the public interest under section 36 (1.) of the Conciliation and Arbitration Act, but, of the States, only Victoria and South Australia were represented.

The State of South Australia suggested that if, contrary to that State's opposition, an increase in the basic wage were prescribed, the Commission should first decide upon the increase to be added to the six capitals basic wage and then apportion that increase amongst the six capital cities on a basis accurately reflecting the differences in cost of living in the different cities.

After hearing the claims of the parties, the Commission decided that before it could reach a decision it would have to examine in detail the following three main issues : (i) Whether the system of automatic adjustments should be restored, (ii) whether there should be an increase in the basic wage and, if so, of what amount, and (iii) whether the increase should be of a uniform amount.

In the judgment delivered on 29th April, 1957, the Commission granted a uniform increase of 10s. per week in the basic wage for adult males to come into effect from the first pay-period to commence on or after 15th May, 1957. As a result of this decision the basic wage for females was increased by 7s. 6d. with proportionate increases for juniors of both sexes and for apprentices. The Commission advised that it approved an annual review of the basic wage and would be available for this purpose in February, 1958.

The new basic wage rates of the Commonwealth Conciliation and Arbitration Commission for adult males payable in the capital city of each State from the beginning of the first pay-period on or after 15th May, 1957 are as follows:—Sydney, £13 3s., Melbourne, £12 15s., Brisbane, £11 18s., Adelaide, £12 11s., Perth, £12 16s., Hobart, £13 2s., Six Capital Cities (weighted average), £12 16s.

State Basic Wage Rates, p. 182.—The table below shows the “basic” weekly wage rates of State industrial tribunals, operative in May and August, 1957.

STATE BASIC WAGE—WEEKLY RATES.

State.	May, 1957.			August, 1957.		
	Date of Operation. (a)	Males.	Females.	Date of Operation. (a)	Males.	Females.
		s. d.	s. d.		s. d.	s. d.
New South Wales—(b)						
Metropolitan and Country excluding Broken Hill ..	May, 1957	268 0	201 0	Aug. 1957	270 0	202 6
Broken Hill	May, 1957	267 0	200 0	Aug. 1957	270 0	202 6
Victoria(c)	Aug., 1956	263 0	197 0	Aug., 1956	263 0	197 0
Queensland—						
Southern Division (Eastern District)—including Brisbane(d)	29.4.57	239 0	162 6	29.7.57	241 0	162 6
South Australia(e)	May, 1957	251 0	188 0	May, 1957	251 0	188 0
Western Australia—(f)						
Metropolitan Area	26.4.57	268 10	174 9	19.7.57	272 9	177 3
South-West Land Division ..	26.4.57	266 5	173 2	19.7.57	269 11	175 5
Goldfields and other areas ..	26.4.57	266 7	173 3	19.7.57	267 10	174 1
Tasmania(g)	Aug., 1956	272 0	204 0	Aug., 1956	272 0	204 0

(a) Where dates are not quoted wage rates operate from beginning of first pay-period commencing in month shown. (b) Automatic adjustment discontinued from 23rd October, 1953, following decision of the Commonwealth Court of Conciliation and Arbitration on 12th September, 1953 (see p. 169). Automatic adjustment re-introduced from first pay-period in November, 1955. (c) Basic wage rates shown (Melbourne) are those commonly adopted by Wages Boards. (d) The Queensland Industrial Court each quarter announces the variation, if any, in the basic wage after considering movements in the “C” Series retail price index numbers. (e) The “living wage” declared applies to the whole State except for a 5s. loading at Whyalla. On 9th May, 1957 the Governor proclaimed a 10s. increase in the “living wage” payable from 20th May, 1957 to conform with the increase of 10s. announced on 29th April, 1957 by the Commonwealth Conciliation and Arbitration Commission. (f) The Western Australian Arbitration Court each quarter announces any variations in the basic wage after considering a statement, prepared by the Government Statistician, which shows movements in the “C” Series retail price index numbers. (g) Basic wage rates shown (Hobart) are those commonly adopted by Wages Boards.

E. EMPLOYMENT AND UNEMPLOYMENT.

§ 1. Employment.

Wage and Salary Earners in Civilian Employment, pp. 186-8.—The following are particulars of wage and salary earners in civilian employment, excluding rural wage earners, female private domestics, Defence Forces and National Service trainees in camp, for the month of June, 1957.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT, JUNE, 1957.

(Excluding Rural Wage Earners, Female Private Domestics, Defence Forces and National Service Trainees in Camp.)
(*000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(a)
Males	789.5	565.1	275.8	182.9	133.6	65.2	2,026.5
Females	302.2	233.5	92.8	62.8	44.2	22.6	762.5
Persons	1,091.7	798.6	368.6	245.7	177.8	87.8	2,789.0

Particulars.	Governmental. (b)	Private Employers.	Mining and Quarrying.	Factories. (c)	Transport and Communication.	Retail Trade.	Other Commerce and Finance.
Males	609.6	1,416.9	56.3	722.3	313.0	129.4	214.0
Females	132.9	629.6	1.2	225.6	40.1	121.3	90.3
Persons	742.5	2,046.5	57.5	947.9	353.1	250.7	304.3

(a) Includes Australian Capital Territory and Northern Territory. (b) Includes all employees of Governmental Bodies (Commonwealth, State, Local and Semi-Governmental) on services such as railways, tramways, banks, post office, air transport, education, broadcasting, police, public works, factories and munitions establishments, migrant hostels, etc., as well as administrative employees, within Australia. (c) Subject to revision.

Government Employees, p. 189.—The number of Government employees in Australia in June, 1957 was as follows:—

Commonwealth Government—males, 165,600; females, 45,600; persons, 211,200;
State Government and Semi-Government Bodies—males, 378,200; females, 80,900; persons, 459,100; Local Government Bodies—males, 65,800; females, 6,400; persons, 72,200; Total—males, 609,600; females, 132,900; persons, 742,500.

§ 4. Industrial Disputes.

States and Territories, p. 192.—The following table shows particulars of industrial disputes in each State and Territory during 1956:—

INDUSTRIAL DISPUTES: SUMMARY, 1956.

State or Territory.	Number.	Workers Involved.			Working Days Lost.	Estimated Loss in Wages (£).
		Directly.	Indirectly. (a)	Total.		
New South Wales(b)	878	219,458	6,796	226,254	611,279	2,199,764
Victoria(b)	54	35,594	2,283	37,877	111,665	386,139
Queensland	269	112,409	2,973	115,382	238,812	815,592
South Australia	21	18,527	..	18,527	74,666	259,636
Western Australia	14	9,780	1,341	11,121	31,944	111,504
Tasmania	45	15,969	..	15,969	46,907	172,206
Northern Territory	24	2,770	..	2,770	5,197	18,194
Australian Capital Territory ..	1	83	..	83	913	4,026
Australia(b)	1,306	414,590	13,393	427,983	1,121,383	3,967,061

(a) Persons thrown out of work at the establishments where the stoppages occurred but not themselves parties to the dispute. (b) Includes two disputes in New South Wales and one in Victoria not settled at the end of 1955.

G. LABOUR ORGANIZATIONS.

§ 1. Labour Organizations in Australia.

Trade Unions, pp. 196-7.—The following tables show the number and membership of trade unions at 31st December, 1956 in each State and Territory and in each industrial group.

TRADE UNIONS: NUMBER AND MEMBERSHIP, 1956.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Separate Unions(a) ..	238	162	133	141	157	101	23	34	377
Members ..	740,582	441,327	314,782	147,728	110,447	52,708	2,352	5,953	1,815,899
Percentage Increase in Membership(b) ..	1.2	-1.1	3.0	0.9	-1.4	2.5	-4.4	0.3	0.8

(a) Without interstate duplication. (b) On preceding year.

NOTE.—Minus sign (—) denotes decrease.

TRADE UNIONS: INDUSTRIAL GROUPS, AUSTRALIA, 1956.

Industrial Group.	Unions. (a)	Members.	Industrial Group.	Unions. (a)	Members.
Manufacturing—			XI. Shipping, etc. ..	14	39,328
I. Wood, Furniture, etc.	6	46,081	XII. Pastoral, Agricultural, etc. ..	3	64,717
II. Engineering, Metal Works, etc. ..	15	267,141	XIII. Domestic Hotels, etc. ..	12	38,209
III. Food, Drink, Tobacco, etc. ..	35	105,230	XIV. Miscellaneous—		
IV. Clothing, Textiles, etc.	7	105,064	(i) Banking, Insurance and Clerical ..	19	110,253
V. Books, Printing, etc. ..	6	42,464	(ii) Public Service ..	63	209,516
VI. Other Manufacturing	39	87,967	(iii) Retail and Wholesale ..	12	72,635
VII. Building ..	29	145,448	(iv) Municipal, Sewerage and Labouring ..	10	86,231
VIII. Mining, Quarrying, etc. ..	14	47,629	(v) Other Miscellaneous	58	141,902
IX. Railway and Tramway Services ..	25	145,791			
X. Other Transport ..	10	60,293	Total	377	1,815,899

(a) Without interstate duplication.

CHAPTER VII.—MANUFACTURING INDUSTRY.

Summary, p. 205.—The following table gives a summary of operations in manufacturing industries during 1955-56.

FACTORIES: 1955-56, SUMMARY.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.	
1. Factories ..	No.	21,602	16,053	5,378	3,908	3,871	1,594	52,406
2. Persons employed(a) ..	"	433,081	355,185	102,473	92,589	50,108	27,062	1,060,498
3. Salaries and wages paid(b) ..	£'000	359,023	286,944	72,460	76,237	37,207	21,598	853,469
4. Value of power, fuel, light, etc., used ..	£'000	66,569	34,598	11,980	12,830	9,053	4,097	139,127
5. " materials used ..	£'000	886,082	674,846	231,584	183,196	96,360	53,751	2,125,819
6. " production(c) ..	£'000	642,136	491,948	128,080	120,936	69,733	45,931	1,498,764
7. " output ..	£'000	1,594,787	1,201,392	371,644	316,962	175,146	103,779	3,763,710
8. " land and buildings ..	£'000	260,268	214,921	52,602	48,353	32,859	46,579	655,582
9. " plant and machinery ..	£'000	298,913	258,295	85,777	63,596	56,534	40,425	803,540

(a) Average over whole year; includes working proprietors. (b) Excludes amounts drawn by working proprietors. (c) Value of production equals figures in line 7 less totals of figures in lines 4 and 5.

Value of Production in Classes of Industry, p. 228.—The following table shows, for the year 1955-56 the value of production in Australia for the various classes of industry.

FACTORIES: VALUE OF PRODUCTION, AUSTRALIA, 1955-56.
(£'000.)

Class of Industry.	Value of Production, 1955-56.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	34,543
II. Bricks, Pottery, Glass, etc.	31,908
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	119,163
IV. Industrial Metals, Machines, Implements and Conveyances	595,362
V. Precious Metals, Jewellery and Plate ..	7,479
VI. Textiles and Textile Goods ..	81,450
VII. Skins and Leather ..	16,983
VIII. Clothing ..	102,468
IX. Food, Drink and Tobacco ..	197,798
X. Woodworking and Basketware ..	78,493
XI. Furniture, Bedding, etc. ..	24,896
XII. Paper, Stationery, Printing, Bookbinding, etc.	99,050
XIII. Rubber ..	25,894
XIV. Musical Instruments ..	2,616
XV. Miscellaneous Products ..	28,170
XVI. Heat, Light and Power ..	52,491
Total ..	1,498,764

CHAPTER X.—TRADE.

NOTE.—Values are expressed in £A. f.o.b., port of shipment.

§ 6. Total Oversea Trade.

Summary of Movements, p. 336.—The following is a summary of the total oversea trade movements of Australia during the year 1956-57:—Merchandise—Exports, £973,396,700, Imports, £716,684,372, Commodity balance, +£256,712,328; Bullion and Specie—Exports, £19,908,250, Imports, £2,312,636, Balance, +£17,595,614; Total balance, +£274,307,942.

§ 7. Direction of Oversea Trade.

According to Countries, p. 337.—The following table shows particulars of the values of total imports and total exports of Australia, including bullion and specie, according to countries of origin or consignment, for the year 1956-57.

TOTAL OVERSEA TRADE, AUSTRALIA: COUNTRIES OF ORIGIN OR CONSIGNMENT, 1956-57.(a)
(£'000.)

Country.	Imports.	Exports.	Country.	Imports.	Exports.
United Kingdom ..	296,251	277,339	China ..	2,115	6,438
Australian Territories—			Czechoslovakia ..	2,442	8,547
New Guinea ..	5,473	8,761	Finland ..	2,779	357
Papua ..	1,150	5,294	France ..	9,297	91,974
Borneo (British) ..	15,224	1,027	Germany, Federal Republic ..	31,079	46,826
Canada ..	22,157	10,681	Indonesia ..	26,356	6,820
Ceylon ..	9,863	10,581	Iran ..	17,803	1,187
Fiji ..	946	4,568	Italy ..	9,111	52,953
Hong Kong ..	2,806	23,432	Japan ..	12,884	138,991
India ..	24,509	28,520	Mexico ..	1,965	4,489
Malaya, Federation of ..	10,875	9,088	Netherlands ..	10,555	5,491
New Zealand ..	11,978	51,085	Norway ..	4,616	1,018
Rhodesia and Nyasaland ..	4,120	2,420	Poland ..	214	12,553
Singapore ..	874	14,129	Sweden ..	11,509	2,440
South Africa, Union of ..	3,635	2,784	Switzerland ..	8,220	2,801
Other Commonwealth Countries	13,194	22,989	United States of America	95,544	65,928
			Other Foreign Countries	15,205	31,708
Total Commonwealth Countries	423,055	472,698	Total Foreign Countries	295,942	520,607
Arabian States ..	23,449	3,174	Total All Countries ..	718,997	993,305
Austria ..	3,337	1,827			
Belgium—Luxemburg	7,462	35,085			

(a) Preliminary.

According to Monetary Areas, p. 338.—The following table shows the trade of Australia during 1956-57 according to monetary areas.

OVERSEA TRADE OF AUSTRALIA ACCORDING TO MONETARY AREAS(a),
1956-57.(b)

Monetary Area.	£'000.	Monetary Area.	£'000.
STERLING.		OTHER NON-STERLING.	
Imports—		Imports—	
From—United Kingdom ..	296,251	From—Countries of the O.E.E.C., including dependencies ..	100,614
Other Sterling Area Coun- tries	126,010	Other Countries ..	73,618
Total	422,261	Total	174,232
Exports—		Exports—	
To—United Kingdom ..	277,339	To—Countries of the O.E.E.C., in- cluding dependencies ..	251,667
Other Sterling Area Countries ..	189,481	Other Countries	188,676
Total	466,820	Total	440,343
Excess of Exports (+) or Imports (-)	+ 44,559	Excess of Exports (+) or Imports (-)	+ 266,111
DOLLAR.		ALL MONETARY AREAS.	
Imports—		Total Imports	718,997
From—United States of America ..	95,544	Total Exports	993,305
Canada	22,157	Excess of Exports (+) or Imports (-)	+ 274,308
Other Dollar Area Countries	4,803		
Total	122,504		
Exports—			
To—United States of America ..	65,928		
Canada	10,681		
Other Dollar Area Countri :s ..	9,533		
Total	86,142		
Excess of Exports (+) or Imports (-)	- 36,362		

(a) For a list of the countries in each monetary area, see page 338. (b) Preliminary.

§ 11. Classified Summary of Australian Oversea Trade.

Imports and Exports in Statistical Classes, p. 348.—The following table shows the values of total imports and total exports in statistical classes for the year 1956-57:—

TOTAL OVERSEA TRADE, AUSTRALIA : CLASSES, 1956-57.(a)
(£'000.)

Class.	Imports.	Exports.
I. Foodstuffs of Animal Origin	5,689	101,859
II. Foodstuffs of Vegetable Origin; Non-alcoholic Beverages	25,815	163,160
III. Spirituous and Alcoholic Liquors	1,684	1,954
IV. Tobacco, and preparations thereof	14,235	482
V. Live Animals	755	1,636
VI. Animal Substances (mainly unmanufactured), not Food- stuffs	3,841	510,431
VII. Vegetable Substances and Fibres; Cork and Manufactures; and Synthetic Fibres	19,278	2,863
VIII. Yarns and Manufactured Fibres, Textiles and Apparel—		
(a) Yarns and Manufactured Fibres	25,083	1,535
(b) Textiles	58,598	643
(c) Apparel	7,632	553
IX. Oils, Fats and Waxes	95,546	17,331
X. Pigments, Paints and Varnishes	6,516	1,087
XI. Rocks, Minerals and Hydrocarbons	5,671	31,604
XII. Metals, Metal Manufactures and Machinery—		
(a) Metals and Metal Manufactures	129,868	85,131
(b) Dynamo Electrical Machinery and Electrical Appli- ances and Equipment	35,564	2,914
(c) Machines and Machinery (except Dynamo Electrical)	99,782	9,455
XIII. Rubber and Leather and Manufactures thereof—		
(a) Rubber and Rubber Manufactures	16,711	828
(b) Leather and Leather Manufactures	673	3,097

(a) Preliminary.

TOTAL OVERSEA TRADE, AUSTRALIA : CLASSES, 1956-57 (a)—continued.
(£'000.)

Class.	Imports.	Exports.
XIV. Wood and Wicker	17,137	3,737
XV. Earthenware, Cement, China, Glass and Stoneware ..	12,188	1,109
XVI. Paper and Stationery—		
(a) Pulp, Paper and Board	30,865	517
(b) Paper Manufactures and Stationery	11,213	2,325
XVII. Sporting Material, Toys, Fancy Goods, Jewellery and Timepieces	6,786	674
XVIII. Optical, Surgical and Scientific Instruments and Appliances and Photographic Goods, n.e.i.	9,990	1,112
XIX. Chemicals, Medicinal and Pharmaceutical Products, Essential Oils and Fertilizers	30,429	5,590
XX. Miscellaneous	45,135	21,770
XXI. Gold and Silver; Bronze Specie	2,313	19,908
Total	718,997	993,305

(a) Preliminary.

Exports of Principal Articles of Australian Produce, p. 350.—The following table shows the quantities and values of the principal articles of Australian produce exported during 1956-57:—

EXPORTS OF PRINCIPAL ARTICLES OF AUSTRALIAN PRODUCE, 1956-57.(a)

Article.	Unit of Quantity.	Quantity.	Value.(£'000.)
Arms, ammunition, military, naval and air force stores .. .. .	..	..	1,484
Barley	ton	591,548	12,745
Butter .. .. .	..	76,265	25,824
Cheese .. .. .	..	17,025	3,775
Chemicals, drugs, fertilizers .. .. .	..	..	5,590
Flour (wheaten), plain white	ton (b)	669,385	21,669
Fruit—			
Dried	ton	46,305	6,586
Fresh, including frozen	'000 bus.	6,418	8,585
Preserved in airtight containers	ton	59,818	10,078
Gold	'000 fine oz.	908.	14,226
Hides and skins .. .. .	..	..	24,269
Lead, pig	ton	167,380	22,915
Machines and machinery (except dynamo electrical) .. .. .	..	..	93,123
Meats preserved by cold process—			
Beef and veal	ton	149,396	23,271
Lamb .. .. .	..	23,778	4,773
Mutton .. .. .	..	10,273	1,322
Pork .. .. .	..	642	271
Meats, tinned .. .. .	..	50,086	13,175
Milk and cream	'000 lb.	132,880	9,654
Ores and concentrates	ton	637,380	26,662
Sugar (cane) .. .. .	..	675,282	28,780
Wheat .. .. .	..	2,440,355	60,058
Wool (c)	'000 lb.	1,407,533	483,704
All other articles .. .. .	..	..	77,104
Total Exports (Australian Produce) .. .. .	..	..	979,643

(a) Preliminary.

(b) 2,000 lb.

(c) Quantity in terms of greasy wool.

§ 15. Australian Index of Export Prices.

Monthly Index (Fixed Weights), p. 356.—The following are the export price index numbers for the year 1956-57.

EXPORT PRICE INDEXES: AUSTRALIA, 1956-57.

SIMPLE AGGREGATIVE INDEX: FIXED WEIGHTS.

INDIVIDUAL COMMODITIES, GROUPS OF COMMODITIES AND ALL GROUPS (COMBINED).

(Base of each section: Average of three years ended June, 1939 = 100.)

Period.	Wool.	Wheat.	But- ter.	Metals (a)	Meats (b)	Sugar.	Dried Fruits. (c)	Tal- low.	Hides. (d)	Gold. (e)	All Groups.	
											Ex- clud- ing Gold.	In- clud- ing Gold.
July ..	490	323	272	549	343	446	320	355	250	178	420	403
August ..	520	326	261	558	347	443	322	352	244	178	434	417
September ..	566	326	284	562	353	439	323	360	243	178	460	441
October ..	551	330	260	559	361	436	323	354	245	178	451	432
November ..	581	328	252	569	357	439	316	352	247	178	465	445
December ..	588	329	242	566	g 360	435	315	361	237	178	g 467	g 447
January ..	596	332	227	570	g 385	439	311	359	226	178	g 472	g 451
February ..	611	335	222	557	g 388	473	(f)309	360	234	178	g 479	g 458
March ..	596	327	218	555	g 372	568	309	359	248	178	g 471	g 451
April ..	618	321	224	548	g 382	620	(f)321	357	234	178	g 483	g 462
May ..	626	319	256	495	g 398	631	327	359	238	178	g 488	g 467
June ..	596	322	284	451	g 373	642	329	362	239	178	g 473	g 452
Year ..	578	327	250	545	g 368	501	319	357	240	178	g 464	g 444

(a) Silver, copper, tin, zinc, lead. (b) Beef, lamb, mutton, pork. Guaranteed minimum prices are used when operative. (c) Sultanas, raisins, currants. (d) Cattle hides, calfskins. (e) Where Australian gold has been sold on the overseas premium markets such price has been used in the index. (f) Nominal. (g) Subject to revision.

§ 20. The Australian Balance of Payments.

NOTE.—Further details of balance of payments estimates will be found in *The Australian Balance of Payments, 1928-29 to 1951-52* and in the mimeographed publication *The Australian Balance of Payments 1952-53 to 1956-57* obtainable from the Commonwealth Statistician.

Australia's Balance of Payments on Current and Capital Account, pp. 362-5.—The following table shows in summary form revised estimates for 1954-55 and 1955-56 and preliminary estimates for 1956-57.

BALANCE OF PAYMENTS: SUMMARY, AUSTRALIA.

(£A. million.)

Particulars.	1954-55.	1955-56.	1956-57.(a)
CURRENT ACCOUNT.			
(Credit items +, Debit items -)			
Exports f.o.b. (excluding gold)	+761.4	+772.3	+979.8
Imports f.o.b. (excluding gold)	-846.9	-819.5	-717.4
Trade Balance	-85.5	-47.2	+262.4
Invisible Balance	-173.3	-188.0	-182.8
Balance on Current Account	-258.8	-235.2	+79.6
CAPITAL ITEMS.			
(Net borrowing +, net lending -)			
Official loans and other capital transactions	+15.1	+37.3	+0.8
Undistributed income (net)	+27.0	+36.7	+41.0
Other private capital movements and balancing items	+74.3	+87.9	+90.1
Movement in international reserves (increase +)	-142.4	-73.3	+211.5

(a) Preliminary.

Australia's Balance of Payments on Current Account—Various Countries and Monetary Areas, p. 364.—Summarized estimates of Australia's regional balance of payments in 1954-55, 1955-56 and 1956-57 (preliminary estimate) are given in the following table.

BALANCE OF PAYMENTS ON CURRENT ACCOUNT, VARIOUS COUNTRIES AND MONETARY AREAS(a): AUSTRALIA.

(£A. million.)

Particulars.	Gold production.	Sterling Area.		Dollar Area.			Other Non-Sterling.		Total.
		United Kingdom.	Other.	U.S.A.	Canada.	Other.	O.E.E.C.	Rest of World. (b)	
1954-55.									
Exports f.o.b. .. .. .	..	288.6	131.8	52.7	10.5	6.4	185.7	85.7	761.4
Imports f.o.b. .. .. .	..	-378.7	-141.6	-108.1	-23.8	-1.2	-122.3	-71.2	-846.9
Invisibles (net)	16.2	-85.2	-21.4	-45.7	-9.1	0.3	-12.6	-15.8	-173.4
Balance on Current Account	16.2	-175.3	-31.2	-101.1	-22.4	5.5	50.8	-1.3	-258.8
		-206.5		-118.0			49.5		
1955-56.									
Exports f.o.b. .. .. .	..	257.1	131.4	55.0	10.9	9.0	187.5	121.4	772.3
Imports f.o.b. .. .. .	..	-355.3	-128.1	-98.7	-23.3	-4.4	-125.8	-83.9	-819.5
Invisibles (net)	15.6	-76.1	-31.6	-45.8	-11.5	-1.1	-15.0	-22.5	-188.0
Balance on Current Account	15.6	-174.3	-28.3	-89.5	-23.9	3.5	46.7	15.0	-235.2
		-202.6		-109.9			61.7		
1956-57.(c)									
Exports f.o.b. .. .. .	..	278.1	175.6	65.2	10.7	8.8	251.1	190.3	979.8
Imports f.o.b. .. .. .	..	-296.0	-122.8	-96.8	-22.2	-4.7	-100.5	-74.4	-717.4
Invisibles (net)	15.9	-56.4	-36.4	-56.6	-7.0	-0.6	-12.3	-29.4	-182.8
Balance on Current Account	15.9	-74.3	16.4	-88.2	-18.5	3.5	138.3	86.5	79.6
		-57.9		-103.2			224.8		

(a) For a list of the countries included in each monetary area see page 338.

(b) Includes international bodies.

(c) Preliminary.

NOTE.—Minus sign (-) denotes debits; other items are credits.

Australia's Balance of Payments with the Dollar Area, p. 368.—The following table presents estimates of Australia's dollar balance of payments in revised form for 1954-55 and 1955-56 and preliminary estimates for 1956-57:—

BALANCE OF PAYMENTS WITH THE DOLLAR AREA: AUSTRALIA.
(United States \$ million.)

Particulars.	1954-55.	1955-56.	1956-57. (a)
CURRENT ACCOUNT.			
1. Exports, f.o.b., to United States of America and Canada	+ 142	+ 148	+ 170
2. Imports, f.o.b., from United States of America and Canada	- 295	- 273	- 266
3. Trade balance with United States of America and Canada	- 153	- 125	- 96
4. Trade balance with other Dollar Area	+ 11	+ 10	+ 9
5. <i>Trade Balance with the Dollar Area</i>	<u>- 142</u>	<u>- 115</u>	<u>- 87</u>
6. Freight	- 33	- 41	- 45
7. Other transportation	- 3	- 3	- 3
8. Travel expenditure	- 3	- 4	- 5
9. Business expenses of Australian firms	- 5	- 5	- 5
10. Film remittances	- 6	- 6	- 6
11. Profits and dividends remitted	- 29	- 26	- 29
12. Undistributed income (net)	- 37	- 43	- 48
13. Public authority interest	- 7	- 6	- 6
14. Other debits	- 16	- 15	- 17
15. Other credits	+ 16	+ 18	+ 20
16. <i>Balance on Invisibles</i>	<u>- 123</u>	<u>- 131</u>	<u>- 144</u>
17. <i>Balance on Current Account (5+16)</i>	<u>- 265</u>	<u>- 246</u>	<u>- 231</u>
18. Other Current Transactions	+ 18	+ 14	+ 24
19. <i>Dollar Deficit on Current Account (17+18)</i>	<u>- 247</u>	<u>- 232</u>	<u>- 207</u>
CAPITAL TRANSACTIONS INVOLVING DOLLARS.			
20. Public authority borrowing	+ 42	+ 60	+ 7
21. Undistributed income (see item 12)	+ 37	+ 43	+ 48
22. Other identified transactions	+ 55	+ 29	} + 54
23. Balancing item	+ 29	+ 14	
24. <i>Balance on Capital Transactions</i>	<u>+ 163</u>	<u>+ 146</u>	<u>+ 109</u>
25. Total Dollar Deficit (-) (19+24)	<u>- 84</u>	<u>- 86</u>	<u>- 98</u>
DOLLAR FINANCING.			
26. Gold sales to United Kingdom .. .. .	..	..	+ 56
27. Dollars repaid to I.M.F. (net) (-)	- 26	..	..
28. Estimated dollar drawings on Sterling Area Central Reserves (+)	+ 121	+ 90	+ 52
29. Movement in Australian dollar balances (increase -)	- 11	- 4	- 10
30. Total	<u>+ 84</u>	<u>+ 86</u>	<u>+ 98</u>

(a) Preliminary.

NOTE.—In current and capital account, + signifies a net receipt (exports, etc., or net borrowing); - signifies a net payment (imports, etc., or net lending).

CHAPTER XI.—TRANSPORT AND COMMUNICATION.

PART I.—TRANSPORT.

F. MOTOR VEHICLES.

Motor Vehicle Registrations, p. 404.—Motor vehicles registered at 30th June, 1957 and new motor vehicles registered during 1956–57 were as follows:—

MOTOR VEHICLES: REGISTRATIONS, 1956-57.

State or Territory.	Number of Motor Vehicles Registered at 30th June, 1957.(a)				Number of New Motor Vehicles Registered, 1956-57.(a)			
	Motor Cars.(b)	Commercial Vehicles.(c)	Motor Cycles.	Total.	Motor Cars.(b)	Commercial Vehicles.(c)	Motor Cycles.	Total.
New South Wales ..	515,941	255,580	35,567	807,088	51,513	22,463	2,919	76,895
Victoria(d) ..	527,859	155,100	25,623	708,582	47,603	13,821	1,999	63,423
Queensland ..	194,726	130,493	20,287	345,506	19,024	9,937	1,659	30,620
South Australia ..	164,210	66,198	19,799	250,207	15,689	5,702	1,441	22,832
Western Australia ..	103,788	66,030	13,146	182,964	9,321	4,418	1,192	14,931
Tasmania ..	52,716	22,893	4,391	80,000	5,307	1,981	341	7,629
Northern Territory ..	2,419	3,574	664	6,657	287	389	60	736
Aust. Capital Territory ..	7,674	2,708	461	10,843	951	256	44	1,251
Total ..	1,569,333	702,576	119,938	2,391,847	149,695	58,967	9,655	218,317

(a) Excludes Defence Service vehicles, trailers, road tractors, etc., and dealer's plates. (b) Includes taxis and hire cars. (c) Includes lorries, vans, buses and utilities. (d) Registration in Victoria is according to purpose of use and not type of vehicle; consequently, motor car registrations are overstated by the inclusion of commercial vehicles registered for private use.

G. ROAD TRAFFIC ACCIDENTS.

Total Accidents Recorded, p. 406.—The following table is a summary of the total number of accidents (known to the police) which occurred in public thoroughfares during 1955-56, the number involving casualties and the number of persons killed or injured in each State and the Commonwealth excluding the Northern Territory.

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: ACCIDENTS RECORDED AND CASUALTIES, 1955-56.

State or Territory.	Total Accidents Recorded.(a)	Accidents Involving Casualties.	Casualties.	
			Persons Killed.	Persons Injured.(b)
New South Wales	38,823	12,917	808	17,047
Victoria	14,781	10,606	582	13,483
Queensland	25,557	7,116	298	9,170
South Australia	12,530	2,886	167	3,709
Western Australia	11,312	3,211	185	4,098
Tasmania	2,259	874	72	1,046
Australian Capital Territory	376	156	7	220
Total	105,638	37,766	2,119	48,773

(a) Total accidents causing death or injury to persons or, except in Tasmania, damage exceeding £10 to property. (b) Persons injured to an extent requiring surgical or medical treatment.

PART II.—COMMUNICATION.

A. POSTS; TELEGRAPHS; TELEPHONES; CABLE AND RADIO COMMUNICATION.

§ 5. Cable and Radio Communication.

Radio-communication Stations Authorized, p. 428.—The following radio-communication stations were authorized in Australia and the External Territories at 30th June, 1957:—Transmitting and receiving stations—amateur, 3,423 (64); aeronautical, 97 (10); coast, 74 (13); land, 3,539 (346); mobile (general), 16,189 (209) (including ship, 1,580; aircraft, 323; other unclassifiable, 583); and miscellaneous, 113. In addition, there were 373 fixed and 61 mobile (general) stations for the purpose of receiving only. The figures in parentheses refer to the External Territories and are included in the totals preceding them.

B. BROADCASTING AND TELEVISION.

§ 2. Broadcasting.

Broadcasting Stations, p. 430.—The following table shows the number of broadcasting stations in operation at 30th June, 1957:—

BROADCASTING STATIONS, 30th JUNE, 1957.

Type of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Papua and New Guinea.	Total.
National—										
Medium Frequency	15	5	12	7	7	4	2	2	1	55
Short-wave ..	1	3	2	..	2	..	..	..	1	9
Commercial ..	37	20	20	8	14	8	..	1	..	108

Broadcast Listeners' Licences, p. 434.—Licences in force at 30th June, 1957 were as follows:—New South Wales, 777,072; Victoria, 554,909; Queensland, 312,527; South Australia, 234,120; Western Australia, 155,166; Tasmania, 73,459; Australia, 2,107,253. Figures for the Northern Territory and the Australian Capital Territory have been included with those for South Australia and New South Wales respectively.

§ 3. Television, p. 434.

Television Viewers' Licences.—Licences in force at 30th September, 1957 were as follows:—New South Wales, 50,563; Victoria, 69,070; Tasmania, 18; Australia, 119,651.

CHAPTER XII.—EDUCATION.

§ 2. Government Schools.

Number of Schools, Teachers and Pupils, p. 442.—The following table gives a summary of particulars relating to government schools in 1955.

GOVERNMENT SCHOOLS(a), 1955.

State or Territory.	Schools open at end of year.	Teachers Employed (Excluding Teachers in Training).	Teachers in Training.	Net Enrolment.
New South Wales(b)	2,595	16,214	3,159	525,298
Victoria	2,016	11,810	2,669	(c) 332,600
Queensland	1,557	6,847	1,746	196,848
South Australia	665	4,670	548	129,407
Western Australia	487	3,243	831	(d) 94,718
Tasmania	291	2,183	390	(e)
Northern Territory	8	86	..	1,987
Australia	7,619	45,053	9,343	(e)

(a) Excludes Senior Technical Colleges. (b) Includes the Australian Capital Territory.
(c) Estimated. (d) Average weekly enrolment. (e) Not yet available.

Average Enrolment and Attendance of Pupils, p. 443.—The following tables gives a summary of average enrolment and attendance of pupils in government schools in 1955.

GOVERNMENT SCHOOLS(a): AVERAGE ENROLMENT AND ATTENDANCE, 1955.

State or Territory.	Average Weekly Enrolment.	Average Daily Attendance.	Percentage of Attendance to Enrolment.
New South Wales(b)	490,595	439,187	89.52
Victoria	317,836	289,331	91.03
Queensland	(c) 192,163	171,118	89.05
South Australia	(d) 124,634	115,661	92.80
Western Australia	94,718	87,699	92.59
Tasmania	53,129	49,053	92.33
Northern Territory	1,760	1,579	89.72
Australia	1,274,835	1,153,628	90.49

(a) Excludes Senior Technical Colleges. (b) Includes the Australian Capital Territory.
(c) Census enrolment 1st August. (d) Average daily enrolment.

Expenditure on Government Schools, pp. 444.—The following table gives a summary of particulars of net expenditure on maintenance of government schools, and on government school buildings in 1955.

GOVERNMENT SCHOOLS(a): NET EXPENDITURE, 1955.
(£.)

State or Territory.	Net Expenditure on Maintenance.	Net Expenditure on Buildings.	Total Net Expenditure on Government Schools.
New South Wales(b)(c)	24,901,349	7,366,160	32,267,509
Victoria(d)(e)	14,453,861	4,660,276	19,114,137
Queensland(e)	6,978,485	1,286,620	8,265,105
South Australia(c)	5,480,363	1,366,399	6,846,762
Western Australia(e)	5,143,030	1,458,278	6,601,308
Tasmania(c)	(f)	(f)	(f)
Northern Territory(e)	125,062	15,608	140,670
Australia	(f)	(f)	(f)

(a) Excludes Senior Technical Colleges. (b) Gross figures, receipts not being available.
Includes the Australian Capital Territory. (c) Year ended 31st December. (d) Excludes Junior Technical Schools. (e) Year ended 30th June. (f) Not yet available.

CHAPTER XIII.—PUBLIC JUSTICE.

§ 2. Lower (Magistrates') Courts. § 3. Higher (Judges') Courts,

§ 4. Civil Courts. § 5. Police and Prisons.

Convictions, Bankruptcies, Police, Prisons, pp. 475, 476, 479, 485, 487.—The following table gives a summary of the more important statistics of this chapter for the latest year for which information is available.

PUBLIC JUSTICE: SUMMARY, 1955.

Particulars.	N.S.W.	Vic.	Qld. (a)	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust.
Convictions for serious crime, magistrates' courts .. No.	19,803	7,318	3,546	(a)1,867	4,368	1,127	177	134	38,340
Convictions for drunkenness .. No.	80,457	19,437	23,947	(a)4,765	5,720	757	474	231	135,788
Convictions at higher courts—									
Offences against the person .. No.	(a) 490	290	149	143	64	43	24	4	1,207
Offences against property .. No.	(a) 1,095	670	227	159	190	94	16	16	2,467
Other offences .. No.	(a) 46	83	6	38	6	17	15	..	211
Total	(a) 1,631	1,043	382	340	260	154	55	20	3,885
Bankruptcies(a) No.	360	200	155	111	100	49	2	(b)	977
Liabilities .. £	1,162,001	764,083	461,874	338,481	315,157	121,198	3,638	(b)	3,166,432
Assets .. £	789,226	365,151	338,257	241,597	237,222	78,851	7,413	(b)	2,057,717
Police .. No.	(c) 4,817	(c)3,109	(c) 2,355	(d)1,086	(d) 964	(d) 471	(c) 62	(c) 60	12,924
Prisons .. No.	(d) 16	(c) 12	(c) 7	(d) 16	(d) 19	(d) 2	(c) 2	..	74
Prisoners in Gaol No.	(d) 2,238	(c)1,295	(c) 580	(c) 413	(d) 386	(d) 163	(c) 50	..	5,125

(a) Year 1954–55.
30th June.

(b) Included in New South Wales.

(c) At 31st December.

(d) At

CHAPTER XIV.—PUBLIC HEALTH AND RELATED INSTITUTIONS.

C. INSTITUTIONS.

§ 2. Public Hospitals (other than Mental Hospitals).

Number, Staff, etc., pp. 515–6.—The following table gives a summary of information relating to public hospitals in each State for the year 1955–56:—

PUBLIC HOSPITALS: SUMMARY, 1955–56.

Item.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Hospitals	264	126	140	65	95	26	4	1	721
Medical Staff ..	4,194	1,915	761	575	416	191	13	38	8,103
Nursing Staff ..	11,035	7,671	4,563	2,062	2,376	1,153	97	113	29,070
Beds and cots ..	20,200	11,819	10,705	3,617	4,291	2,300	368	250	53,550
In-patients (cases) treated year during ..	414,132	222,986	200,369	69,295	81,271	32,903	6,224	5,488	1,032,668
In-patients at end of year	14,267	8,172	7,139	2,612	2,570	1,640	217	156	36,773
Average daily number resident ..	14,252	8,252	(a)	2,530	2,648	1,636	226	154	(a)
Out-patients treated ..	1,077,618	514,423	583,061	109,196	121,060	111,008	63,530	7,661	2,587,557

PUBLIC HOSPITALS: SUMMARY, 1955-56—*continued.*

Item.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
£'000.									
<i>Revenue</i> —									
Government aid ..	14,580	11,825	6,714	4,107	3,749	1,600	381	209	49,162
Commonwealth Hospital benefits, etc. ..		2,333	2,427	658	517		37	25	
Municipal Aid ..	..	22	129	114	..	..	..	..	265
Public subscriptions, legacies, etc. ..	133	1,190	3	125	211	1	..	..	1,663
Fees ..	6,793	3,183	471	617	902	352	51	41	12,410
Other ..	299	244	85	230	92	5	..	..	955
<i>Total</i> ..	(b)21,805	18,797	9,829	5,851	5,471	(b)1,958	469	275	64,455
<i>Expenditure</i> —									
Salaries and Wages ..	14,638	8,550	5,376	2,501	2,728	1,436	289	147	35,665
Upkeep and repair of buildings and grounds ..	779	463	278	309	239	42	112	12	2,234
All other ordinary ..	7,190	6,371	4,189	1,391	1,827	777	57	88	21,890
Capital ..	5,213	4,440	2,387	1,717	627	(c)	11	29	(c)
<i>Total</i> ..	27,820	19,824	12,230	5,918	5,421	(c)	469	276	(c)

(a) Not available.

(b) Does not include income for capital expenditure.

(c) Not yet available.

CHAPTER XV.—WELFARE SERVICES.

A. COMMONWEALTH SOCIAL SERVICE BENEFITS.

§ 2. Commonwealth Expenditure on Social and Health Services.

States, p. 522.—The following table shows particulars of payments of social and health services in each State during 1956-57.

COMMONWEALTH EXPENDITURE ON SOCIAL AND HEALTH SERVICES, 1956-57. (£'000.)

Service.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Over-seas.	Total.
<i>Social Benefits</i> —										
Age and Invalid Pensions ..	45,296	26,773	16,332	9,622	7,254	3,698	38	122	75	109,210
Child Endowment ..	20,759	15,168	8,836	5,250	4,461	2,173	164	217	9	57,037
Commonwealth Rehabilitation Service ..	145	175	64	91	71	22	..	..	..	568
Funeral Benefits ..	136	94	48	30	23	10	..	..	..	341
Maternity Allowances ..	1,252	948	533	319	271	131	9	17	2	3,482
Sickness Benefits ..	640	340	234	136	97	47	1	4	..	1,499
Special Benefits(a) ..	116	155	80	26	14	13	..	1	..	405
Tuberculosis Allowances ..	527	361	244	159	92	78	..	..	..	1,461
Unemployment Benefits ..	670	531	419	114	337	23	..	2	..	2,096
Widows' Pensions ..	3,642	2,035	1,504	735	612	303	6	15	10	8,862
<i>National Health Services</i> —										
Hospital Benefits ..	4,046	2,359	1,443	815	772	320	34	24	..	9,813
Medical Benefits ..	2,716	1,434	665	590	601	140	..	..	..	6,146
Medical Benefits for Pensioners ..	1,380	734	366	261	194	58	..	6	..	2,999
Nutrition of Children ..	1,093	599	386	199	158	155	1	16	..	2,607
Pharmaceutical Benefits ..	3,994	2,757	1,321	843	698	244	..	67	..	9,924
Pharmaceutical Benefits for Pensioners ..	825	378	279	162	114	35	..	..	..	1,793
Tuberculosis Campaign maintenance payments ..	1,607	1,092	1,080	319	470	171	..	16	..	4,755
Miscellaneous ..	42	36	75	7	13	19	10	(b) 723	..	925
<i>Total</i> ..	88,886	55,969	33,909	19,678	16,252	7,640	263	1,230	96	223,923

(a) Includes payments to migrants.

(b) Includes an amount of £650,642 for the production of poliomyelitis vaccine.

§ 3. Age and Invalid Pensions, § 6. Maternity Allowances, § 7. Child Endowment, § 8. Widows' Pensions, § 9. Unemployment, Sickness and Special Benefits.

General, pp. 523-35.—The following table gives a summary of age, invalid and widows' pensions, maternity allowances, child endowment, and unemployment, sickness and special benefits for the year 1956-57:—

SOCIAL SERVICES: SUMMARY, 1956-57.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total.
Age Pensioners at end of year—									
Males	67,003	35,351	26,863	14,017	11,938	4,844	70	222	160,308
Females	118,603	83,437	43,075	29,628	20,254	10,003	68	405	305,473
Persons	185,606	118,788	69,938	43,648	32,192	14,847	138	627	465,781
Invalid Pensioners at end of year—									
Males	25,353	10,807	7,176	2,736	2,850	1,422	31	48	50,423
Females	17,209	8,400	5,937	2,637	2,189	1,390	12	39	37,813
Persons	42,562	19,207	13,133	5,373	5,039	2,812	43	87	88,236
Maternity Allowances—									
Claims paid during year	77,387	59,648	32,882	19,929	16,853	8,166	579	1,067	216,617
Child Endowment at end of year—									
Family claims in force	518,942	373,121	199,689	127,356	102,157	48,743	2,705	5,297	1,378,169
Endowed children	1,081,141	791,026	453,717	274,291	227,575	111,367	5,881	11,717	2,957,046
Widows' Pensions at end of year—									
Pensions in force	18,389	10,879	7,544	3,783	3,243	1,476	24	78	45,416
Class "A" pensions in force(b)	8,616	4,619	3,659	1,689	1,237	772	12	44	20,648
Unemployment, Sickness and Special Benefits—									
Persons on benefit at end of year—									
Unemployment Benefit—									
Males	4,713	4,012	2,306	730	2,206	351	..	6	14,324
Females	1,517	1,061	545	324	235	59	..	6	3,747
Persons	6,230	5,073	2,851	1,054	2,441	410	..	12	18,071
Sickness Benefit—									
Males	2,130	1,147	855	459	366	188	1	14	5,160
Females	755	398	234	149	88	51	1	9	1,685
Persons	2,885	1,545	1,089	608	454	239	2	23	6,845
Special Benefit—(c)									
Males	220	86	98	57	27	15	..	1	504
Females	447	445	326	100	67	78	..	4	1,467
Persons	667	531	424	157	94	93	..	5	1,971
Total—									
Males	7,063	5,245	3,259	1,246	2,599	554	1	21	19,988
Females	2,719	1,904	1,105	573	390	188	1	19	6,899
Persons	9,782	7,149	4,364	1,819	2,989	742	2	40	26,887
Admissions to Benefit—									
Unemployment Benefit—									
Males	23,086	20,316	18,698	5,448	12,918	1,113	12	131	81,722
Females	5,640	3,622	2,853	1,062	916	171	1	43	14,308
Persons	28,726	23,938	21,551	6,510	13,834	1,284	13	174	96,030
Sickness Benefit—									
Males	15,642	8,827	7,734	4,023	3,226	1,441	46	78	41,017
Females	5,163	2,923	1,809	875	664	307	7	26	11,774
Persons	20,805	11,750	9,543	4,898	3,890	1,748	53	104	52,791
Special Benefit—(c)									
Males	926	369	684	234	77	62	..	4	2,356
Females	445	681	227	68	44	44	1	11	1,521
Persons	1,371	1,050	911	302	121	106	1	15	3,877
Total—(c)									
Males	39,654	29,512	27,116	9,705	16,221	2,616	58	213	125,095
Females	11,248	7,226	4,889	2,005	1,624	522	9	80	27,603
Persons	50,902	36,738	32,005	11,710	17,845	3,138	67	293	152,698
Benefits paid—									
Unemployment	£ 669,798	£ 530,959	£ 418,997	£ 113,653	£ 336,846	£ 23,045	£ 105	£ 2,633	£ 2,096,036
Sickness	£ 639,342	£ 339,414	£ 234,000	£ 136,332	£ 96,907	£ 47,243	£ 1,361	£ 3,927	£ 1,498,526
Special (d)	£ 116,087	£ 155,126	£ 80,237	£ 25,459	£ 14,055	£ 13,030	£ 33	£ 838	£ 404,865
Total(d)	£ 1,425,227	£ 1,025,499	£ 733,234	£ 275,444	£ 447,808	£ 83,318	£ 1,499	£ 7,398	£ 3,999,427

(a) Includes claims paid overseas.

(b) Pensions paid to widows who maintain at least one child

under 16 year of age.

(c) Excludes migrants.

(d) Includes payments to migrants.

CHAPTER XVI.—POPULATION.

§ 3. Growth and Distribution of Population.

Growth of Population, pp. 543-4.—The following table shows the estimated population of each State and Territory at 30th June, 1957:—

ESTIMATED POPULATION, 30th JUNE, 1957.
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T. (a)	Aust.
Males ..	1,819,566	1,348,904	716,507	443,656	355,720	168,983	11,065	20,102	4,884,503
Females ..	1,803,340	1,324,594	680,233	429,467	336,162	158,912	8,105	17,763	4,758,576
Persons ..	3,622,906	2,673,498	1,396,740	873,123	691,882	327,895	19,170	37,865	9,643,079

(a) Estimates based on the June, 1957 Population Count of Canberra.

§ 4. Mean Population, p. 550.

The estimated mean population (excluding full-blood aboriginals) of each State and Territory for the financial year ended 30th June, 1957 is as follows:—New South Wales, 3,588,033; Victoria, 2,640,105; Queensland, 1,380,466; South Australia, 861,373; Western Australia, 684,518; Tasmania, 326,137; Northern Territory, 18,340; Australian Capital Territory, 36,013; Australia, 9,534,985.

§ 7. General Characteristics.

Age Distribution, p. 560.—The following table shows the estimated population of Australia at 30th June, 1956, in five-year age groups.

POPULATION: ESTIMATED AGE DISTRIBUTION, AUSTRALIA, 30th JUNE, 1956.
(EXCLUDING FULL-BLOOD ABORIGINALS.)

Age Group (Years).	Males.	Females.	Persons.	Age Group (Years).	Males.	Females.	Persons.
0-4 ..	512,477	489,451	1,001,928	40-44 ..	337,119	322,780	659,899
5-9 ..	500,222	477,717	977,939	45-49 ..	301,301	277,299	578,600
10-14 ..	400,447	383,129	783,576	50-54 ..	253,122	233,797	486,919
15-19 ..	326,757	309,966	636,723	55-59 ..	211,710	216,250	427,960
20-24 ..	312,852	284,778	597,630	60-64 ..	175,863	200,022	375,885
25-29 ..	370,176	330,665	700,841	65 and over	353,039	441,244	794,283
30-34 ..	383,544	356,163	739,707				
35-39 ..	338,938	326,730	665,668	Total ..	4,777,567	4,649,991	9,427,558

§ 12. Citizenship and Naturalization.

Certificates Granted, p. 582.—The number of certificates granted under the Nationality and Citizenship Act 1948-1955 during the year 1956 was 25,585. Former nationalities of the recipients were: Polish, 4,509; Italian, 2,902; Hungarian, 2,421; Yugoslav, 2,371; Latvian, 2,263; Dutch, 2,019; Czechoslovak, 1,687; Ukrainian, 1,520; Other nationalities, 5,893.

CHAPTER XVII.—VITAL STATISTICS.

§ 2. Marriages.

Age and Conjugal Condition at Marriage, p. 587.—A summary of the previous conjugal condition of bridegrooms and brides in 1956 in relation to age at marriage is as follows.

AGE AND CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES:
AUSTRALIA, 1956.

Age at Marriage (Years).	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
Under 20 ..	2,782	..	1	2,783	17,343	2	5	17,350
20-24 ..	29,464	12	42	29,518	31,477	79	251	31,807
25-29 ..	19,974	66	486	20,526	8,665	183	1,007	9,855
30-34 ..	6,831	135	941	7,907	3,033	307	1,206	4,546
35-39 ..	2,448	213	840	3,501	1,277	373	957	2,607
40-44 ..	1,268	256	746	2,270	712	486	669	1,867
45-49 ..	713	345	578	1,636	450	507	446	1,403
50-54 ..	415	388	339	1,142	255	387	227	869
55-59 ..	198	459	216	873	146	361	94	601
60-64 ..	101	492	93	686	69	342	48	459
65 and over ..	114	740	84	938	61	332	23	416
Total ..	64,308	3,106	4,366	71,780	63,488	3,359	4,933	71,780

In 1956 the proportional distribution (per cent.) of bridegrooms and brides according to previous conjugal condition was:—

Bridegrooms: Bachelors, 89.59; Widowers, 4.33; Divorced, 6.08.

Brides: Spinsters, 88.45; Widows, 4.68; Divorced, 6.87.

The average age in 1956 of bridegrooms was 28.66 years and of brides 25.34 years.

Celebration of Marriages, p. 589.—The number of marriages in 1956 celebrated by ministers of religion in the various denominations or by civil officers was as follows:—

MARRIAGES IN EACH DENOMINATION, 1956.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia.	
									No.	Pro-portion of Total.
Church of England	9,217	5,061	2,680	1,336	1,516	970	26	102	20,908	29.13
Roman Catholic ..	6,923	5,167	2,466	1,042	1,199	481	41	94	17,413	24.26
Methodist ..	2,687	2,534	1,590	1,543	603	408	17	11	9,393	13.08
Presbyterian ..	2,995	3,462	1,848	261	351	136	14	24	9,091	12.66
Greek Orthodox ..	426	581	93	205	68	4	..	1	1,378	1.92
Baptist ..	327	302	172	142	49	56	..	5	1,053	1.47
Lutheran ..	100	237	275	406	18	2	1	4	1,043	1.45
Congregational ..	251	255	91	225	123	48	..	1	994	1.38
Church of Christ..	86	346	86	195	65	14	..	4	796	1.11
Salvation Army ..	99	102	103	51	20	15	7	2	399	0.56
Seventh-Day Ad-ventist ..	85	28	34	17	16	8	..	1	189	0.26
Other Christian ..	159	204	167	31	142	30	23	..	756	1.06
Hebrew ..	113	137	1	3	16	..	..	..	270	0.38
Total ..	23,468	18,416	9,606	5,457	4,186	2,172	129	249	63,683	88.72
Civil Officers ..	3,845	1,721	328	820	894	429	31	29	8,097	11.28
Grand Total ..	27,313	20,137	9,934	6,277	5,080	2,601	160	278	71,780	100.00

PROPORTION OF TOTAL.

(Per cent.)

Denominational ..	85.92	91.45	96.70	86.94	82.40	83.51	80.63	89.57	88.72
Civil ..	14.08	8.55	3.30	13.06	17.60	16.49	19.37	10.43	11.28

§ 4. Fertility and Reproduction.

Number of Live Births and Confinements, p. 590.—A summary of live births and confinements registered in 1956 is shown in the following table. The table also shows the confinements resulting in one or more live births. The figures exclude cases where the births were of still-born children only.

LIVE BIRTHS AND CONFINEMENTS, 1956.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
LIVE BIRTHS.									
Single Births	73,966	57,011	31,706	18,564	16,525	7,910	544	1,056	207,282
Twins	1,726	1,370	688	394	385	194	12	21	4,790
Triplets	18	12	15	6	6	..	..	..	57
Quadruplets	4	..	..	..	..	..	..	..	4
Males	39,209	30,115	16,702	9,708	8,870	4,128	284	573	109,589
Females	36,505	28,278	15,707	9,256	8,046	3,976	272	504	102,544
Total	75,714	58,393	32,409	18,964	16,916	8,104	556	1,077	212,133

STILLBIRTHS ASSOCIATED WITH MULTIPLE BIRTHS INCLUDED ABOVE.

Twins	46	12	16	..	13	6	..	1	94
Triplets	3	..	..	..	..	..	..	..	3

CONFINEMENTS RESULTING IN ABOVE BIRTHS.

Nuptial	71,587	55,751	30,251	18,130	15,932	7,693	472	1,048	200,864
Ex-nuptial	3,273	1,955	1,812	633	794	317	78	19	8,881
Total	74,860	57,706	32,063	18,763	16,726	8,010	550	1,067	209,745

Maculinity of Live Births, p. 595.—The masculinity of live births registered in 1956 was as follows:—Total births, 106.87; ex-nuptial births, 107.16.

Ex-nuptial Live Births, p. 595.—The following table shows the number of ex-nuptial live births and the proportion of total live births in each State and Territory in 1956:—

EX-NUPTIAL LIVE BIRTHS: NUMBER AND PROPORTION, 1956.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Number	3,305	1,979	1,833	639	796	320	78	19	8,969
Proportion of Total Births	4.37	3.39	5.66	3.37	4.71	3.95	14.03	1.76	4.23

§ 5. Mortality.

Infant Deaths and Mortality Rates, p. 610.—The following table shows the number of deaths under one year of age and infant mortality rates for 1956:—

INFANT DEATHS AND INFANT MORTALITY RATES(a), 1956.

Age at Death.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
NUMBERS.									
Under 4 weeks ..	1,285	825	530	257	269	118	17	8	3,309
4 weeks and under 1 year ..	492	303	207	120	115	52	7	3	1,299
Total under 1 year ..	1,777	1,128	737	377	384	170	24	11	4,608
ANNUAL RATES.									
Under 4 weeks ..	16.97	14.13	16.35	13.55	15.90	14.56	30.58	7.43	15.60
4 weeks and under 1 year ..	6.50	5.19	6.39	6.33	6.80	6.42	12.59	2.78	6.12
Total under 1-year ..	23.47	19.32	22.74	19.88	22.70	20.98	43.17	10.21	21.72

(a) Number of deaths per 1,000 live births registered.

Age Distribution, p. 615.—A summary of the ages at death for Australia for the year 1956 is given in the following table:—

AGE AT DEATH: AUSTRALIA, 1956.

Age at Death.	Males.	Fe- males.	Per- sons.	Age at Death.	Males.	Fe- males.	Per- sons.
Under 1 week ..	1,647	1,232	2,879	Total 5-9 years..	277	169	446
1 week and under 2 weeks ..	127	93	220	" 10-14 " ..	226	139	365
2 weeks " " 3 " ..	63	62	125	" 15-19 " ..	414	168	582
3 " " " 28 days ..	42	43	85	" 20-24 " ..	579	194	773
Total under 28 days ..	1,879	1,430	3,309	" 25-29 " ..	588	263	851
28 days and under 3 months	223	175	398	" 30-34 " ..	700	374	1,074
3 months and under 6 " ..	236	200	436	" 35-39 " ..	787	520	1,307
6 " " " 12 " ..	245	220	465	" 40-44 " ..	1,234	758	1,992
Total under 1 year ..	2,583	2,025	4,608	" 45-49 " ..	1,790	1,084	2,874
1 year ..	249	195	444	" 50-54 " ..	2,533	1,369	3,902
2 years ..	141	132	273	" 55-59 " ..	3,577	1,956	5,533
3 " ..	105	85	190	" 60-64 " ..	4,898	2,857	7,755
4 " ..	91	72	163	" 65-69 " ..	6,280	4,135	10,415
Total under 5 years ..	3,169	2,509	5,678	" 70-74 " ..	6,668	5,077	11,745
				" 75-79 " ..	5,988	5,672	11,660
				" 80-84 " ..	4,566	5,217	9,783
				" 85-89 " ..	2,764	3,638	6,402
				" 90-94 " ..	922	1,404	2,326
				" 95-99 " ..	191	363	554
				" 100 and over..	24	27	51
				Age not stated ..	17	3	20
Total under 5 years ..	3,169	2,509	5,678	Total All Ages..	48,192	37,896	86,088

Causes of Death, p. 617.—The following table shows deaths of males, females and persons registered in 1956, classified according to the Abbreviated List of 50 Causes provided in the Sixth Revision of the International List:—

CAUSES OF DEATH: AUSTRALIA, 1956.

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE INTERNATIONAL LIST).

Cause of Death.	Detailed List Numbers.	Males.	Females.	Persons.
B 1 Tuberculosis of respiratory system	001-008	507	156	663
B 2 Tuberculosis, other forms	010-019	33	28	61
B 3 Syphilis and its sequelae	020-029	130	44	174
B 4 Typhoid fever	040	..	2	2
B 5 Cholera	043	..	..	..
B 6 Dysentery, all forms	045-048	10	5	15
B 7 Scarlet fever and streptococcal sore throat	050, 051	5	4	9
B 8 Diphtheria	055	5	7	12
B 9 Whooping cough	056	2	8	10
B10 Meningococcal infections	057	31	35	66
B11 Plague	058	..	..	..
B12 Acute poliomyelitis	080	37	20	57
B13 Smallpox	084	..	..	..
B14 Measles	085	23	21	44
B15 Typhus and other rickettsial diseases	100-108	1	..	1
B16 Malaria	110-117	2	..	2
B17 All other diseases classified as infective and parasitic	(a)	175	154	329
B18 Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues	140-205	6,431	5,850	12,281
B19 Benign and unspecified neoplasms	210-239	121	143	264
B20 Diabetes mellitus	260	419	793	1,212
B21 Anaemias	290-293	137	199	336
B22 Vascular lesions affecting central nervous system	330-334	4,965	6,597	11,562
B23 Non-meningococcal meningitis	340	71	62	133
B24 Rheumatic fever	400-402	22	31	53
B25 Chronic rheumatic heart disease	410-416	371	411	782
B26 Arteriosclerotic and degenerative heart disease	420-422	14,569	9,344	23,913
B27 Other diseases of heart	430-434	1,486	1,148	2,634
B28 Hypertension with heart disease	440-443	1,041	1,149	2,190
B29 Hypertension without mention of heart	444-447	568	633	1,201
B30 Influenza	480-483	95	87	182
B31 Pneumonia	490-493	1,729	1,379	3,108
B32 Bronchitis	500-502	808	247	1,055
B33 Ulcer of stomach and duodenum	540, 541	508	179	687
B34 Appendicitis	550-553	99	56	155
B35 Intestinal obstruction and hernia	560, 561, 570	288	228	516
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543, 571, 572	216	198	414
B37 Cirrhosis of liver	581	312	158	470
B38 Nephritis and nephrosis	590-594	712	579	1,291
B39 Hyperplasia of prostate	610	543	..	543
B40 Complications of pregnancy, childbirth and the puerperium	{ 640-652, 670-689, 750-759 }	..	119	119
B41 Congenital malformations .. ..	..	637	535	1,172
B42 Birth injuries, postal-natal asphyxia and atelectasis	760-762	635	449	1,084
B43 Infections of the newborn	763-768	97	70	167
B44 Other diseases peculiar to early infancy, and immaturity unqualified	769-776	832	658	1,490
B45 Senility without mention of psychosis, ill-defined and unknown causes	780-795	626	659	1,285
B46 All other diseases	Residual	4,413	3,608	8,021
BE47 Motor vehicle accidents	E810-E835	1,722	497	2,219
BE48 All other accidents	{ E800-E802, E840-E962 }	1,912	1,036	2,948
BE49 Suicide and self-inflicted injury	{ E963, E970-E979 }	751	270	1,021
BE50 Homicide and operations of war	{ E964, E965, E980-E999 }	95	40	135
All Causes .. ..	..	48,192	37,896	86,088

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

CHAPTER XVIII.—HOUSING.

§ 3. Statistical Summary—New Building.

New Houses, p. 637.—The number of new houses commenced, completed and under construction in each State and Territory during 1956–57 was as follows:—

NEW HOUSES : NUMBER, 1956–57.
(Including Owner-built Houses.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Commenced ..	24,356	19,649	7,572	6,832	5,565	2,591	251	509	67,325
Completed ..	22,267	20,185	7,217	7,193	5,030	2,759	328	561	65,540
Under construction at 30th June, 1957 ..	27,605	17,863	3,461	5,854	4,819	2,137	163	533	62,435

(a) Includes flats.

Of the 65,540 new houses completed during 1956–57, 21,956 had outer walls of brick, brick veneer, concrete or stone, 25,670 of wood (weatherboard, etc.), 17,408 of fibro-cement and 506 of other materials.

New Flats, p. 639.—The following table shows the number of new flats commenced, completed and under construction in each State and the Australian Capital Territory during 1956–57:—

NEW FLATS : NUMBER, 1956–57.
(Individual Flats.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	A.C.T.	Aust.(a)
Commenced	844	1,106	280	295	153	69	260	3,007
Completed	861	899	174	230	365	105	264	2,898
Under construction at 30th June, 1957	765	786	213	184	100	34	468	2,550

(a) Excludes figures for the Northern Territory, which are not available for publication.

Value of New Buildings, p. 640.—The values of all new buildings commenced, completed and under construction in each State and Territory are shown in the following table for the year 1956–57:—

NEW BUILDINGS : VALUE, 1956–57.
(Including Estimated Value of Owner-built Houses.)
(£'000.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Commenced ..	138,243	111,423	37,841	31,888	22,241	14,138	1,765	5,959	363,498
Completed ..	133,094	113,963	35,383	33,997	23,424	12,609	2,285	5,940	360,693
Under construction at 30th June, 1957 ..	162,097	126,381	31,332	36,792	26,217	12,085	1,555	11,520	407,979

The value of new buildings completed in Australia during 1956–57, according to kind of building, was as follows:—*Houses*—Brick, brick veneer, concrete and stone, £84,505,000; wood (weatherboard, etc.), £74,361,000; fibro-cement, £42,286,000; other, £1,339,000; Total, £202,491,000; *Other Buildings*—Flats, £7,260,000; hotels, guest-houses, etc., £8,544,000; shops, £12,735,000; factories, £42,435,000; business premises—office, £17,561,000; other, £18,846,000; educational, £14,867,000; religious, £3,518,000; health, £13,479,000; entertainment and recreation, £7,935,000; miscellaneous, £11,024,000; Total, £158,204,000; Grand Total, New Buildings, £360,695,000.

Persons Engaged in New Building, p. 642.—The number of tradesmen engaged on jobs carried out by builders of new buildings in Australia at 28th June, 1957 was as follows:—Carpenters, 45,700; bricklayers, 10,398; painters, 9,974; electricians, 5,723; plumbers, 9,341; builders' labourers, 20,514; other, 15,310; total, 116,960. Contractors actually working on jobs numbered 9,926, sub-contractors actually working on jobs 14,736 and wage earners 92,298.

CHAPTER XX.—PRIVATE FINANCE.

A. CURRENCY.

§ 2. Coinage.

Issues of Australian Coins, p. 701.—The net issues of Australian coins to 30th June, 1957, were:—silver, £35,416,000; bronze, £2,934,000; total, £38,350,000.

§ 3. Notes.

The Australian Note Issue, p. 704.—The average value of notes in circulation for the year 1956–57 was £386,885,000. This amount was distributed in denominations as follows:—10s., £10,867,000; £1, £72,384,000; £5, £171,067,000; £10, £131,569,000; £20, £4,000; £50, £44,000; £100, £49,000; and £1,000, £901,000. The amount held by the banks was £44,433,000 and by the public, £342,452,000.

B. BANKING.

§ 1. Cheque-Paying Banks.

Commonwealth Bank, p. 710.—The average liabilities of the Central Banking Business (including Note Issue Department) of the Commonwealth Bank for the year ended June, 1957, amounted to £927,479,000. Capital and Reserve Funds amounted to £17,559,000; Notes on Issue to £383,214,000; Special Accounts of Trading Banks to £289,444,000; Other Deposits of Trading Banks to £31,345,000; Other Liabilities to £205,917,000.

Particulars of the average assets were as follows:—Gold and Balances held abroad; £349,663,000; Australian Coin, £1,892,000; Cheques and Bills of other Banks, £5,360,000; Government and Other Securities (including Treasury Bills), £508,841,000; Bills Receivable and Remittances in Transit, £3,805,000; and Other Assets, £57,918,000.

Commonwealth Trading Bank, p. 712.—The average liabilities in Australia of the Commonwealth Trading Bank for the year ended June, 1957, were £203,097,000. Of this amount Deposits not bearing interest amounted to £140,125,000; Deposits bearing interest to £44,423,000; Balances due to other Banks to £389,000; Other Liabilities to £18,160,000.

The average assets in Australia, £202,272,000, included Cash and Cash Balances £9,988,000; Special Deposit Account with Central Bank, £34,603,000; Balances with other Banks, £1,469,000; Treasury Bills, £4,059,000; Other Commonwealth and State Government Securities, £35,714,000; Other Securities, £2,654,000; Loans, Advances and Bills Discounted, £106,480,000; Other Assets, £7,305,000.

Private Trading Banks, p. 713.—Average liabilities in Australia of the Private Trading Banks for the year ended June, 1957, were £1,354,200,000. Interminable Deposits or Deposit Stock amounted to £6,000; Deposits not bearing interest to £1,028,509,000; Deposits bearing interest to £299,499,000; Notes in Circulation to £158,000; Balances due to other Banks to £7,343,000; Other Liabilities to £18,685,000.

Average assets in Australia amounted to £1,369,359,000. These comprised Cash and Cash Balances, £63,661,000; Special Accounts with Commonwealth Bank, £254,052,000; Balances with other Banks, £20,239,000; Treasury Bills, £51,162,000; Other Commonwealth and State Government Securities, £151,298,000; Other Securities, £7,946,000; Loans Advances and Bills Discounted, £762,638,000; All Other Assets, £58,363,000.

Classification of Advances within Australia—Commonwealth Trading Bank and Private Trading Banks, p. 716.—Advances within Australia at the end of December, 1956 dissected by industries were:—Business advances—Agriculture, Dairying and Grazing, £199,003,000; Manufacturing, £184,105,000; Transport, Storage and Communication, £15,176,000; Finance and Property, £85,531,000; Commerce, £156,246,000; Miscellaneous, £57,203,000; Not elsewhere specified, £10,923,000; Total Business advances, £708,187,000; Advances to Public Authorities, £24,846,000; Personal advances £132,545,000; Total, £865,578,000.

Clearing House Returns, p. 718.—The average weekly bank clearings in each capital city for the year ended June, 1957 were as follows:—Sydney, £119,381,000; Melbourne, £107,563,000; Brisbane, £25,571,000; Adelaide, £23,042,000; Perth £14,927,000; Hobart, £4,237,000; Total, £294,721,000.

Debits to Customers' Accounts—All Cheque-paying Banks, p. 718.—The average weekly debits to customers' accounts in each State for the year 1956–57 for all cheque-paying banks (excluding debits to accounts of Australian Governments in capital cities) were as follows:—New South Wales, £219,368,000; Victoria, £195,455,000; Queensland, £62,743,000; South Australia, £42,685,000; Western Australia, £28,571,000; Tasmania, £12,609,000; Australian Capital Territory, £1,229,000; Total, £562,660,000.

§ 2. Savings Banks.

All Savings Banks, pp.720-1.—The number of operative accounts in the several States at 30th June, 1957 was:—New South Wales, 2,609,000; Victoria, 2,320,000; Queensland, 960,000; South Australia, 839,000; Western Australia, 474,000; Tasmania, 291,000; Northern Territory, 12,000 and Australian Capital Territory, 23,000; Total, 7,528,000. The amounts on deposit in the several States at 30th June, 1957 were:—New South Wales, £422,184,000; Victoria, £411,569,000; Queensland, £144,608,000; South Australia, £142,401,000; Western Australia, £62,693,000; Tasmania, £38,759,000; Northern Territory, £1,894,000 and Australian Capital Territory, £3,302,000, Total, £1,227,410,000. Total excess of deposits over withdrawals during 1956–57 was £57,276,000 and interest added was £29,137,000.

D. INSURANCE.

§ 2. Life Assurance.

Life Assurance, p. 730.—The following is a summary of the life assurance business transacted in Australia during 1956 (figures for 1955 in parentheses) compiled from monthly returns collected from the 22 companies registered under the Life Insurance Act 1945–1953, and excluding the Government Insurance Office of New South Wales and the Queensland State Government Insurance Office which operate only within their respective States. Particulars shown are therefore not entirely comparable with those in Chapter XX., which are derived from annual returns and include business of the State Government Offices.

Ordinary Department and Industrial Department, respectively:—New Policies issued in Australia—Number, 289,359 (289,560), 211,146 (213,124); Sum Assured, £359,238,000 (£324,017,000), £32,975,000 (£32,775,000); Policies Matured or Otherwise Discontinued in Australia—Number, 172,696 (155,820), 270,407 (273,298); Sum Assured, £115,152,000 (£102,206,000), £24,699,000 (£22,756,000). Particulars of annuities are excluded.

Premium receipts of Ordinary and Industrial Departments in Australia in 1956 amounted, respectively, to £72,868,000 (£66,072,000) and £14,898,000 (£14,634,000) Claims, etc., paid amounted to £28,325,000 (£25,348,000) and £9,813,000 (£9,199,000) respectively. Particulars of annuities are included.

CHAPTER XXI.—PUBLIC FINANCE.

A. COMMONWEALTH FINANCE.

Consolidated Revenue Fund, pp. 754 and 762.—The table below shows details of revenue and expenditure for the year 1956–57:—

COMMONWEALTH CONSOLIDATED REVENUE FUND: REVENUE AND EXPENDITURE, 1956–57.

(£'000.)

Revenue.		Expenditure.	
Item.	Amount.	Item.	Amount.
<i>Taxation—</i>		Defence Services	151,274
Customs	68,597	War and Repatriation Services ..	112,296
Excise	217,440	Subsidies and Bounties	15,014
Sales Tax	125,752	Departmental	97,978
Land Tax	1	National Welfare Fund—	
Income Taxes (a)	620,298	Expenditure on Social Services	223,923
Pay-roll Tax	48,675		
Estate Duty	12,712	<i>Business Undertakings—</i>	
Entertainments Tax .. ..	..	Postmaster-General's Depart-	
Other Taxes	5,261	ment	91,197
<i>Total</i>	<i>1,098,736</i>	Broadcasting Services	6,701
		Railways	4,244
		<i>Total</i>	<i>102,142</i>
<i>Business Undertakings—</i>		Territories	16,510
Postmaster-General's Depart-			
ment	90,074	<i>Capital Works and Services—</i>	
Broadcasting Services	5,301	Defence Services	38,416
Railways	4,428	Business Undertakings	36,840
<i>Total</i>	<i>99,803</i>	Other	70,962
		<i>Total</i>	<i>146,218</i>
Territories	2,513	Payments to or for States	244,077
Other Revenue	110,783	Loan Consolidation and Invest-	
		ment Reserve	194,793
		Other Expenditure	7,610
<i>Grand Total</i>	<i>1,311,835</i>	<i>Grand Total</i>	<i>1,311,835</i>

(a) Includes Wool Deduction.

C. COMMONWEALTH AND STATE FINANCE.

Revenue and Expenditure, p. 793.—The following table shows particulars of Commonwealth and State revenue and expenditure during the year 1955-56 and preliminary figures of revenue and expenditure for the year 1956-57.

COMMONWEALTH AND STATE REVENUE AND EXPENDITURE.

(£'000.)

Government of—	Consolidated Revenue Fund.			Loan Fund— Net Expenditure on Works and Services.
	Revenue.	Expenditure.	Surplus (+) or Deficit (—)	
1955-56.				
New South Wales	(a)204,399	(a)211,232	— 6,833	49,750
Victoria	123,152	126,398	— 3,246	36,343
Queensland	75,669	77,392	— 1,723	19,015
South Australia	55,352	56,782	— 1,430	24,161
Western Australia	49,612	51,443	— 1,831	13,528
Tasmania	17,827	17,712	+ 115	13,524
<i>Six States</i>	526,011	540,959	— 14,948	156,321
<i>Commonwealth</i>	1,138,358	1,138,538	..	43,995
Grand Total—Unadjusted	1,664,370	1,679,316	— 14,948	200,316
Adjusted(b)	1,466,672	1,481,618	— 14,948	200,316

1956-57.(e)

New South Wales	(a)224,955	(a)224,872	+ 83	48,974
Victoria	133,252	137,567	— 4,315	38,449
Queensland	85,158	85,143	+ 15	20,114
South Australia	61,561	61,610	— 49	24,018
Western Australia	54,331	56,243	— 1,912	16,787
Tasmania	18,802	19,615	— 813	10,885
<i>Six States</i>	578,059	585,050	— 6,991	159,227
<i>Commonwealth</i>	1,311,835	1,311,835	..	43,999
Grand Total—Unadjusted	1,889,894	1,896,885	— 6,991	203,226
Adjusted(b)	1,674,318	1,681,309	— 6,991	203,226

(a) Represents the combined transactions of the Consolidated Revenue Fund and the Business Undertakings—Railways, Tramways and Omnibuses and Sydney Harbour Section of the Maritime Services Board—included in the annual Budget Papers. Adjustments have been made to exclude duplications.

(b) To avoid duplication in aggregating particulars for the Commonwealth and States, the grand totals have been adjusted to exclude State payments to the Commonwealth in respect of pay-roll tax and Commonwealth payments to the States included in State Consolidated Revenue Funds in respect of interest on State debts, special grants, uniform taxation, special financial assistance, grants to universities, tuberculosis, capital expenditure and National Welfare payments. There are other relatively minor payments for which adjustments have not been made and the adjusted figures are therefore still slightly overstated.

(c) Preliminary.

D. COMMONWEALTH AND STATE PUBLIC DEBT.

§ 3. Commonwealth and State Public Debt Outstanding.

Public Debt and Annual Interest Payable, pp. 797-8.—The following table shows details of the public debt of the Commonwealth and States and the annual interest payable thereon at 30th June, 1956 and 1957.

COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE, 1956.

Particulars.	Maturing in—					Total. £'000.
	Australia. £A'000.	London. £Stg.'000.	New York. £'000.(a)	Switzer- land. £'000.(b)	Canada. £'000.(a)	
DEBT.						
<i>Commonwealth—</i>						
War (1914-18)	122,346	7,534	..	..	..	129,880
War (1939-45)	1,399,347	5,725	..	..	..	1,405,072
Works and other purposes	268,287	48,796	59,199	12,251	3,082	391,615
<i>Total</i>	<i>1,789,980</i>	<i>62,055</i>	<i>59,199</i>	<i>12,251</i>	<i>3,082</i>	<i>1,926,567</i>
<i>States</i>	<i>1,651,243</i>	<i>288,449</i>	<i>22,336</i>	..	..	<i>1,962,028</i>
Grand Total	3,441,223	350,504	81,535	12,251	3,082	3,888,595
ANNUAL INTEREST PAYABLE.						
Commonwealth	51,361	2,084	2,592	475	116	56,628
States	60,479	9,303	828	..	..	70,610
Grand Total	111,840	11,387	3,420	475	116	127,238

(a) £ payable in dollars which have been arbitrarily converted to £ at the rate of \$4.8665 to £1.
 (b) Loan raised in Switzerland has been converted to £ at the rate of 1,000 Swiss francs to £102 ls. 10d. as provided in Loan Agreement.

COMMONWEALTH AND STATE PUBLIC DEBT AND ANNUAL INTEREST PAYABLE AT 30th JUNE, 1957.

Particulars.	Maturing in—					Total. £'000.
	Australia. £A'000.	London. £Stg.'000.	New York. £'000.(a)	Switzer- land. £'000.(b)	Canada. £'000.(a)	
DEBT.						
<i>Commonwealth—</i>						
War (1914-18)	112,606	7,534	..	..	..	120,140
War (1939-45)	1,334,093	5,725	..	..	..	1,339,818
Works and other purposes	299,297	48,711	62,145	12,251	3,069	425,473
<i>Total</i>	<i>1,745,996</i>	<i>61,970</i>	<i>62,145</i>	<i>12,251</i>	<i>3,069</i>	<i>1,885,431</i>
<i>States</i>	<i>1,822,442</i>	<i>261,621</i>	<i>22,414</i>	..	..	<i>2,106,477</i>
Grand Total	3,568,438	323,591	84,559	12,251	3,069	3,991,908
ANNUAL INTEREST PAYABLE.						
Commonwealth	51,333	2,203	2,754	475	123	56,888
States	70,370	8,490	879	..	..	79,739
Grand Total	121,703	10,693	3,633	475	123	136,627

(a) £ payable in dollars which have been arbitrarily converted to £ at the rate of \$4.8665 to £1.
 (b) Loan raised in Switzerland has been converted to £ at the rate of 1,000 Swiss francs to £102 ls. 10d. as provided in Loan Agreement.

§ 4. Commonwealth Loan Raisings.

Loans Raised, pp. 805.—Particulars of loans raised by the Commonwealth between 1st July, 1955 and 30th June, 1957 are given in the following table.

COMMONWEALTH LOANS RAISED, 1955-57.(a)

Month of Raising.	Where Raised.	Amount Invited.	Amount Subscribed.	Rate of Interest. (b)	Year of Maturity.	Purpose.
		£'000.	£'000.	%		
1955-56—						
August, 1955	.. Australia	35,000	{ 16,050 16,408 7,173	{ 3 4½ 4½	1956 1965 1970	State purposes, £39,627,000
November, 1955	.. Canada	3,082	{ 3,082 8,519	{ 4 3	1970 1956	
November, 1955	.. Australia	30,000	{ 14,639 4,891	{ 4½ 4½	1965 1970		State purposes, £28,032,000
November, 1955	.. Australia	129,488	{ 32,297 41,815 39,589	{ 3 4½ 4½	1956 1965 1970	Conversion
May, 1956	.. Australia	30,000	{ 12,907 20,127	{ 3½ 5	1957 1963	State purposes, £33,000,000
June, 1956	.. New York	5,137	5,137	4½	1971	Conversion, £3,761,000; State purposes, £1,115,000
June, 1956	.. Australia	100,000	{ 80,500 19,500	{ 3½ 5	1957 1963	Conversion, £6,795,000 War (1939-45) and Repatriation Services, £8,354,000; Advances for Housing, £32,805,000; State purposes, £48,848,000
1956-57—						
August, 1956	.. Australia	30,000	{ 14,085 9,734 7,636	{ 3½ 5 5	1957 1963 1976	State purposes, £31,432,000
August, 1956	.. Australia	70,181	{ 20,738 22,157 12,943	{ 3½ 5 5	1957 1963 1976	Conversion
October, 1956	.. Australia	70,000	{ 30,797 20,660 15,120	{ 4 5 5	1958 1965 1976	State purposes, £30,092,000 Conversion, £36,479,000
October, 1956	.. London	6,951	6,951	5½	1972	Conversion
December, 1957	.. Australia	5,575	5,575	5	1972	Conversion
March, 1957	.. New York	4,110	4,110	5	1972	State purposes, £493,000; Conversion, £3,517,000
March, 1957	.. Australia	35,000	{ 12,202 14,008 10,092	{ 4 5 5	1958 1965 1976	State purposes
March, 1957	.. Australia	141,931	{ 102,570 10,066 17,481	{ 4 5 5	1958 1965 1976	Conversion
June, 1957	.. Australia	99,000	{ 40,000 30,000 29,000	{ 4 5 5	1958 1965 1976	War (1939-45) and Repatriation Services, £7,115,000; Advances for Housing, £31,931,000 State purposes, £59,954,000

(a) During 1955-56 and 1956-57, \$43,383,000 and \$2,457,000 respectively were drawn against loans made available by the International Bank for Reconstruction and Development. In 1956-57, a loan of \$8,691,000 was raised in New York for Qantas Empire Airways. (b) Australian loans bearing interest at 4½ per cent. were issued at par and those at other rates were issued at prices ranging from par to £99 10s. London loans raised in 1956-57 were issued at £97 10s. The New York loan in 1955-56 was issued at £98 10s. and in 1956-57 at par. The Canadian loan was issued at £98 10s.

CHAPTER XXII.—AGRICULTURAL PRODUCTION.

§ 3. Distribution, Production and Value of Crops.

Principal Crops, pp. 823-7.—The following table shows the area, production and yield per acre of wheat in each State for 1956-57.

WHEAT FOR GRAIN: AREA, PRODUCTION AND YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
AREA ('000 ACRES).								
1956-57(a)	1,742	1,565	390	1,455	2,764	4	..	7,920
PRODUCTION ('000 BUSHEL).								
1956-57(a)	28,490	35,282	8,000	31,500	32,100	89	..	135,461
YIELD PER ACRE (BUSHEL).								
1956-57(a)	16.4	22.5	20.5	21.6	11.6	22.7	..	17.1

(a) Preliminary, subject to revision.

CHAPTER XXIII.—PASTORAL PRODUCTION.

Livestock and Meat Produced.—The following table shows, for each State, the numbers of livestock at 31st March, 1957, and the amounts of meat produced during 1956-57:—

LIVESTOCK AND MEAT PRODUCED.

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
HORSES ('000.), p. 889.									
1957 (a) ..	236	108	(b)	41	(b)	14	38	1	(b)
CATTLE ('000.), p. 890.									
1957 (a) ..	3,911	2,765	7,495	622	956	354	1,176	11	17,290
BEEF, INCLUDING VEAL ('000 TONS BONE-IN WEIGHT), p. 892.									
1956-57 (a) ..	232	155	314	40	38	18	5	2	804
SHEEP ('000.), p. 894.									
1957 (a) ..	67,400	25,831	23,240	14,984	14,900	2,943	30	272	149,600
MUTTON AND LAMB ('000 TONS BONE-IN WEIGHT), p. 896.									
1956-57 (a) ..	119	125	23	43	33	12	..	1	356
TOTAL MEAT (INCLUDING PIG-MEATS) IN TERMS OF FRESH ('000 TONS BONE-IN WEIGHT).									
1956-57 (a) ..	380	302	356	90	78	34	6	3	1,249

(a) Preliminary, subject to revision.

(b) Not yet available.

CHAPTER XXIV.—FARMYARD, DAIRY AND BEE PRODUCTS.

Principal Farmyard, Dairy and Bee Products.—Particulars of the total production of these products in each State during 1956-57 are shown below:—

PRODUCTION OF PRINCIPAL FARMYARD, DAIRY AND BEE PRODUCTS.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
TOTAL WHOLE MILK PRODUCED ('000 GALS.), p. 928.								
1956-57(a)	305,623	586,592	254,168	87,907	57,044	63,888	976	1,356,198
BUTTER(b) (TONS), p. 929.								
1956-57(a)	35,059	89,306	41,341	8,460	7,572	10,637	5	192,380
CHEESE(b) (TONS), p. 930.								
1956-57(a)	4,019	20,216	7,152	11,943	1,155	334	..	44,819
PIGS ('000.), p. 934.								
1957 (a)	387	258	390	92	40	52	1	1,320
PORK (TONS, BONE-IN WEIGHT), p. 935.								
1956-57 (a)	14,921	10,742	7,018	2,603	3,273	2,163	204	(d)40,983
BACON AND HAM (TONS, CURED WEIGHT), p. 936.								
1956-57 (a)	10,244	7,538	9,965	3,426	3,070	922	..	35,165

(a) Preliminary, subject to revision. (b) Includes an estimate of farm production. (c) Includes Northern Territory, 68 tons. (d) Includes Northern Territory, 59 tons.

CHAPTER XXVI.—MINERAL INDUSTRY.**§ 1. The Mineral Wealth of Australia.**

Quantity and Value of Production, pp. 971-2.—In the table hereunder particulars are given of the quantity and value of production in Australia of the principal minerals during the year 1956:—

MINERAL PRODUCTION: QUANTITIES AND VALUES, AUSTRALIA 1956.**METALLIC MINERALS.**

Year.	Principal Contents of Metallic Minerals Produced.								Total Value of Output of Metal Mining.
	Copper.	Gold.	Iron.	Lead.	Silver.	Tin.	Zinc.	Sulphur. (a)	
	Tons.	Fine oz.	Tons.	Tons.	'000 fine oz.	Tons.	Tons.	Tons.	
1956	53,041	1,029,821	2,542,826	299,485	14,586	2,078	278,082	344,890	92,301

NON-METALLIC AND FUEL MINERALS.

Year.	Quantities Produced.						Total Value of Output of Non-metal and Fuel Mining.
	Coal.		Gypsum.	Limestone. (b)	Mica.	Salt.	
	Black.	Brown.					
	'000 tons.	'000 tons.	Tons.	Tons.	lb.	Tons.	£'000.
1956	19,274	10,560	467,484	4,264,158	28,837	409,000	65,194

(a) Includes sulphur content of spent oxide roasted material.

(b) Excludes limestone used as a construction material.

§ 2. Gold, § 3. Silver, Lead, Zinc, § 4. Copper, § 5. Tin, pp. 979-990.

The smelter and refinery production of the principal metals in Australia during the year 1956 is shown below.

SMELTER AND REFINERY PRODUCTION OF PRINCIPAL METALS: AUSTRALIA, 1956.

Year.	Refined Gold.	Refined Silver. (a)	Refined Lead. (a)	Lead Content of Lead Bullion Produced for Export. (a)	Refined Zinc. (a)	Refined Copper. (a)	Refined Tin. (a)
	'000 fine oz.	'000 fine oz.	Tons.	Tons.	Tons.	Tons.	Tons.
1956	1,044	8,232	195,090	41,658	104,993	29,307	1,850

(a) Source: Bureau of Mineral Resources.

SUBJECT.	OFFICIAL YEAR BOOK NO.	PAGE.
Commercial and Industrial Bureau of the Board of Trade	17	1037
Commonwealth Advisory Council on Nutrition	32	222
" Bank	11	815
" Bureau of Census and Statistics, Creation of	1	11
" Department of Fisheries	14	333
" Disposals Commission	39	1289
" Government Shipping and Shipbuilding Activities	22	256
" Housing Division	38	1234
" Marine War Risks Insurance Board	37	604
" Reconstruction Training Scheme	39	240
" Savings Bank	10	789
" War-time Technical Training Scheme	39	240
Compulsory Military Training	12	1001
Constitution Acts (Conspectus)	13	928
Contingents, Australian—New Zealand and Sudan Campaigns, South African, China and 1914–18 Wars	12	1019
Coolgardie Water Scheme	6	576
Co-operation of Producers and of Consumers in Australia	17	581
Copper-mining, History of	5	498
Cost of Living Inquiry, 1910–11	5	1167
Country Roads Board, Victoria	15	526
Customs Tariff, 1914	11	603
Daylight Saving	36	1119
Decimal Coinage	15	719
Defence Legislation, Special (1914–18 War)	15	930
Designs	12	1174
Diphtheria	16	1031
Disease, Transmission by Mosquitoes	22	506
Education, Primary—Early History	2	880
Enemy Contracts Annulment Act 1915 (Text)	8	1095
" Patents and Trade Marks	13	1104
Eucalypts, Australian, Chemical Products of	10	92
Eucalyptus Timbers, Australian	10	85
Exploration of Australia (Account)	2	20
" " (Maps)	8	35
Factories and Shops Acts and Regulations (Conspectus)	16	540
Fauna of Australia	2	111
Federal Capital City—Map and Designs for Layout (<i>See also</i> "Can- berra" and "Seat of Government")	5	1139
" " Territory—Structure and Scenery of (<i>See also</i> "Can- berra" and "Seat of Government")	22	627
" Movement in Australia	1	17
Ferries in Australia	25	199
Financial Agreement between Commonwealth and States (Full Text)	31	21
Financial Crisis	30	983
Flora of Australia	2	117
Fodder Plants, Native Australian	6	1190
Food and Drugs, Inspection and Sale	12	1053
" Control, Commonwealth, 1939–45 War	35	921
Forest Areas, Characteristics of State	6	446
Forestry in Australia	19	701
Friendly Societies Acts (Conspectus)	10	800
Geological History of Australia, Salient Features	7	56
" Map of Australia	12	51
Geology of Australia	2	78

SUBJECT.	OFFICIAL YEAR BOOK No.	PAGE.
German Place Names, Changing of	19	50
Glacial Action in Australia, Past	13	1133
Gold, Discovery of	4	492
" Modes of Occurrence and Remarkable Masses	4	500
Goulburn River Gravitation Scheme (Map)	13	561
Grasses and Saltbushes of Australia	9	84
Henderson, Report by Sir Reginald (Naval Matters)	6	1067
History of Australia, Early	1	44
Hurricanes and Related Storms, Australian	16	80
Hydrology of Australia	2	67
Industrial Hygiene in Australia	18	522
Infant Mortality, Australia 1881-1910, Rates of	5	227
Influenza Epidemic of 1918-19	13	1128
Institute of Tropical Medicine	15	1010
International Currency	13	1146
Interstate Commission	13	1123
" " Tariff Reports	9	1134
Iron-mining, History of	3	508
Islands off the Coast of Australia	5	51
Labour and Industrial Branch, Functions	7	992
" " , Laws relating to Conditions of (Conspectus)	16	538
Lakes of Australia	4	59
Land Tenure, Early History	4	235
League of Nations	35	920
Lend-Lease and Mutual Aid between Australia and the United States	36	331
" " , Terms of Settlement	37	393
Life Assurance Legislation, Australian (Conspectus)	18	1041
Lighthouses and Lights	2	668
Local Option	22	1005
Manufactures Encouragement Act of 1908-1912	11	451
Marine and Fresh Water Fisheries of Australia	17	752
Marketing of Australian Commodities, Legislation	36	1102
Masculinity of Population, 1796-1907	2	163
Meteorology, History of, in Australia	3	79
" " System in Australia prior to Federation	2	1075
Military Cadets, Anthropometrical Measurements of	11	1203
Mineral Springs in Australia	6	55
Mining, Aid to	5	527
Mortality, Rates of, Methods of Measuring	12	229
Mountain Systems of Australia	3	59
Murray River Waters Conference	7	1059
Mutual Aid between Canada and Australia	36	336
" " " " " " Termination	37	394
National Health and Pensions Insurance Scheme	31	968
Naval Defence, Historical Outline	2	1084
Navigation and Shipping Legislation	17	1053
New Guinea, Territory of, and Papua—Map	16	665
Northern Territory, Historical Sketch	6	1113
Orographical Map of Australia	11	49
Orography of Australia	3	59
Ottawa Conference	26	868

SUBJECT.	OFFICIAL YEAR BOOK NO.	PAGE.
Pacific Islanders in Australia	19	902
Parliamentary and Departmental Reports and Papers	13	4
Past Glacial Action in Australia	13	1133
„ Volcanic Action in Australia	14	46
Patents	12	1170
Penological Methods, Improvement of	5	922
Petrol Rationing (1939-45 War)	37	178
Plains and Peneplains of Australia	12	82
Poisons, Sale and Custody of	22	496
Population of Australia, Characteristics of the Development of, and the effect of the 1914-18 War	13	1226
„ „ Increase of (Graph)	35	268
„ „ Influences affecting Increase and Distribution of	22	906
„ „ Sex Distribution	22	910
Ports of Australia	3	669
Postal Services in Early Days	5	754
Post-Censal Adjustment of Population Estimates, 1901-11	6	112
Preferential Tariffs of the British Empire	11	601
„ Voting	6	1182
Premiers' Conference, 1914	7	1055
„ „ 1915	8	1081
„ „ 1916	11	1191
„ „ 1916-17	12	1194
„ „ 1918	14	1061
„ Plan	30	992
Publications issued by the Commonwealth Statistician, 1906-20	13	2
„ State, 1906-20	13	6
Public Health Legislation and Administration	22	493
Railways, Non-conformity of Gauge	15	534
„ Private	14	611
Rainfall from 1860	15	53
„ —Wettest Months of Year (Map)	17	69
Registration of Births, Marriages and Deaths, and Legitimations Acts (Conspectus)	13	212
Rent Control (1939-45 War)	37	1197
Returned Soldiers' Settlement Acts 1914-18 War (Conspectus)	13	1018
Rivers of Australia	2	67
School Children in Australia and Other Countries, Comparison	5	1032
Seat of Government	4	1134
Seismology in Australia	4	82
Settlement in Australia, Climatic Factors influencing	11	84
Snowy Mountains Scheme	42	1103
Southerly Bursters	6	84
Statistical Conference, 1906	1	12
Statistics, Development of State	1	1
Sugar Bounties	6	394
Suicide in Australia	5	240
Sydney Harbour Collieries	6	504
Sylvicultural Nurseries and Plantations	6	451
Taxation Acts (Conspectus)	14	722
Tenure of Land by Aliens	18	190
Tides of Australia	31	972
Timbers, Australian, Principal Commercial Uses	6	454
Tin-mining, History of	3	504
Topography of Australia	20	75

SUBJECT.	OFFICIAL YEAR BOOK No.	PAGE.
Trade Marks	12	1173
" Of the Individual States	4	664
" Prices, and House Rents—Control of	22	530
" Unionism in Australia, Historical Development	9	937
Trans-Australian Railway	11	662
Treasurer's Conference, 1914	7	1061
Tuberculosis in Australia, 1881 to 1910	5	230
Unification of Gauge	14	563
" " Conference	15	535
Universities, Historical Sketch	2	898
Volcanic Action in Australia, Past	14	46
Wages and Conditions of Employment (Conspectus)	16	567
" " Terms of Contract, Regulation	9	959
" Real—International Comparison of	22	542
War, 1939–45, Account of part played by Australian Military Forces and Chronology	36	1016
War Precautions Act 1914–16 and Regulations	11	1034
War-time Marketing of Primary Products	36	1105
" Technical Training Scheme	39	240
Wealth, Private of Australia, 1925	21	415
" " " 1929	26	471
Weights and Measures Acts (Conspectus)	15	1038
Wimmera-Mallee Gravitation Channel System Map	13	562
Wireless Telegraphy	15	628
Wool Industry, Inquiry into	29	644
Workmen's Compensation Acts (Conspectus)	22	1028

GENERAL INDEX.*

NOTE.—This index is preceded by a list of special articles, etc., in previous issues of the Official Year Book. A list of maps and graphs contained in this issue will be found on pp. ix and x. Area, population, etc., of particular localities are indexed under the locality concerned. Subject matter extending continuously over more than one page is indexed according to the first page only. *Where more than one reference to a subject is given, the chief reference, wherever it has been possible to determine it, is indicated by italic type. Two references to a subject so indicated signify major, and approximately equal, importance.*

	PAGE		PAGE
A.			
"A" Series Retail Price Index	143	Agricultural Allowances to Returned Soldiers	94
Aboriginals	103, 523, 534, 539, 583, 1163	And Stock Departments	1163
Accidents, Aviation	415, 624	Bank, Tasmania—Loans to Settlers	98
Deaths from	384, 397, 399, 406, 415, 613, 618–620, 623, 1142, 1152	Colleges	85, 880, 1163
Mining	1008	Council, Australian	294, 822, 920
Prevention	1065, 1066	Implement Works	246
Railway	397, 624	Production	821, 1049–1051, 1160
Shipping	384	Gross, Farm and Net Values	828
Traffic	406, 624, 1142	Quantum and Price Indexes	829, 1050, 1051
Tramway	399	Water Supply, Western Australia	692
Acoustic Laboratories, Commonwealth	506	Weights and Measures	825
Acts Administered by Commonwealth Departments	81	Agriculture (<i>see also</i> Crops)	821, 1160
Adaminaby Dam	267, 268, 290	Employment in	881, 883
Adelaide, Climatological Data	48, 55, 1127	Territories	104, 115, 119, 122
Population	548	Value of Production	828, 1048, 1049
Public Library	464, 466	Air Ambulance Services	402
University	452, 455–459	Board	1024
Waterworks and Sewerage	688, 689	Defence	1024
Administration and Classification of Crown Lands	84	Department Expenditure	764, 1015
and Legislation	73, 1127	Freight	412, 415
Justice, Cost of	488	Licences	411
Letters of	748	Mail	412, 415, 421
Territories	103, 112, 119, 121, 125, 131, 138, 142	Pilots, Training of	410
Administrators of the Commonwealth	74	Services	409, 412
Adult Education	460	Oversea	409, 412
Advances, Banks (<i>see also</i> Loans)	710, 712–717, 1155	Papua–New Guinea	130, 136, 415
Industry of Borrower	716, 717	Within Australia	108, 114, 409, 412
Main Purpose of	716, 717	Traffic Control	410
To Public Authorities	716, 717	Training Scheme	410
Settlers	94, 791, 1163	Transport Councils	409
War Service Land Settlement	93	Aircraft (<i>see also</i> Aviation)	411, 412, 1025, 1027
Wheat Growers	835	Accidents and Deaths	415, 624
Advisory Council of Science and Industry	1163	Engine Production	1027
Aerial Medical Services	514	Maintenance	411, 1027
Aero Clubs	410	Parts and Materials	411
Aerodromes	411, 415	Production	764, 1027
Aeronautical Research Laboratories	1029	Airports and Landing Grounds	411, 415
Telecommunications	410	Alcoholic Beverages, Consumption	478, 1054, 1056
Aeroplane Production	1027	Ale, Beer and Stout Production	234, 259
After-Auction Purchases of Land	86, 87	Alice Springs–Port Augusta Railway	108
Age and Invalid Pensions	521–525, 1146, 1147	Alien Immigrants	580
Distribution of Population	560	Alienation of Crown Lands	99
Military, Population of	1021	Allowances, Maternity	494, 529, 1146, 1147
School	435	Parliamentary	65, 82, 1127
Aged Persons Homes Act	537	Soldiers' Land Settlement	94
Ages at Death	613–615, 621–625, 1151	Alloys	243
Married Persons	625	Aluminium Production Commission, Australian	1032
Parents	639	Ambulance Services, Air	409
Pensioners	524	Ammonium Sulphate, Imports and Exports	878
Persons who Committed Suicide	624	Ammunition, Production	1026
Died	613–615, 621–625	Anatomy, Australian Institute of	508
from Malignant Neoplasms	622	Animal and Vegetable Diseases and Pests	1163
Tuberculosis	621	Acts	918
		Animals (Living) Net Exports	509, 510
		Quarantine	2
		Annexation of Australia	733–743
		Annuities, Life Assurance	140, 770
		Antarctic Research Expenditures	24, 140
		Territory	24, 140

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Antimony Imports	1009	Australia— <i>continued.</i>	
Production	971, 972	Orography	27, 1165
Appeal Tribunals, War Pensions	1035	Rainfall	28, 45, 52, 1127, 1166
Appendicitis, Deaths	618-620, 1152	Rivers	28, 1166
Apples and Pears, Exports	870, 871	Australia-United Kingdom Trade Agreement	327,
Marketing	871		328
Production	868, 869	Australian (<i>see also</i> Commonwealth)—	
Apprentices' School, Army	1023	Agricultural Council	294, 822, 920
Apprenticeship	221, 1023	Aluminium Production Commission	1032
Legislation	1163	And International Relations in Education	451
Apricots, Production	868, 869	New Zealand Association for the	
Arbitration Acts, Operations under	156, 166-182,	Advancement of Science	472
	196	Antarctic Territory	24, 140
Commission, Commonwealth Concilia-		Apple and Pear Board	871
tion and	156-158, 1132	Atomic Energy Commission	1067
Court, Commonwealth Conciliation and		Balance of Payments	362, 1139
144, 156, 166-172, 183, 473		Barley Board	850
Western Australia	158, 180	Battles Nomenclature Committee	1024
Area, Australia	5, 25, 27, 102	Bibliography	1084
Compared with Other Countries	26	Broadcasting Commission	430
Crops (<i>see also</i> Specific Crops)	821-825	Control Board	429
Crown Lands, Alienated	99	Cadet Corps	1022
Leased or Licensed	88, 99	Capital Territory	5, 112, 1163
Customs	333	Administration	112
Forests	945, 949	Air and Road Services	114
Irrigated	291, 300-322	Area	5, 27, 102
Local Government Authorities	659	Climatological Data	48, 49, 58
Rural Holdings	880	Creation of	5, 112
Sown Pastures	822	Diseases Notifiable	512
States and Territories	5, 25, 27, 102, 103, 119,	Dwellings	630, 644
125, 130, 137, 140, 141		Education	115, 443
Tropical and Temperate Regions	25	Electricity Supply	286
Army Apprentices' School	1023	Finance	116, 762, 774
Australian (<i>see</i> Australian Military Forces).		Forestry	113
Schools	1023	Jervis Bay	114
Arrangement, Deeds of	485	Land Tenure	89, 102, 114
Arrivals, Oversea	572	Livestock	115
Classes	573	Medical Inspection of School	
Excess over Departures	554, 572	Children	497
Nationality	574	Police	487
Racial Origin	574	Population	115, 542-556,
Art Galleries, Public	471	559, 1148	
State Expenditure	472	Production	115
Artesian Basins	29, 293, 303-321	Progress of Work	112
Bores	293, 303-321, 692	Railways	114, 387, 761, 773
Water	293, 303-321, 692	Transfer of Parliament	67, 112
Diminution of Supply	293, 310	To Commonwealth	5, 112
Fertilizers	241, 768	Council for Educational Research	438
Asbestos Production	971, 1004, 1009	Of Trade Unions	198
Ashmore and Cartier Islands	24	Dairy Produce Board	932, 933
Asians in New Guinea	131	Forestry School	947
Northern Territory	103	Institute of Anatomy	508
Assemblies, Legislative	64, 68-72	Life Tables	611, 1163
Assets, Cheque-paying Banks	710, 712-716, 1154	Loan Council	795
Insurance Companies	742-745	Meat Board	888
Postmaster-General's Department	419	Metal Exchange	1163
Registered Companies	727-729	Military Forces	1020, 1050, 1163
Savings Banks	722-725	Expenditure	764, 1015
Assistance to Housing, Government	627	Organization	1021
Primary Producers	767, 791, 877	Phases of Development	1020
University Students	454	Strength	1015, 1024
Assisted Immigrants	572, 576	National Antarctic Research Expedition	140,
Associations, Industrial	196		770
Assurance, Life	730, 1155	Film Board	463, 1064
Astronomical Society, British	472	Library	463
Atmospheric Pressures	50	University	452-454, 457-459, 467
Capital Cities	53-60	Naval Station	1018
Atomic Energy Commission, Australian	1067	Note Issue	701, 703, 708, 711, 1154
Attorney-General's Department, Common-		Parliamentary and National Library	463
wealth	488, 769, 771	Rifle Clubs	1024
Atypical Children, Education	438	Road Safety Council	1066
Auction Sales of Crown Lands	86, 87	Shipbuilding Board	1059
Australia, Annexation	2	Shipping Board	369
Area	5, 25, 27, 102	Standards Association	1062
Artesian Areas	29, 293, 303-321	Territories	5, 23, 103
Geographical Features	27	Tobacco Board	872
Position	25	Wheat Board	830
Hydrology	28, 1165	Women's Army Corps, Royal	1022, 1023
Lakes	29	Wool Bureau	904
Land Tenure and Settlement	84, 1165	Realization Commission	903
Mountain Systems	28, 1165	Austrian Migration	574, 579, 580

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Aviation (<i>see also</i> Aircraft)	408	Basic Wage—	
Civil, Department of	409	Capital Cities	169, 177
International Organizations	409	Commonwealth	166, 1132
Services	409, 412	Females	172, 177
Meteorological Aids	410	"Harvester"	166
Mileage Flown	412, 415	Inquiries	166, 1132, 1163
Naval	1018	Rates Operative	172, 1133
Navigation Facilities	410	Principal Towns	172
Papua-New Guinea Activities	130, 136, 415	Royal Commission	166
Radio Aids	410	States, Rates, etc.	177, 1133
Services	409, 412	Territories	177
Statistical Summaries	411	Basins, Water-bearing	293
Awards, Industrial	158, 166	Battles Nomenclature Committee, Aus- tralian	1024
		Bauxite	995, 1032
		Beam Wireless	427
		Beans and Peas	871, 872
		Beds in Hospitals	515, 516, 1145
		Beef, Consumption	892, 1053, 1055
		Exports	888, 893, 918
		Imports into United Kingdom	893
		Production	892, 1160
		Bee-farming	939, 1048, 1049
		Beer, Consumption	478, 1054, 1056
		Excise	756
		Production	234, 259
		Quantity on which Excise Paid	361
		Bees-wax	939
		Belgium, Trade Agreement with	328
		Benefactions, Universities	458
		Benefits, Funeral	522, 526, 1146
		Hospital	498, 521, 522, 1146
		Mental Institution	519, 522, 1146
		National Health	498
		Pharmaceutical	498, 521, 522, 1146
		Sickness 190, 521, 522, 533, 748, 1146, 1147	
		Social Services	190, 521, 771, 1146
		Unemployment 190, 521, 522, 533, 1146, 1147	
		Benevolent Homes	536
		Beryllium	995
		Betting Investments with Licensed Book- makers	750
		Beverages, Consumption	478, 1052, 1054, 1056
		Bibliography of Works on Australia	1084
		Bird-Darwin Railway	108
		Birthplaces, Married Persons	589
		Parents	601
		Population	566
		Birth Rates	591, 592, 1150
		Births	590, 1150
		Ages of Parents	601
		Duration of Marriage of Mothers	601
		Ex-nuptial	590, 596, 601, 1150
		Issue of Mothers	601
		Legitimations	596
		Masculinity	595, 1150
		Maternity Allowances	494, 529, 1146, 1147
		Multiple	590, 596, 601
		Occupation of Fathers	601
		Premature, Deaths of	613, 618-620, 1152
		Registration of	585
		Stillbirths	585, 590, 604
		Blankets, Production	234, 248
		Blind Persons, Pension Rates	523
		Boarded-out Children	494, 538
		Boats engaged in Fisheries	958, 959, 965
		Bones, Net Exports	918
		Books dealing with Australia	1084
		Boot Factories	251
		Border Rivers Agreement	296
		Bores, Artesian	293, 303-321, 692
		Borrowings under Financial Agreement—	
		Commonwealth and States	795
		Semi-governmental Bodies	797
		Bounties	762, 767, 877
		Cotton	768, 876, 877
		Dairy Products	877
		Flax	874
		Wheat	768, 779
		Wine	865
		Bowen Harbour Board	696
		Bran Production	234, 252

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE
Brazil, Trade Agreement with	328.
Breweries	258
Brides and Bridegrooms, Ages, etc.	588
Bridges	657, 667
Briquettes	997
Brisbane, Climatological Data	48, 56, 1127
Population	548
Public Library	465, 466
Waterworks and Sewerage	686
British Astronomical Society	472
Commonwealth Forces, Korea	1016
Medical Association	472
Migration	574, 576, 580
New Guinea (<i>see</i> Papua)	137, 139
Phosphate Commissioners	323, 327, 328
Preference	434, 1143
Broadcast Licences	434, 1143
Listeners' Licences	429, 1143
Broadcasting and Television	430, 433, 1143
Commercial Stations	430
Commission, Australia	429
Control Board, Australian	432
Drama and Features	773
Expenditure	431
Financial Operations	429, 434
Legislation	433
News	433
Parliamentary Proceedings	430
Service, National	432
Talks	431
Transmission Services	432
Youth Education	432
Broadcasts, Rural	432, 439
School	984
Broken Hill Mines, Extraction of Silver	679, 682
Lead and Zinc	613, 618, 620
Water Board	823, 824, 826
Bronchitis, Deaths	971-975, 995-999, 1001, 1161
Broom Millet	727
Brown Coal	630, 1153
Building and Investment Societies	636
New	971
Societies	636
Stone, etc., Quarried	971
Buildings and Land, Factory, Value of 229, 238-264	441
School	842
Bulk Handling and Storage of Wheat	351, 352, 360, 1136
Bullion, Imports and Exports	697
Bumbury Harbour Board	696
Bundaberg Harbour Board	352, 999
Bunker Coal	280
Burdekin River Hydro-electric Project	313
Irrigation Scheme	947
Bureau: Commonwealth Forestry and Timber	769, 1079, 1164
Of Census and Statistics	508
Dental Standards, Commonwealth	1010, 1012
Mineral Resources	861
Sugar Experiment Stations	400
Buses	494
Bush Nursing Associations	762, 772, 1156
Business Undertakings (Government)—	661
Commonwealth, Expenditure	788, 789
Revenue	781, 782, 785
Local Government	920, 921, 925-934
State, Expenditure	932, 1053, 1055
Revenue	933
Butter	932
Consumption	345, 347, 350
Contracts	257, 925, 927, 929
Disposal of	933
Exports	932, 933
Factories	234, 257, 920, 921, 925-930, 932, 1161
Graded for Export	925
Marketing	925
Production	345, 347, 350, 934, 941, 942
Stabilization Scheme	925
Subsidy	925
Trade	925

	PAGE
C.	
"C" Series Retail Price Index	143, 145-148, 150, 1130
And Basic Wage Variations	144, 167-182
Comparison with Interim Retail	145, 147
Price Index	200
Wage Index Numbers	150
Construction of	63
Cabinet	63, 73
Ministers, Commonwealth	63, 76, 1128
State	261
Cabinet-making Factories	427, 1143
Cable and Radio Communication	1021
Cadet Corps, Australian	1023
School, Officer	994
Cadmium and Cobalt; Production	915, 918
Calfskins, Exports	105, 885
Camels	323, 324, 327
Canadian Preference	48, 58, 1127
Canberra (<i>see also</i> Australian Capital Territory)	1163
Climatological Data	548
Past and Present	114
Population	115
Rail, Air and Road Services	452, 453, 456-459, 467
Schools	114
University College	114
Canberra-Queanbeyan Railway	1163
Cancer (<i>see also</i> Malignant Neoplasms)..	506
In Australia	240
Organizations for the control of	962, 967, 1053, 1055
Candle and Soap Factories	871
Cane Sugar (<i>see</i> Sugar-cane).	236, 255, 872, 1054, 1056
Canned Fish	1043
Fruits, Marketing	401
Vegetables	418
Canteens Trust, Services	388
Capital Expenditure, Omnibuses	399, 400
Postmaster-General's Department	327
Railways	742, 743
Tramways	480
Export Control	706
Insurance Companies	762, 767, 772-774, 780
Punishment	693
Resources, Banks	370, 375
Works and Services	474, 481
Captain Cook Graving Dock	292, 297, 315, 319
Cargo, Shipping	885, 889, 918, 920
Cases Tried at Magistrates' Courts	890
Casualties (<i>see</i> Accidents).	923
Catchments	915, 918
Cattle	891, 918
Classification	889, 1160
Dairy, in Australia	105, 115, 124, 889, 1160
Hides, Imports and Exports	891
Imports and Exports	892
Number in each State	892
Territories	892
Various Countries	613, 617-624, 1152
Slaughtered	238
Causes of Deaths	1063
Cement (Portland) Production	103
Censorship, Films	103
Census, Aboriginal	1163
And Statistics Act	769, 1079, 1164
Bureau of	643
Dwellings	1073
of Retail Establishments	542, 583, 1163
Censuses of Population	708, 710, 711
Central Banking Business, Commonwealth	211
Bank	198
Electric Stations	1054, 1056
Labour Organizations	291, 300, 301, 305
Cereals, Consumption	537, 538, 787-789
Grown in Irrigated Areas	537, 538, 787-789
Charities, State Expenditure on	537, 538, 787-789

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.
6926/56.—37

	PAGE		PAGE
Cheese, Consumption ..	932, 1053, 1055	Coal— <i>continued.</i>	
Contracts ..	933	Production, Australia ..	971, 995-1002
Factories ..	257, 925, 927, 930	Value of ..	972-996
Graded for Export ..	933	Principal Countries ..	999
Marketing ..	932, 933	Utilization and Disposal ..	997, 1000
Production 234, 257, 920, 921, 927, 930, 932,	1161	Values ..	1000
Subsidy ..	925	Coastal Configuration of Australia ..	27, 1163
Trade ..	345, 347, 350, 934, 941, 942	Radio Stations ..	428
Chemical Factories ..	238	Steamship Services ..	375
Fertilizers ..	241	Cobalt Production ..	994
Cheque-paying Banks (<i>see</i> Banks).		Cocoa, New Guinea ..	124, 133, 136
Cherries ..	868, 869	Coconuts ..	123, 133
Child Centres, Lady Gowrie ..	513	Cocos (Keeling) Islands ..	24, 141
Endowment 184, 521, 522, 530, 1146, 1147		Coffee ..	124
Guidance Clinics, New South Wales ..	495	Consumption ..	1054, 1056
Labour in Factories ..	220	Coinage ..	710, 1154
Pre-school ..	513	Coke Production ..	234, 264, 1002
Childbirth, Deaths ..	619, 620, 623, 1152	Colleges, Agricultural ..	85, 880, 1163
Children, Deaths under One Year 492, 610-615		Military and Naval ..	1018, 1022, 1023
Employed in Factories ..	220	Training ..	440
Neglected and State ..	494, 538	University, Canberra 452, 453, 456-459, 467	
School, Medical and Dental Inspection		New England ..	452
of ..	494	Colonization of Australia ..	3, 4
Soldiers' Education Scheme ..	1042	Comfort Zones ..	30
Children's Courts ..	479	Command Organization, Army ..	1021
Libraries ..	469	Commerce (<i>see also</i> Trade) ..	323, 1136
Chinese in Australia ..	103, 566, 568, 1163	Powers of Commonwealth in regard to ..	323
Christmas Island, Phosphates ..	140	Commercial Broadcasting Stations 430, 433, 1143	
Chronological Table ..	1111	Forests ..	948
Cigarettes and Cigars, Excise Revenue ..	756	Vehicles, Registration ..	404, 405, 1142
Factories ..	260	Commission, Commonwealth Conciliation	
Production ..	234, 260	and Arbitration ..	156-158
Quantity on which Excise Paid ..	361	Electricity, of New South Wales ..	269, 271
Cities, Population ..	548, 550	Hydro-electric, of Tasmania ..	285, 320
Citizen Military Forces ..	1015, 1022, 1024	Industrial, New South Wales ..	158, 177
Citrus Fruits ..	868-870, 1054, 1056	Commissioners, Conciliation ..	156-158
Civil Aircraft (<i>see</i> Aircraft).		High ..	332, 768, 1071, 1072
Aviation Department (<i>see</i> Aviation).		Trade ..	332, 1071-1073
Organizations, International ..	409	Commonwealth Accounts ..	753
Courts ..	480, 1145	Acoustic Laboratories ..	506
Claims, General Insurance ..	746, 747	Activities, Educational ..	451
Life Assurance ..	738-741	Advisory Council on Nutrition ..	1164
Clays, Production ..	1005	Age Pensions ..	521-525, 1146, 1147
Clear Days at the Capital Cities ..	53-60	Aid Roads ..	667, 775, 777
Clearing Houses, Bank ..	718	Air Transport Council ..	409
Climate ..	29, 1127, 1163	And State Finance 753, 781, 793, 795, 1157	
Territories ..	104, 119, 123, 137, 141	Housing Agreement ..	628
Climatological Stations, Tabulated Data ..	31	Price Control Administration ..	155
Tables for Capital Cities ..	52	Public Debt ..	797, 809, 1157
Clinics, Baby ..	494	States, Financial Agreement ..	795
Child Guidance, New South Wales ..	495	Bank ..	705, 707, 1154, 1164
School Dental ..	494-496	Departments and Management 704, 705,	
Closer Settlement ..	84, 91	707, 722	
Acts ..	84	Exchange Control ..	327
Advances ..	95, 791	Legislation ..	327, 704, 707
Cloth Production ..	234, 247	Liabilities and Assets ..	710, 711, 1154
Clothing and Drapery Group 146, 1129, 1130		Management ..	708
Retail Price Index Numbers 148, 149,		Net Profits ..	710
151, 200, 1129, 1130		Note Issue ..	703, 707, 711, 1154
and Food Rationing ..	1163	Rural Credits Department ..	709-711
Factories ..	219-221, 247-251	Banking Legislation ..	327, 704, 707
Clouds at the Capital Cities ..	53-60	Bankruptcy Act ..	485
Coaching Receipts, Railways ..	389	Basic Wage ..	166, 1132
Coal ..	971-975, 995, 1009, 1161	Bureau of Census and Statistics 769, 1079, 1164	
Australian Reserves ..	998	Dental Standards ..	508
Black ..	995-1002	Child Endowment ..	521, 522, 530
Board, Joint ..	1002	Conciliation and Arbitration Act 156, 196	
Brown ..	971-975, 995-999, 1001, 1222	Commission 156-158,	
Bunker ..	352, 999	1132	
By-products ..	1002	Court 144, 156, 166-	
Carried on Railways ..	395	172, 183, 473, 769	
Consumption ..	997, 1000	Consolidated Revenue Fund ..	753, 793, 1156
Gas-works ..	264	Constitution 6, 294, 753, 775, 776, 1164	
Railways ..	397	Alterations of ..	68
Exports ..	999, 1009	Council for National Fitness ..	513
Mining Accidents and Deaths ..	1008	Court of Conciliation and Arbitration 144,	
Employment ..	1001, 1007	156, 166-172, 183, 473, 769	
History of ..	1163	Courts ..	156, 473, 485, 486, 769
Leases and Licences ..	90, 107	Currency and Coinage ..	701, 1154
Oil ..	1002	Debt (<i>see</i> Public Debt).	
		Departments ..	81, 754
		Finance ..	754, 762, 764, 766, 1156

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
<i>Commonwealth—continued.</i>		<i>Commonwealth—continued.</i>	
Disposals Commission ..	767, 1164	Revenue ..	754, 793
Division of Industrial Development ..	202	Broadcasting Services ..	761
Elections ..	65, 82	Customs and Excise ..	351, 755, 756, 794, 1156
Employees, Number ..	188, 1134	Defence ..	754
Employment Service ..	190	Patents ..	488, 754, 1058
Establishment of ..	5	Per Head of Population ..	754
Expenditure ..	753, 762, 793	Postmaster-General's Department ..	417, 761
Air ..	764, 1015	Railways ..	387-396, 761
Army ..	764, 1015	Sources ..	754, 1156
Attorney-General's Department ..	488, 769, 770	Taxation ..	754, 755, 794, 810
Broadcasting ..	773	Savings Bank ..	708, 719, 722, 726, 1164
Capital Works ..	762-764, 767, 774, 780	Scientific and Industrial Research ..	771
Defence and War ..	762-764, 767, 774, 780	Organization ..	202, 292, 454, 464, 769, 771, 873, 880, 963, 1060
Departments ..	762, 764, 766, 1156	Serum Laboratories ..	505
Governor-General and Establish- ment ..	82, 768, 770	Shipping Line ..	369, 1164
Loan ..	764, 794	Short-term Debt ..	804
Maternity Allowances ..	522, 530, 1146, 1147	Sinking Fund, National Debt ..	772, 775, 796, 809
Munitions ..	764, 1028	Taxation ..	754, 755, 794, 810, 1156
Navy ..	764, 1015	Trade Commissioners ..	332, 1071
Parliament ..	81, 768, 770, 1128	Trading Bank ..	705, 707, 712, 1154
Pensions ..	522, 1035, 1039, 1041, 1146, 1147	Trust Funds ..	779
Per Head of Population ..	762	Unemployment and Sickness Benefits ..	190, 521, 522, 533, 1146, 1147
Postmaster-General's Department ..	417, 772	War and Service Pensions ..	1034, 1039
Repatriation ..	762, 767, 774, 780, 1035, 1039, 1042, 1043, 1156	War-time Technical Training Scheme ..	1164
War Services ..	762-764, 767, 774, 780, 1015, 1156	Widows' Pensions ..	521, 522, 532, 1146, 1147
Finance ..	753, 793, 1156	X-ray and Radium Laboratory ..	506
Financial Agreement with States ..	776, 781, 795, 1164	Communications and Transport ..	369, 1142
Assistance to Primary Producers ..	762, 767, 877	Cable and Radio ..	427, 1143
Fisheries Office ..	963	Territories ..	107, 114, 120, 130, 136, 140
Forestry Activities ..	769, 947	Companies ..	726
Government ..	61, 65, 73, 1128	Building and Investment Societies ..	727
Grants Commission ..	776	Co-operative ..	729, 1164
To States ..	667, 775, 780-782, 787, 1156	Insurance ..	729
Health Department ..	498, 505-508	Trustee, Executor and Agency ..	727
Laboratories ..	505	Company Income Taxes ..	815
High Commissioners ..	332, 768, 1071	Compensation, Workers' ..	195
High Court ..	156, 473, 486, 769	Concentrates, Metallic Contents of ..	983, 984, 987, 993
Housing Division ..	1164	Concessional Deductions, Income Tax ..	811
Industrial Court ..	156-158, 486	Conciliation and Arbitration Court, Common- wealth ..	144, 156, 166-172, 183, 473, 769
Invalid Pensions ..	521-525, 1146, 1147	Commission ..	156-158, 1132
Legislation Affecting Oversea Trade ..	323-329	Commissioners ..	156-158
Course of ..	78	Condensed Milk (<i>see</i> Milk).	
Loan Council ..	795	Conditional Purchases of Freehold ..	84, 87, 99
Fund ..	780, 1159	Confectionery Factories ..	254, 861
Maternity Allowances ..	494, 529, 1146, 1147	Conference of British Commonwealth Statis- ticians ..	1084
Ministers, Ministries ..	63, 74	Conferences, Statistical ..	1079, 1166
National Library ..	463	Confinements ..	590, 601, 1150
Navigation and Shipping Legislation ..	384	Congenital Malformations and Diseases of Early Infancy, Deaths ..	613, 618-620, 623, 1152
Note Issue ..	701, 703, 708, 711, 1154	Conjugal Condition of Migrants ..	575
Office of Education ..	451	Pensioners ..	524
Oversea Representatives ..	1070	Persons at Marriage ..	587, 1149
Parliament ..	64, 65, 73, 1127	Population ..	565
Parliamentary Library ..	463	Conservation, Water ..	289
Payments to or for States ..	455, 516, 519, 762, 775, 780-782, 787, 1146, 1156	Conservatorium of Music ..	456
Wheat Growers ..	835	Consolidated Revenue Fund, Commonwealth ..	753, 793, 1156
Properties transferred from States ..	796	States ..	781, 793, 1157
Public Debt ..	795, 809, 1157	Constitution, Commonwealth ..	6, 294, 753, 775, 776, 1164
Short-term ..	804	Alteration of ..	68
Taken over from States ..	795	State ..	6, 69-72
Service Superannuation Fund ..	751	Construction Materials Production ..	971-975
Publications ..	1082	Consular Representatives ..	1070
Railways ..	334, 761-763, 773, 780	Consumers' Co-operative Societies ..	729, 1164
Reconstruction Training Scheme ..	454, 456, 457, 767, 1041, 1164	Consumption (<i>see</i> Tuberculosis).	
Referenda ..	68, 155		
Rehabilitation Service ..	525		

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Consumption of—		Customs— <i>continued.</i>	
Beverages	478, 1052	Legislation	323, 325, 326
Butter and Cheese	932, 1053, 1055	Revenue	351, 755, 756, 794, 1156
Coal, Oil and Petrol, Railways	397	Tariff	128, 134, 323, 327, 328, 1164
Farm Products, Quantum Indexes	1052	Industries Preservation	325
Fish	962, 1053, 1055	Papua and New Guinea	128, 134, 323, 324, 326
Foodstuffs	1052	Cycles, Motor	404, 1142
Meats 887, 892, 896, 935, 936, 1053, 1055	1055	Cyclones	51
Onions	856	Czechoslovakia, Trade Agreement with	328
Potatoes	855, 1054, 1056		
Sugar	861, 1054, 1055	D.	
Wheat	840	“D” Series Retail Price Index	144
Wool, Locally Processed	906	Dairies, Milk Supply, etc., Supervision of	497, 920
Contagious Diseases	509	Dairy Cattle	497, 923
Contingents, Australian	1164	Herds	923
Contract Board	1030	Premises, Registered	497
Conversion Loans, Australia	806, 1159	Produce Board, Australian	932, 933
London	807, 1159	Marketing	932
New York	808, 1159	Production 920, 927, 1048–1051, 1161	1161
Convictions at Higher Courts	479, 1145	Stabilization Schemes	925
Magistrates' Courts	475, 1145	Products, Exports 345, 347, 350, 934, 941, 942	942
for Serious Crime	475, 479, 1145	Dairying Industry, Subsidies	768, 877, 925
Coolgardie Water Scheme	1164	Supervision	497, 920
Co-operative Societies	728, 729, 1164	Dams and Reservoirs	267, 268, 289, 295–322
Copper 971–975, 987, 1009, 1010, 1161, 1162	1162	Darwin-Birdum Railway	108
Content of Ores, etc., Produced	987	Dawson Valley Irrigation Scheme	313
Mine Production in Principal Countries	989	Daylight Saving	1164
Mining Employment	989, 1007	Dead Letter Offices	421
Prices	989	Death Rates 600–612, 614, 616, 621–624, 1151	1151
Production and sales 987, 988, 1161, 1162	1162	Accidents	624
Sources of Production	987, 1164	Crude	606, 608
Territories	105, 128, 134	Heart Diseases	623
World Mine Production	989	Infant	493, 610–615, 1151
Copra	123, 127, 129, 133, 134, 136	Malignant Neoplasms	613, 623
Copyright	1058	Puerperal	623
Cornflour, Imports and Exports	849	Standardized	607
Correspondence Schools	439, 449	Suicide	624
Cotton	291, 312, 340, 350, 823–828, 876	True	607
Bounty	876, 877	Tuberculosis	621
Mills	247	Various Countries	608, 623
Country Fire Authority, Victoria	699	Violence	623
Of Origin, Imports 337, 347, 353, 360, 1136	1136	Deaths	605, 1151
Roads Board, Victoria	670, 1164	Accidents 384, 397, 399, 406, 415, 613, 618–620, 623, 1142, 1152	1152
Towns Water Supply and Sewerage	682, 685, 687, 689, 692	Ages at Death	613–615, 621–625, 1151
Court, Courts—		Causes	613, 617–624
Arbitration, Western Australia	158, 180	Congenital Malformations 613, 618–620, 623, 1152	1152
Bankruptcy, Commonwealth	485, 1145	Friendly Societies, Members of	748
Children's	479	Heart Diseases	613, 618–620, 623, 1152
Civil	480, 1145	Hospitals	515, 516, 1145
Commonwealth	473, 485, 486, 769	Infant	493, 610–615, 1151
Conciliation and Arbitration	144, 156, 166–172, 183, 473, 769	Malignant Neoplasms	613, 618–623, 1152
High, of Australia	156, 473, 486, 769	Puerperal Causes	619, 620, 623, 1152
Higher (Judges')	476, 479, 481, 1145	Registration of	585
Industrial, Commonwealth	156, 158, 486	Suicide	618–620, 1152
Queensland	158, 179	Tuberculosis	613, 618–621, 1152
South Australia	158, 180	Venereal Diseases	618–620, 1152
International, of Justice	1070	Violence	623
Lower (Magistrates')	473, 480, 1145	Debt, Local Government	664
“Court” Index	144, 168, 169, 171, 178	Public, Commonwealth	797, 809, 1157
Crayfish	961, 968	and State	797, 809, 1157
Crédit Foncier Advances	96, 97	Semi-Governmental Authorities	664
Cremations	498	Short-term	804
Crime, Serious	475, 479, 1145	States	775, 776, 795, 797, 809, 1157
Crops, Acreage (<i>see also</i> Specific Crops)	821–825, 1160	Deceased Persons' Estates	748
Area Fertilized, etc.	878	Decentralization of Manufacturing Industries	201
On Irrigated Areas	291, 300–322	Deeds of Arrangement	485
Production and Value	823	Defence	1013
Crown Lands Acts	84	Expenditure 762–764, 767, 774, 780, 1015	1015
Administration and Classification	84	Forces	184, 185, 1015–1025
Alienation and Occupation	99	Funds Allocated	1015
Areas Leased or Licensed	88, 99	Policy	1014
Settlement and Tenure of	84, 99	Production, Department of	1026
Crustaceans	961, 964, 968	Expenditure	1028
Currants	866, 867	Functions	1026
Currency and Coinage	701, 1154	Programme	1014
Export Controls	327	Research and Development	1029
Customs Area	333	Services, Expenditure 762–764, 767, 774, 780, 1015	1015
Duties 323, 328, 351, 755, 756, 794, 1156	1156	Standards Laboratories	1030
Import Licensing Regulations	325		

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
Degrees Conferred, University	459	E.	
Dehydrated Vegetables	872	Earnings, Average Weekly Wage ..	165, 1132
Dental Clinics, School	494-496	Eastern Countries, Trade with ..	346
Inspection of School Children ..	437, 494	Economic and Social Council, United Nations	1069
Standards, Commonwealth Bureau of ..	508	Events, Diary of Principal	1100
Departmental Reports	1084	Education (<i>see also</i> Schools)	109, 115, 120, 132, 138, 432, 435, 1143
Departments, Commonwealth	81	Adult	460
Finance	762, 764, 768, 1156	Atypical Children	438
Departures, Oversea (<i>see also</i> Migration) ..	572	Australian Capital Territory ..	115, 443
Classes of Emigrants	573	Broadcasts to Schools	273, 432, 439
Nationality	574	Commonwealth Activities	451
Racial Origin	574	Office of	451
Deposits, Cheque-paying Banks	710, 712-715, 1154	Correspondence Schools	439
Insurance Companies	730	Denominational Schools	446
Interest Rates, Banks	717, 726	Examinations and Accrediting ..	437
Savings Banks	720-726, 1155	Expenditure	444, 450, 458, 459, 472, 788, 789, 1144
Special	710, 712-715, 1154	Government Schools	435, 1143
Depreciation, Factories	233	Guidance	438
Design and Inspection Branch	1030	Migrant	462
Designs	1058, 1164	Native Children	438
Determinations, Industrial	158, 177	Parent and Citizen Organizations ..	442
Diabetes Mellitus, Deaths	618-620, 1152	Pre-school	447
Diamond Drills	1010	Provision for Rural Areas	438
Diamonds	1007	Research	438
Diarrhoea and Enteritis, Deaths	613, 614, 618-620, 1152	Rural Areas	439
Diary of Principal Economic Events	1100	Soldier's Children	1042
Diatomite	971, 1006	Teacher Training and Recruitment ..	439
Diphtheria	512, 613, 618-620, 1164	Technical	448
Diplomatic Representatives	1070	Territories	109, 115, 120, 132, 138
Directorate of Contracts	1030	Visual Aids	442
Discharged Soldiers Settlement 9/1, 767, 791, 1167		Educational Associations, Workers' ..	460-462
Discovery of Australia	1	Research, Australian Council for ..	438
Gold	979, 1165	Systems in Australia, Evolution of ..	435, 1164
Diseases, Classification of	617	Effective or Real Wage Rates	163, 200
Contagious and Infectious	509	Temperature	29
Heart	613, 618-620, 623	Egg Boards	937-939
Notifiable	511	Consumption	938, 1053, 1055
Tropical	507, 1165	Marketing	938
Venereal	512, 618-620	Prices	938
Disposals Commission, Commonwealth ..	767, 1164	Production	921, 937
Disputes, Industrial	191, 1134	Pulp and Powder	937, 938
Dissolution, Commonwealth Parliament ..	67, 73	Trade	939, 941, 942
Distances by Sea	384	Eildon Reservoir	276, 289, 304, 305
Distilleries	259	Eire, Assisted Passage Scheme	577, 580
Divorces	481, 590	Elections	65-72, 1127
Docking Facilities, Sydney	693	Electoral Expenditure	82, 768, 770, 1128
Dollar Loans	780, 807, 808	Electric Authority of Queensland, Southern	279
Donkeys	105, 885	Light and Power Supply Corporation	
Drainage	679	Ltd.	269
Dressmaking Establishments	250	Motors	209
Dried Fruits	827, 866, 1054, 1056	Power	263, 265
Marketing	867	Future Developments	266
Vine Fruits	827, 866	Generating Capacity	266
Driest Regions	46	Generation and Distribution	265, 288
Drivers' Licences	404	Production	266, 288
Drought Relief	767	Resources	265
Drowning, Deaths	624	Statistical Summary	287
Drugs, Inspection and Sale	497, 1164	Stations, Central	211
Drunkennes	477	Tramway and Trolley-bus Services ..	398
Dutiable Goods, Imports	351	Electrical Machinery, Cables and Apparatus	235, 244
Duties, Customs	324, 351, 755, 756, 794, 1156	Electricity Authority of New South Wales ..	269
Estate, Commonwealth	755, 758, 1156	Boards, Regional, Queensland	278
Excise	360, 755, 756, 794, 1156	Commission of New South Wales ..	269, 271
Gift	755, 759	Queensland, State	278
Primage	323, 324, 351	Victoria, State	272
Probate and Succession	783-785, 794	Generation	265, 288
Stamp, States	783-785, 794	Supply, State Expenditure	791
Dwellings	627, 643	Revenue	785
Class	644	Value of Production	287
Date of Building	656	Trust of South Australia	282
Inmates	646, 649	Employees, Commonwealth	188, 1134
Material of Outer Walls	647	Local Government	188, 1134
Nature of Occupancy	651	State and Semi-Governmental	188, 1134
Occupied	627, 644, 646	Employment	184, 1134
Rent Weekly	652	Agriculture	881, 883
Rooms	647	Dairying	919
Unoccupied	627, 643, 644	Factories	188, 205, 207, 217, 1135

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Employment—continued.		Exports (see also Individual Commodities)—contd.	
Females (see Female)		Ships' Stores	335, 352
Ferry Services	403	Specie and Bullion	351, 352, 360, 1136
Fisheries	965	Territories	107, 120, 128, 135, 139, 140
Forestry	950, 954	Value	334, 336-355, 1136
Government	188, 1134	External Trade of Australia and other	
Industrial Groups	187	Countries	359
Mining	1001, 1007		
New Buildings	642, 1154		
Occupational Status	571		
Occupied Persons	184, 1134		
Omnibus Services	401, 402		
Postmaster-General's Department	416		
Railways	387, 398		
Returned Soldiers	1041		
Rural	184		
Service, Commonwealth	190		
Tramways	399, 400		
Wage and Salary Earners	184-188, 1134		
Enactments of the Parliament	65, 78		
Endowment Assurance Policies	733-737		
Child	184, 521, 522, 530, 1146, 1147		
Family	184		
Engineering Works	241		
Engines, Aircraft	1027		
In Factories, Horse-power	209		
Marine	1059		
Enrolments, Schools	443, 446, 448, 1144		
Universities	456		
Ensilage	879		
Enteritis, Deaths	613, 618-620, 1152		
Entertainments Tax	755, 759, 783-785, 1156		
Reimbursement	776		
Equipment, Schools	441		
Estate Duty	755, 758, 1156		
Estates of Deceased Persons	748		
Eucalypts	943, 1164		
Eucalyptus Oil	953, 1164		
Evacuees, War-time Arrivals	573		
Evaporation	45		
At the Capital Cities	53-60		
Evolution of Educational Systems in Australia	435, 1164		
Examinations	437		
Exchange Control Regulations	327		
On Oversea Interest Payments, State	391		
Railways	718		
Rates	425		
Exchanges, Telephone	360		
Excise	755, 756, 794, 1156		
Revenue	480		
Executions	63		
Executive Council	63, 75		
Councillors	63		
Governments	727		
Executor Companies	590, 595, 601, 1150		
Ex-nuptial Births	614		
Children, Deaths under One Year of Age	590, 595, 601, 1150		
Confinements	880, 1163		
Experimental Farms	3, 1164		
Exploration of Australia	1027		
Explosives	327, 938		
Export Control	938		
Eggs	1012		
Metals and Minerals	895		
Stud Sheep	327		
Licensing System	355, 1139		
Price Index	358		
Recent Trends			
Exports (see also Individual Commodities).			
Australasian Produce	345, 347, 350, 354, 1138		
Calendar Years	360		
Classification of	333, 340, 345, 348, 1137		
Comparison with other Countries	359		
Countries of Destination	337, 347, 353, 360, 1136		
Industrial Groups	354		
Merchandise	337, 346, 351, 360, 1136		
Method of Recording	333		
Principal Articles	345, 347, 350, 1138		
Prohibition of Specified Items	327		
Proportion of, to Various Countries	338		
		F.	
		Factories	204, 1135
		Butter and Cheese	257, 925, 927, 929-931
		Children Employed	220
		Classification	204, 207
		Decentralization	201
		Depreciation	233
		Development	205
		Employment 188, 205, 207, 211, 221, 238-264, 1134, 1135	
		Sex Distribution	212, 215-221
		Individual Industries	237
		Land, Buildings, Plant and Machinery, Value of	229, 238-264, 1135
		Legislation	220, 1164
		Materials Used, Value of	205, 225, 238-264, 1135
		Munitions	1027
		Power, Fuel and Light Used	224, 238-264, 1135
		Salaries and Wages Paid	205, 221, 238-264
		Value of Output and Production	226-229, 238-264, 1135
		Factory Products, Principal	234
		Statistics, Definitions	203
		Family Size, Endowed Children	532
		Farm Production, Quantum and Price Indices of	1049
		Stocks of Hay	858
		Water Supplies	303, 309, 317
		Farmers, Assistance to	762, 767, 791, 877
		Debt Adjustment	780
		Farming, Bee	939, 1048, 1049
		Mixed	919
		Farms, Experimental	880
		Poultry	937
		Wheat	836
		Farmyard, Dairy and Bee Products	919, 1161
		Production, Value of	920, 1048, 1049
		Fathers' Age, Occupation and Birthplace	601
		Fauna and Flora, Australia	29, 1165
		Northern Territory	104
		Features, Geographical, of Australia	27
		Federal (see Commonwealth).	
		Capital City—Map and Designs for	1164
		Layout	198
		Federated Trade Unions	5, 1164
		Federation of Australia	517
		Feeble-minded, Institutions for	462
		Fellowship, New Education	971, 1007
		Felspar, Production	590, 605
		Female Births and Deaths	184
		Domestics	1134
		Employment	184-187, 212, 215-221, 1134
		Life Expectation	609
		Population	542-547, 559-571, 583, 1148
		Wage and Salary Earners	184-187, 1134
		Rates	160, 172, 173, 182, 1132, 1133
		Ferries	402, 1164
		Fertility and Reproduction	590, 1150
		Of Marriages	595
		Rates	592
		Fertilizers	241, 768, 878
		Subsidies	768
		Film Board, Australian National	463, 1064
		Censorship Board	1063
		Division, News and Information Bureau	1065
		Films, Imports and Exports	1064

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
Finance, Commonwealth ..	753, 793, 1156	Forests ..	943, 1164
Commonwealth and State ..	753, 781, 793, 795, 1157	Australian Capital Territory ..	113
Hospitals, Mental ..	519	Classification ..	945
Public ..	516, 1145	Commercial ..	948
Local Government ..	659, 676-700	Extent of ..	944
Private ..	701, 1154	Fire Protection ..	946
Public ..	753, 1156	Influence on Climate and Rainfall ..	52
State ..	780, 793	Management ..	948
Territories 110, 116, 121, 130, 137, 140, 754, 762, 774, 780		Papua and New Guinea ..	127, 133
Financial Agreement, Commonwealth and States ..	776, 781, 795, 1164	Research ..	948
Assistance to Primary Producers ..	762, 767, 791, 877	Resources ..	948
Soldier Settlers ..	91, 1166	Revenue and Expenditure ..	769
Universities ..	454	Foundries ..	242
University Students ..	454	France, Trade Agreement with ..	328
Crisis ..	1164	Franchise Qualifications, Commonwealth States ..	65
Provisions of the Constitution ..	17, 753, 775, 776	Women ..	69-72
Fire Brigades ..	658, 698	Free and Assisted Passages ..	572, 576
Insurance ..	746	Goods, Imports ..	351
Protection, Forests ..	946	Grants of Crown Lands ..	84, 99
First Offenders ..	478	Kindergartens ..	447
Fish ..	957	Milk for School Children ..	504
By-products ..	963	Passage Agreement ..	576
Consumption ..	962, 1053, 1055	Freehold, Purchases of ..	84, 86, 87, 99
Marketing and Distribution ..	962	Freight, Air ..	412, 415
Oversea Trade ..	968	Railways ..	394, 396
Preserving and Processing ..	258, 959, 962, 967	Rates, Shipping ..	384
Fisheries ..	957	Fremantle Harbour Trust ..	697
Administration ..	958, 1164	Population ..	548
Office, Commonwealth Territories ..	106, 120, 128, 134	Friendly Societies ..	747, 1164
Value of Production ..	966, 1048, 1049	Frosts ..	32
Fishing Areas ..	957	Frozen Meat (<i>see</i> Beef and Mutton).	
Boats and Equipment ..	958, 959, 965	Fruit ..	867
Industry ..	964	Consumption ..	1054, 1056
Fitness, National ..	513	Gardens, Area ..	821, 823-825, 867
Flats, New Building ..	639-642, 1153	Industry, Sugar Concession Committee ..	864
Flax ..	874	Marketing ..	871
Fleeces Shorn, Average Weights ..	901	Preserved ..	236, 255, 869, 870
Fleet Air Arm ..	1018	Principal Crops ..	869
Flood Control Districts ..	300, 302	Production and Trade ..	828, 867
Flora, Australia ..	29, 1164	Varieties ..	868
Northern Territory ..	104	Fuel Oil Consumption, Factories ..	224, 225
Flour Consumption ..	1054, 1056	Railways ..	397
Exports ..	345, 347, 350, 835, 840	Imports ..	346, 350
Milling ..	252	Fund, Consolidated Revenue, Commonwealth States ..	753, 793, 1156
Production ..	235, 252	National Welfare ..	781, 793
Stocks ..	847	Funeral Benefits ..	762, 771
Tax ..	755, 759	Furniture Factories ..	522, 526
Flying Accidents ..	415, 624		261
Doctor Service ..	514	G.	
Fodder, Green ..	823-825, 828, 858	Goals ..	436, 1145
Fogs, Capital Cities ..	53-60	Gardens, Fruit ..	821, 823-825, 867
Food and Drugs, Inspection and Sale ..	497, 1164	Gas, Natural ..	1003
Groceries Group ..	146, 1129, 1130	Works ..	264
Retail Price Index Numbers ..	148, 149, 151, 200, 1129, 1130	Gastro-enteritis, Deaths ..	613, 618-620, 1152
Control, 1939-45 War ..	1164	Gauge, Railways ..	108, 385-387, 1166, 1167
Foodstuffs and Beverages, Consumption ..	1052	Standardization ..	108, 386, 1166, 1167
Forces, Armed ..	1015-1025	Tramways ..	398
Police ..	486	Geelong Harbor Trust ..	695
Foreign Representatives ..	1072	Population ..	548
Forest Conferences ..	949	Waterworks and Sewerage Trust ..	684
Plantations ..	113, 946	Gems ..	1007
Products, Research ..	949	General Agreement on Tariffs and Trade ..	328, 331
Trade in ..	955	Assembly, The United Nations ..	1069
Reservations ..	85, 945, 949	Banking Division, Commonwealth Bank ..	708
Forestry ..	943, 1164	Government ..	61, 1127
And Timber Bureau ..	947	Insurance ..	746
Commonwealth Activities ..	947	Tariff ..	324
Education ..	947	Trade ..	334, 1136
Employment ..	950, 954	Generating Capacity, Electric Power States and Territories ..	266
Production ..	113, 127, 133, 950, 1048, 1049	Generation, Electricity ..	265, 288
Value of ..	1048, 1049	Geographical Features of Australia ..	27
School, Australian ..	947	Position of Australia ..	25
State Departments ..	949	Geology of Australia ..	29, 1164
		German Migration ..	574, 579, 580
		Gift Duty ..	755, 759
		Glacial Action in Australia, Past ..	1165

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Gliding Clubs	410	Harbour Boards and Trusts ..	658, 693
Glycerine, Net Exports	918	Bridge, Sydney	670
Goats in Australia	885	Services, State Expenditure ..	788, 789, 791
Territories	105, 124	Revenue	785, 786
Gold	979	Harbours (<i>see also</i> Ports)	658, 693
Discovery	1165	Hardboard, Production	952
Imports and Exports 127, 129, 134, 136, 336, 352	352	Hardwoods	943-945, 950, 955, 956
Mining Employment	982, 1008	Harts Range Mica Fields	106
Leases	90	"Harvester" Judgment	166
Minted	702	Havana Charter	328
Prices	703	Hay	857
Production 971-975, 979, 1161, 1162	1162	Area and Average Yield	823-826, 857
Refinery	981	Imports and Exports	858
Territories	106, 127, 134	Production	826, 827, 857
Receipts and Issues	702	Stocks on Farms	858
Reserve against Note Issue	703	Value of Crop	858
Sources of Production	980	Health	489, 1145
Tax	755, 761, 982	And Medical Research Council, National ..	504, 1053
World Production	982	Benefits, National	498, 522, 1146
Goldfields Water Supply, Western Australia 318, 692	692	Centres, Baby	494
Goods Receipts, Railways	389, 395, 396	Department of, Commonwealth ..	498, 505-
Tonnage Carried, Railways	387, 388, 392, 395, 396	Expenditure	769, 770, 788, 789, 1146, 1147
Traffic, Railways	393, 395	Laboratories, Commonwealth	505
Government Assistance (<i>see also</i> Subsidies).		Public	489, 1145
Mining	791, 1010	School of, and Tropical Medicine ..	507
Primary Producers 762, 767, 791, 877	877	Royal Commission	504
Soldier Settlement	91, 1166	School Children	494
Commonwealth	61, 65, 73, 1128	Services to Schools	437, 494
Employees	188, 1134	Territories	126, 132, 138
Executive	63	Heard Island	24, 140
General	61, 1127	Heart, Organic Diseases, Deaths ..	613, 618-620, 623, 1152
Local	657	Heights of Cities above Mean Sea Level ..	53-60
Omnibuses	401	Herds, Dairy	923
Parliamentary, Cost of 81, 768, 770, 1128	1128	Hides and Skins, Trade	345, 350, 914, 918
Scheme of	61, 1127	Used in Tanneries	249
Pension Schemes	751	High Commissioners	332, 768, 1071, 1072
Railways	384	Court of Australia	156, 473, 486, 769
Schools, Administration	435	Schools	436
Enrolments	443, 1144	Higher Courts	476, 479, 481, 1145
Expenditure	444, 450, 1144	Highways (<i>see also</i> Roads)	667
Statistics	442	Fund, South Australia	673
Teachers	439, 442, 1144	Hives, Bee	939
Governor-General's Establishment, Expenditure ..	82, 768, 770	Hobart, Climatological Data	48, 60, 1127
Powers and Functions	62	Marine Board	697
Governors-General	61-63, 73	Population	548
Governors, State	62, 76-78, 1127	Public Library	464, 467
Grafton-South Brisbane Railway	386	Water Supply and Sewerage	692
Grain Carried on Railways	395	Holdings, Pastoral, Carrying Capacity ..	885
Elevators	842	Rural, Carrying Dairy Cattle	925
Mills	252	Number and Area	880
Grants Commission, Commonwealth	776	Tractors on	880
For Road Construction	667	Territories	107, 114, 126, 132, 137
Free, of Crown Lands	84, 99-102	Homes, Benevolent	536
State	455, 516, 519, 667, 762, 775, 780-782, 787, 1156	War Service	635, 767, 774, 780
Grapes	826, 827, 864	Homicide	618-620, 624, 1152
Graphs and Maps (<i>see</i> List on page ix).		Honey	939-941, 1054, 1055
Grasses and Salt Bushes of Australia	1165	Hoofs, Net Exports	918
Artificially Sown	822	Hops	259, 823-828, 874
Gratuities, War	767, 1026	Horns, Net Exports	918
Great Artesian Basin	293, 303, 310, 317	Horse-power of Engines	209
Greece, Trade Agreement with	328	Horses	885, 889, 918, 1160
Greek Migration	574, 579, 580	Imports and Exports	889, 918
Green Fodder	823-825, 828, 858	In Territories	105, 115, 889, 1160
Ground Water	292, 294	Hosiery Mills	248
Guidance, Educational	438	Hospital Benefits	498, 521, 522, 1146
Gums and Resins	953	Hospitals, Leper	517
Gypsum, Production	971, 1005	Mental	517
		Public	515, 1145
		Finances	516, 1146
		Patients Treated	515, 516, 1145
		Staff	515, 516, 1145
		Hourly Wage Rates, Nominal	161
		Hours of Labour	158
		Standard, Inquiry	169
		House of Representatives, Commonwealth ..	66
		Rents	1129, 1130

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE
Houses, Imported	630
New	637, 641, 642, 1143
Tenanted, Private, Weekly Rent	652
Housing	627, 1153
Agreement, Commonwealth and States	628
Assistance to Government	627
Census (<i>see</i> Dwellings)	627
Division, Commonwealth	1164
Loans, Commonwealth Bank (<i>see also</i> Loans)	709
Of Population	627
State Expenditure	791
Humane Society, Royal	539
Hume Reservoir	289, 295, 299, 304
Humidity	32
At the Capital Cities	53-60
Hungarian Migration	579, 580
Hunter District Water Board	294, 679
Hydro-Electric Commission, Tasmania	285, 320
Hydro-electric Power	265-287, 297, 320
Project, Burdekin River	280
Kiewa	277
Snowy Mountains	266, 297, 1166
Tully Falls	280, 281
Hydrology of Australia	28, 1165
Hygiene, Veterinary	510
I.	
Illegitimacy (<i>see</i> Ex-nuptial Births)	567
Immaturity, Deaths	613, 614, 618-620, 1152
Immigrant Population	567
Immigrants (<i>see also</i> Migrants, Migration).	574, 576-582
Nationality	567
Period of Residence	574
Racial Origin	574
Immigration	571, 576-582
Expenditure	769, 771, 780
Free and Assisted Passages	572, 576
Passports	581
Regulation	580
Imperial Economic Conference	329
Preference, Trade	328
Implement Factories	246
Import Licensing Regulations	325
Imports (<i>see also</i> Individual Commodities).	360
Calendar Years	334, 340
Classification	359
Comparison with other Countries	337, 346, 353, 360, 1136
Country of Origin	351
Dutiable and Free Goods	878
Fertilizers	360
Home Consumption	337, 346, 351, 360, 1136
Merchandise	333
Method of Recording	340-347, 349
Principal Articles	340, 346
Products of Various Countries	326
Prohibited Items	338
Proportions of from Various Countries	351, 352, 360, 1136
Specie and Bullion	107, 120, 128, 135, 140
Territories	334, 336-353, 1136
Value	86
Improvement Purchases, Land, New South Wales	810
Income Tax, Assessable Income	815
Assessment	812
Formulae	817
Collections	755, 794, 810, 1156
Commonwealth	815
Company	811
Concessional Deductions	815
Deduction from Wages and Salaries	812
Effective Exemptions	819
Grades of Income	815
Lodgment of Returns	813
On Specified Incomes	812
Rates	775, 777, 781, 782, 787
Reimbursements	819
Residents	755, 810-820
Social Services Contribution	781, 783-785
State	781, 784, 810
Uniform	810

	PAGE
Indebtedness Per Head, Commonwealth	798
States	798, 800
Indexes, Retail Price (see "Retail Price Indexes")	798, 800
Index Numbers—	165
Average Weekly Wage Earnings	200
Comparative	355, 1139
Export Prices	163
Hours of Labour	1049
Production	147, 150, 200, 1130
Retail Price—	147, 148, 1128
" C " Series	152
Interim	164, 200
International Comparisons	159-162, 200, 1132
Wage Rates—	154, 1131
Effective or Real	155
Nominal	156, 166-182
Wholesale Price—	196
Basic Materials and Foodstuffs	730, 1155
Melbourne	158, 166
Industrial Arbitration Acts	180
Associations	158, 177
Assurance, Life	156-158, 486
Awards and Determinations	158, 179
Code, South Australia	158, 180
Commission, New South Wales	158, 180
Court, Commonwealth	202
Queensland	191, 1134
South Australia	193
Development, Division of	192
Disputes	191
Causes of	195
Duration	194
In Industrial Groups	191, 1134
Methods of Settlement	191, 1134
Results	191, 1134
Wages Lost	709-711
Workers Involved	156, 166-182, 196, 1165
Working Days Lost	470
Finance, Commonwealth Bank	538
Legislation	158, 177-182
Libraries	353
Schools	237
Tribunals, State	325
Unions (<i>see</i> Trade Unions).	569
Industries, Exports According to	1151
Manufacturing, Individual	493, 610-615, 1151
Preservation	493
Industry of Population	493, 610-615, 1151, 1165
Infant Deaths	509
Life, Supervision and Care of	613, 618-620, 1152
Mortality Rates	618-620, 1152
Infectious and Contagious Diseases, Control	1165
Infective Diseases, Deaths	518, 519
Influenza, Deaths	485, 1145
Epidemic of 1918-19	497, 1164
Insanity, Deaths	437, 494
Insolvencies	508
Inspection, Food and Drugs	536
Medical and Dental, School Children	517
Institute of Anatomy, Australian	723, 1155
Institutions, Charitable	746
For the Feeble-minded	730, 1155
Instruction, Public (<i>see</i> Education).	730, 1155
Insurance	754, 762
Fire, Marine and General	797-802, 1158
Life	660-665
Interest, Commonwealth Revenue from	797-802, 1158
Debt	1158
Local Government Debt	391
On Commonwealth and State Debts	717, 726
Railway Loan Expenditure	797-802
Rates, Bank Deposits	797-802
On Public Debts	775, 796, 798-802
State Debts	391
Railways, Exchange on Oversea	781, 782, 787
Payments of	797-799, 802
Revenue from	578, 579
War Loans	578, 579
Inter-Governmental Committee for European Migration	578, 579

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Interim Retail Price Index ..	144, 1128	Lady Gowrie Child Centres ..	513
Comparison, "C" ..	145, 147	Lakes of Australia ..	29, 1165
Series Index ..	324	Lamb (see Mutton and Lamb).	
Intermediate Tariff ..	324	Land and Buildings, Factories ..	229, 238-264, 1135
International Bank for Reconstruction and Development, Loans ..	780, 807	Irrigated ..	291, 300-322
Civil Aviation Organization ..	409	Legislation ..	84
Court of Justice ..	1070	Revenue, State ..	781, 782-785, 787
Labour Conference ..	199	Settlement, Returned Soldiers ..	84, 91, 767, 791, 1166
Organization ..	199	Territories ..	107, 114, 126, 132, 137
Payments ..	767	Tax, Commonwealth ..	755, 758, 1156
Balance of ..	362, 1139	States ..	783-785
Radio Traffic ..	427	Tenure and Settlement ..	84, 1165, 1166
Refugee Organization ..	578	Landing Grounds ..	411, 415
Sugar Agreement ..	862	Lands and Survey Department, Victoria, ..	
Tariff Negotiations ..	327	Advances ..	96
Telegrams ..	427	Department of, New South Wales, Advances to Settlers ..	95
Trade Organization ..	328	Lard ..	235, 256, 917, 941, 1053, 1055
Wheat Agreement ..	836	Launceston Marine Board ..	697
Interstate Commission ..	1165	Population ..	548
Communication by Railway ..	384	Lead ..	971-975, 983, 1009, 1010, 1161, 1162
Exchange Rates ..	719	Exports ..	345, 350, 985, 1009, 1010
Shipping ..	372	Local Extraction of ..	983
Trade ..	361	Mine Production in Principal Countries ..	986
Trade Unions ..	198	Mining ..	983
Intoxicants, Consumption ..	478	Prices ..	986
Intoxication, Convictions ..	477, 1145	Production and Sales ..	983, 985, 1161, 1162
Invalid Pensions ..	521-525, 1146, 1147	Sources of Production ..	984
Investment Societies ..	727	League of Nations, The ..	1068, 1165
Iron and Steel Production ..	235, 241, 992, 1161	Leases and Licences, Under Land Acts ..	84, 88, 99-102
Mining, History of ..	1165	Under Mining Acts ..	90, 99-102
Ore ..	971-973, 991	Leather, Exports ..	345, 347
Ironworks, Smelting, etc. ..	241	Marketing ..	916
Irrigation ..	291, 300-322, 785-789, 791	Production ..	235, 249
Areas ..	291, 300-322	Lecturers, University ..	456
Districts ..	300-302, 306, 318	Legal Tender ..	701, 703
Production Advisory Committee ..	294	Legislation Affecting Oversea Trade ..	323
Research and Extension Committee ..	292	Age Pensions ..	521
Trusts ..	300, 302-306, 315, 316	Banking ..	327, 704, 707
Issue of Deceased Married Persons ..	625	Bankruptcy ..	485
Mothers ..	601	Commonwealth ..	78
Italian Migration ..	574, 578, 580	Scientific and Industrial Research ..	1060
	J.	Organization ..	1057, 1058
Jam, Consumption ..	1054, 1056	Copyright and Trade Marks ..	1020, 1164
Factories ..	235, 255, 861	Defence ..	78
Jams and Jellies, Exports ..	870	During 1955 ..	327
Production ..	235, 255, 869	Exchange Control ..	220, 1164
Japanese Occupation of Territories ..	121, 131, 137	Factory ..	489
Jervis Bay ..	5, 114	Health ..	580
Joint Coal Board ..	1002	Immigration ..	156, 166-182, 196, 1165
Organization, Wool ..	903	Industrial ..	521
Judges' Courts ..	476, 479, 481, 1145	Invalid Pensions ..	84
Judicature, Commonwealth ..	16, 486	Land ..	730, 1165
Judicial Separations ..	482	Life Assurance ..	1010-1012
Justice, Expenditure ..	488, 769, 788, 789	Mining ..	582
International Court of Public ..	1070	Naturalization ..	155
	473, 1145	Prices, State ..	384
	K.	Shipping ..	103, 119, 121, 125, 131, 137, 141
Keeling Islands ..	24, 141	Territories ..	1034, 1035
Kiewa Hydro-electric Project ..	277	War Pensions ..	830
Kindergarten of the Air ..	432, 439, 448	Wheat Industry ..	521
Unions ..	448	Widows' Pensions ..	64, 68-72
Kindergartens ..	436, 437	Legislative Assemblies ..	69-72
Knitting Mills ..	248	Councils ..	596
Korean Campaign, Australian Participation ..	1016, 1022, 1024	Legitimations, Births ..	282
	L.	Leigh Creek ..	868, 869
Laboratories, Aeronautical Research ..	1029	Lemons ..	492, 512, 517
Commonwealth, Acoustic ..	506	Leprosy ..	424, 428
Health ..	505	Letter Telegrams ..	424
Serum ..	505	Lettergrams ..	748
X-ray and Radium ..	506	Letters of Administration ..	420
Defence Standards ..	1030	Posted ..	866, 867
Labour, Hours of ..	158	Lexias ..	710, 712-715, 1154
Laws Relating to Conditions of Native, Papua ..	1165	Liabilities, Banks ..	742, 743
Organizations ..	196, 1135	Insurance Companies ..	727-729
Wages and Prices ..	143, 1128	Registered Companies ..	

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
Libraries	462	Magnesite Production	971, 1006
Children's and School	469	Mail, Air	412, 415, 421
Special	470	Contractors	416
University	467	Cost of Carriage	421
Library Association of Australia	462	Dealt with	420
Licences—		Main Roads Commission, Queensland	672
Air	411	Department, New South Wales	668-670
Export	327	Development Act	775
Import	325	Maize	
Mining	84, 90, 99-102	Area	821, 823-828, 847
Motor	404	Exports	848
Television Stations	429, 434	Price of	848
Viewers	1143	Production	826, 827, 847, 849
Under Land Acts	84, 88, 99-102	Value of Crop	848
Wheat	830	World Production	849
Wireless	434, 1143	Malaria	
Life Assurance	730, 1155	Deaths	618-620, 1152
Legislation	730, 1165	Malaya, Australian Forces in	1015, 1022, 1024
Expectation	609	Male Births and Deaths	590, 605, 1150, 1151
Tables	609	Employment in Agriculture	883
Lifesaving Societies	539	Factories	212, 215-221
Light, Power, etc., Used in Factories	224, 238-264, 1135	Total	184, 1134
Lighthouses	383, 1165	Life Expectation	609
Lightning at Capital Cities	53-60	Population	542-547, 559-571, 583, 1148
Lignite (see Brown Coal).		Wage and Salary Earners	184, 1134
Limestone, Production	971, 1005	Rates	158, 172, 182
Linnean Society of New South Wales	472	Malformations, Congenital, Deaths	613, 618-620, 623, 1152
Linseed	875	Malignant Neoplasms, Deaths	613, 618-623, 1152
Liquor Revenue	783-785, 794	Age at Death	622
Livestock Carried on Railways	395	Seat of Disease	621
In Australia	885, 1160	Type of Disease	621
Minor Classes	885	Malt, Imports and Exports	
Territories	105, 115, 124	Production	852
Living, Cost of (see Prices).		Used in Breweries and Distilleries	259
Loan Council, Australian	795	Maltese Migration	577, 580
Expenditure, Commonwealth	780, 794	Malting Barley	852
Local Authorities	663	Mandarins	868, 869
Railways	774, 780, 791	Mandates	23, 24, 130, 137
Roads and Bridges	679	Manganese Ore	971, 972, 995
States	791, 794	Manufactures Encouragement Act	1165
Funds, Commonwealth	780, 1159	Manufacturing Industry (see Factories).	
States	790	Manures (see Fertilizers).	
Raisions	790, 796, 805, 1159	Maps and Graphs (see List on page ix).	
Transactions, Summary	808	Margarine, Consumption	1053, 1055
Loans, Banks	709, 710, 712-717	Margins, Wage	183
Building Societies	727	Marine and Fresh Water Fisheries of Australia	
Commonwealth	780, 805, 1159	Boards, Tasmania	1165
Conversion and Redemption	806, 1159	Casualties	697
Flotation	790, 796, 805, 1159	Insurance	384
Insurance Companies	745	Maritime Industry Commission	746
International Bank for Reconstruction and Development	807	Services Board of New South Wales	369
Local Government	663, 665-667	Marketing Agreements—	
London Conversions	807	Apples and Pears	871
State	790	Australian Commodities, Legislation	1165
To Settlers	94	Canned Fruit	871
Under Re-establishment and Employment Act	767	Dairy Products	932
Local Government Authorities	657, 658	Dried Vine Fruits	867
Business Undertakings	661	Hides and Skins	916
Employees	188, 1134	Meat	888
Finance	659, 676-700	Tallow	918
Jurisdiction	657	Wheat	835
Telephone Calls	426	Wool	903, 904
Locks and Weirs	295-297, 299, 305-307	Marriage, Marriages	586, 1148
Lockyer Valley Irrigation Area	312	Ages and Conjugal Condition of Persons	
Lodges (see Friendly Societies).		Marrying	587, 1149
London Conversion Loans	807	Birthplaces of Persons Marrying	589
Long Range Weapons Project	1029	Duration and Issue	601
Lord Howe Island	4	Fertility	590
Lotteries, State	749, 783-785	In Denominations	589, 1149
Lower Courts	473, 480, 1145	Interval between and First Birth	603
		Occupation and Age of Bridegrooms	589
		Rates	586, 1149
		Registration of	585
		Masculinity, Births	595, 1150
		Employees in Factories	219
		Pensioners	525
		Population	545, 559, 1165
		Matches, Excise Revenue	756
		Quantity on which Excise paid	361

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
Materials used in Factories, Value of	205, 223, 238-264, 1135	Migration— <i>continued.</i>	
Maternity Allowances .. 494, 529, 1146,	1147	Displaced Persons Scheme ..	578, 580
Maturity of Loans, Commonwealth ..	803	Eire ..	577, 580
States	803	Empire and Allied Ex-Servicemen ..	578, 580
Mawson Research Station	140	Free and Assisted Passages ..	572, 576
Means Test, Pensions	523, 532	German Agreement ..	574, 578, 580
Unemployment and Sickness Benefits ..	534	Greek Agreement ..	574, 579, 580
Measles, Deaths	618-620, 1152	Italian Agreement ..	574, 578, 580
Measures, Agricultural	825	Maltese Agreement ..	577, 580
Meat Agreement with United Kingdom ..	888	Netherlands Agreement ..	554, 556, 572
Board, Australian	888	Oversea	554, 571
Consumption 887, 892, 896, 935, 936,	1053, 1055	Passports	581
Exports 345, 347, 350, 888, 893, 897, 918,	941, 942	Regulation of	580
Marketing	888	Variations in	554
Preserving Works	258	Mildura Irrigation Trust	304, 306
Production 892, 896, 935, 936, 1160,	1161	Mileage of Motor Omnibus Services ..	401, 402
Medical Inspection of School Children ..	494	Railways	386, 388
Research Council, National Health and ..	504, 1053	Roads	668, 670, 672-678
Service, Northern Territory	492	Telegraph and Telephone Lines ..	424
Pensioner	501, 522	Tramways	398-400
Services, Aerial	108, 574	Military (see also Australian Military Forces)—	
Treatment of Returned Soldiers ..	1041	Board	1021
Medicine, School of Public Health and ..	507, 1165	College, Royal	1023
Tropical	507, 1165	Defence	1020
Melbourne and Metropolitan Board of Works	682	Expenditure	764, 1015
Climatological Data	48, 59, 1127	Occupation of New Guinea ..	121, 130
Harbour Trust	695	Milk	920, 921, 923, 927-929, 1161
Population	548, 550	Condensed, Concentrated and Powdered ..	236, 257, 921, 927-929, 937, 1053, 1055
Public Library	464, 465	Consumption	1053, 1055
Sewerage and Drainage	683	Factories	257, 925, 927, 929
University	452-459, 467	Free, for School Children	504
Water Supply	682	Imports and Exports 345, 347, 350, 934, 941,	942
Wholesale Price Index	154	Production 236, 257, 920, 927-929, 1161	925
Members of Cabinets	75, 1128	Subsidies	925
Friendly Societies	748	Supervision of Supply	497, 920
Parliament	65, 1127	Utilization	928
Pensions	72, 752	Millet	318, 823, 824, 826
Trade Unions	196	Millinery Establishments	250
Meningitis	512, 613, 618-620, 1152	Mills, Cotton	247
Mental Hospitals	517	Flour	252
Finances	519	Hosiery and Knitting	248
Patients in	517-520	Pulp and Paper	951
Hygiene, Victoria	490	Saw	261, 950, 954
Institution Benefits	519, 522	Sugar	253
Menzies Ministry	75	Woolen and Tweed	247
Merchandise Trade	337, 346, 351, 360, 1136	Mineragraphic Investigations	1011
Merchant Shipping	369	Mineral Industry	969, 1161
Vessel Construction	382, 1060	Oil	107, 128, 134, 1003
Metal Extraction Works	243	Leases and Licences 90, 107, 128, 134	1161
Metals, Non-ferrous	243	Production 105, 127, 134, 139, 971, 1161	1010, 1012
Meteorological Divisions, etc.	29	Resources, Bureau of	994
Meteorology of Australia	29, 1127, 1165	Sands	969
Metropolitan Fire Brigades Board, Victoria	698	Wealth of Australia	395
Populations	659	Minerals carried on Railways	4012
Public Libraries	464	Radio-active	1008
Sewage Farm, Victoria	683	Mining Accidents	791, 1010
Water, Sewerage and Drainage Board, ..	679	Aid to	1008
Sydney	105, 971, 1012	Deaths	1001, 1007, 1134
Mica	470	Employment	976
Microfilms	462	Industrial Census	90, 99-102
Migrant Education	571, 576-582	Leases and Licences	971, 1048, 1049, 1161
Age Distribution	575	Production	105, 127, 134, 139
Conjugal Condition	575	Territories	64
Extent of Journey	573	Ministers, Appointment of	63, 75
Nationality	574, 576-582	Commonwealth	65
Naturalization	582	Number in each House and Salaries ..	1071, 1072
Occupation	576	Pleni-potentiary	76, 1128
Period of Residence	567	State	63, 74-78, 1128
Racial Origin	574	Ministries, Commonwealth and State ..	701, 702
Migration	571, 576-582	Mints	139
Agreements	576-580	Missions, Nauru	132
Aliens	580	New Guinea	126
Austrian Agreement	574, 579, 580	Papua	464, 465
Child Migration	577	Mitchell Library	919
		Mixed Farming	254
		Molasses	254

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
Molluscs	961, 964, 968	Nations, League of	1068, 1165
Monetary and Banking Systems, Royal Commission	705	The United	1068
Money Orders	421, 761	Native Children, Education of	109, 438
Morgan-Whyalla Water Supply Scheme	317, 690	Labour and Taxation, Papua	125
Mortality (<i>see also</i> Deaths)	605, 1151, 1165	Medical Practitioners' School	126
Infant	493, 610-615, 1151	Welfare, Northern Territory	110
Mortgage Bank Department, Commonwealth Bank	709-711	Natives, New Guinea	131
Bank	601, 602, 604	Papua	125
Mothers, Ages	601	Natural Increase of Population	551
Birthplaces	601	Oil	1003
Duration of Marriage	601	Naturalization	582
Issue	601	Nauru	24, 137
Motor Bodies, Imports	245, 340, 350	Administration	138
Production	245	Area, Climate, etc.	24, 137
Cycles	404, 405, 1142	Education	138
Licences	404	Finance	140
Omnibuses	400, 785-789, 791	Health	138
Passenger Services	400	History	137
Registration	403, 1142	Japanese Occupation	137
Taxation	404, 783-785, 794	Judiciary	139
Tyres	237	Phosphate Deposits	139
Vehicles	245, 403, 1142	Population and Dwellings	138, 583
Accidents, Deaths	406, 624, 1142	Religion	139
Drivers' and Riders' Licences	404, 1142	Trade	140
Registration	403-405, 1142	Trusteeship	138
Survey	405	Naval (<i>see also</i> Royal Australian Navy).	1018
World Registrations	405	Aviation	1017
Vessels	383	Board	1018
Works	245	College	1017, 1165
Mount Stromlo Observatory	1062	Defence	764, 1015
Mountain Systems of Australia	28, 1165	Expenditure	764, 1015
Mules	885	Navigation and Shipping Legislation	494, 538
Northern Territory	105	Neglected Children	613, 618-623, 1152
Multiple Births	590, 596, 601, 1150	Neoplasms, Deaths	618-623
Municipal Omnibuses	401	Malignant, Deaths	618-623
Tramway and Trolley-bus Services	398	Nephritis, Deaths	618-620, 1152
Trust, South Australia	283	Netherlands Migration	578, 580
Municipalities	659	New Building	636, 1153
Debt	664	New Education Fellowship	462
Finance	659	New England University	452, 455-459, 467
Munitions	1026	New Guinea (<i>see also</i> Papua and New Guinea)	23, 26, 121, 131, 1165
Expenditure	764, 1028	Administration	131
Factories	1027	Agriculture	123, 124
Production	1026	Air Services	136, 415
Murray Irrigation Areas	299, 301, 305, 306, 315	Area, Climate, etc.	23, 26, 130
River Artesian Basin	293, 309, 317	British (<i>see</i> Papua).	136
Waters Conference	1165	Communication	134
Murrumbidgee Irrigation Areas	299-301	Customs Tariff	132
Museums, Public	470	Education	121, 137, 774
Music	432	Finance	134
Broadcasting and Television	432	Fisheries	130
Conservatorium of	456	Government	132
Mutton and Lamb, Consumption	896, 1053, 1055	Health of Natives	132
Exports	897, 918	Land Tenure	23, 137
Imports into United Kingdom	898	Mandate	121, 130
Production	896, 1160	Military Occupation	134
		Mining	132
		Missions	131
		Natives	131, 583
		Population and Dwellings	323, 324
		Preference	133
		Production	132
		Research Work	136
		Shipping	133, 136
		Timber	134
		Trade	121, 131
		Trusteeship	322
		Water Resources	296
		New South Wales-Queensland Border Rivers Agreement	296
		New South Wales University of Technology	452, 453, 455-459, 467
		New York Redemption Loans	807
		New Zealand Preference	323, 324, 327
		Separation of	3, 4
		Shipping at Principal Australian Ports	376
		Newcastle, Population	548
		Port Facilities	694
		Water Supply, Sewerage and Drainage	679-681
		News and Information Bureau, Film Division	1065
		Broadcasts	433

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Newspaper Works	262	Nutrient Intake, Level of	1056
Newspapers, etc., Posted	420	Nutrients available for Consumption	1057
Nominal and Effective (Real) Wage Rates	<i>163,</i> 200, 1132	Nuts	<i>368, 869, 1054, 1056</i>
Nominated Immigrants	572, 576		
Non-European Races, Conditions of Immigration	581	O.	
In Australia	103, 566-568	Oatmeal	847
Northern Territory	103	Oats	821, 823-828, 846
Non-ferrous Metals	243	Area	821, 823-825, 846
Non-Government Schools	445	Imports and Exports	847
Non-official Post Offices	416	Prices	846
Norfolk Island	23, 119	Production	826, 827, 846, 847
Administration	119	Value of Crop	828, 847
Area, Climate, etc.	23, 119	World Production	847
Communication	120	Observatory, Mount Stromlo	769, 1062
Economic Activity	119	Occupation of Bridegrooms	99
Finance	<i>121, 774</i>	of Crown Lands	601
Government Instrumentalities	120	Population	184, 571
Population	119, 583	Survey	184
Primary Industries	119	Occupational Status of Population	571
Social Condition	120	Occupied Persons	184, 1134
Tourists	120	Private Dwellings	627, 644, 646
Trade	120	Ocean Island Phosphate Industry	139
Transfer to the Commonwealth	23, 119	Offenders, First	478
North Australia Development Committee	963	Habitual	480
Survey	1010	Officer Cadet School	1023
Northern Territory	5, 103, 1165	Official Publications	1082
Aboriginals	<i>103, 583</i>	Oil, Coal	1002
Administration and Legislation	103	Eucalyptus	953
Advances to Settlers	98	Imports	346, 350
Agriculture	104	Mineral	107, 128, 134, 1003
Air Services	108	Mining Leases and Licences	90, 107, 128, 134
Area, etc.	5, 25, 27, 103	Natural	1003
Artesian Water	321	Railways, Consumption	297
Asians	103	Search for	107, 128, 134, 1003
Climate	104	Omnibuses, Motor	400, 785-789, 791
Communications	107	Consumption	823-828, 855
Diseases Notifiable	512	Imports and Exports	857
Dwellings	630, 644	Value of Crop	855
Education	109, 438	Opals	1007
Electricity Supply	287	Opposition, Leaders of the	78, 1128
Fauna and Flora	104	Oranges	868, 869
Finance	110, 762, 774	Orchards (<i>see</i> Fruit-gardens).	
Fisheries	106	In Irrigated Areas	291, 300-322
Land Tenure	86, 89, 90, 93, 94, 98, 102, 106	Order of St. John, The	539
Library Service	463	Ordinance Production	1026
Livestock	105	Ore Reduction Works	241
Medical Service	492	Ore-dressing Investigations	1011
Mining	90, 105, 107	Ores, Metallic Contents	983, 984, 989, 993
Native Education	109	Organizations in Schools, Parent and Citizen	442
Welfare	110	Labour	196, 1135
Pastoral Industry	105	Orography of Australia	27, 1165
Physiography	104	Orphanages	538
Police and Prisons	487	Ottawa Conference Agreement	327, 329, 330, 1165
Population	<i>103, 542-556, 559, 1148</i>	Output of Factories	226, 234, 237-264, 1135
Postal Services	109	Outside Packages	335
Production	104	Outworkers	211, 215
Railways	<i>108, 761, 773</i>	Oversea Air Services	409, 412
Roads	108	Cable and Radio Communication	427
School of the Air	109	Exchange Rates	718
Schools	109	Regulations	327
Shipping	108	Migration (<i>see</i> Migrants, Migration)	
Trade	107	Representatives	1070
Training of Apprentices	110	Shipping (<i>see also</i> Shipping)	370, 373
Transfer to the Commonwealth	5, 103	Itinerary on Australian Coast	373
Uranium Deposits	106, 1012	Telephone Services	426
Water Resources	321	Trade (<i>see</i> Trade)	
Note Issue, Australian	701, 703, 708, 711, 1154	Overseas Broadcasting Service	433
Notes, Postal	421, 761	Telecommunications Commission	427
Notifiable Diseases	511	Oxide, Iron	991, 992
Nuptial Births	590, 601-603, 1150	Oysters	<i>961, 965, 968</i>
Nursing Activities	494		
Associations, Bush	494, 495	P.	
		Pacific Islanders in Australia	1166
		Packages, Outside	335
		Packets, etc., Posted	420

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Paper and Wood Pulp	951	Payments, Balance of	362, 1139
Paper-making	262	Pay-roll Tax	186, 755, 758
Papua (<i>see also</i> Papua and New Guinea)	23, 26,	Peaches	868-871
Administration	121, 125	Peanuts	823, 824, 826, 876, 1054, 1056
Agriculture	121, 125	Pearl Barley, Consumption	1054, 1056
Air Services	123, 124	Exports	852
Area	130, 475	Pearls, Pearl-shell	961, 963
Customs Tariff	23, 26, 125	Exports	968
Finance	121, 130, 774	Fisheries	106, 961, 963-965, 968
Forestry	127	Territories	106
Health	126	Pears	868-871
Land Tenure	126	Marketing	871
Military Control	127	Peas	871
Mining	125	Pension and Superannuation Schemes, Government and Semi-Governmental	751
Native Labour and Taxation	125	Pensioner Medical Service	501, 522
Plantations	123	Pensioners, Age and Invalid	521, 525, 1147
Population	125, 583	War and Service	1034, 1039
Preference	323, 324	Pensioners' Concessions, Wireless Licences	434
Production	127	Pensions, Aborigines	523
Trade and Shipping	128-130	Age and Invalid	521-525, 1146, 1147
Transfer to the Commonwealth	23, 125	Blind Persons	523
Water Power	128, 322	Members of Parliament	72, 752
Papua and New Guinea	121	Rates	523, 524, 532, 1034, 1039
Administration	121	Reciprocity with New Zealand	536
Agriculture, Native	124	United Kingdom	536
Plantation	123	Service	767, 1039
Animal Industry	124	War	767, 1034
Climate	123	Widows'	521, 522, 532, 1146, 1147
Crops	123	Perth, Climatological Data	48, 53, 1127
Customs Tariff	128, 134, 323, 324, 326	Population	548
Division, Royal Australian Navy	1019	Public Library	464, 466
Electricity Supply	287	Water Supply and Sewerage	690
Finance	121	Petrol, Excise Revenue	756
Hydro-electric Potential	287	Imports	346, 350
Livestock	124	Production	1003
Soils	122	Quantity on which Excise paid	361
Parasitic Diseases, Deaths	613, 618-620, 1152	Rationing, 1939-45 War	1166
Parcels Post, Cash on Delivery	420, 421	Petroleum Legislation	1011
Posted	420, 421	Search for	90, 107, 128, 134, 1003
Parent and Citizen Associations	442	Pharmaceutical Benefits	498, 521, 522, 1146
Parents, Ages	601	Preparations, Factories	238
Birthplaces	601	Phosphate Commissioners, British	137, 139
Parliament	64, 65, 1127	Imports and Exports	139, 878
Commonwealth	64, 65, 73, 1127	Nauru	139
Powers	12, 323, 580	Production	139
Transfer to Canberra	67, 112	Used on Crops	878
Enactments	65, 78	Phototelegram Service, Oversea	423
Members	65, 1127	Physical Fitness (<i>see</i> National Fitness).	
States	69-72	Physiography, Australia	25, 289, 1127
Parliamentary Allowances	65, 82, 1127	Territories	104, 119, 125, 130, 137, 140, 141
Government, Cost of	31, 768, 770, 1128	Pickle Factories	255
Scheme of	61, 1127	Picturegram Service	423
Library, Commonwealth	463	Pig-iron and Steel Production	992
Pension and Superannuation Schemes	72, 752	Pigs	885, 934, 1161
Proceedings, Broadcast of	433	Cured in Bacon Factories	256
Reports and Papers	1084, 1166	Imports and Exports	936, 941
Salaries	65, 82, 1127	In Territories	105, 115, 124
Passages, Free and Assisted	572, 576	Pilots, Air, Licences	411
Passenger-mileage, Airways	412, 415	Training of	410
Railways	393, 394	Pineapples	868-871
Passengers Carried, Aircraft	412, 415	Plant and Machinery Used in Factories, Value	1135
Ferries	403	of	229, 238-264, 509, 511
Omnibuses	401, 402	Quarantine	509, 511
Railways	387, 388, 392-394	Plantations, Forest	113, 946
Tramways	399, 400	New Guinea and Papua	123
Passports	581	Plums	868-870
Pastoral Holdings, Carrying Capacity	885	Plywood	952, 955, 956
Industry, Northern Territory	105	Mills	261
Production 105, 115, 119, 124, 885, 1048-1051, 1160	886, 1048, 1049	Pneumonia, Deaths	613, 614, 618-620, 1152
Value of	886, 1048, 1049	Poison, Deaths from	623
Products, Exports	345, 347, 350, 354, 918	Sale and Custody of	1166
Pasture Land	822	Police	486, 1145
Patents	488, 754, 1057	Duties	486
Office Library	463	Expenditure by States	488, 788, 789
Revenue	488, 754, 1057	Poliomyelitis	490, 502, 512
Parson's Plan	925	Pollard	236, 252
Patients in Mental Hospitals	517-520	Pools, Wheat	835
Public Hospitals	515, 516, 1145		

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Population	541, 583, 1148	Potatoes	854
Aboriginal	103, 583	Area and Yield	821, 823-827, 854
Age Distribution	560	Consumption	855, 1054, 1056
Birthplace	566	Exports	855
Census	542, 583	Marketing	855
Cities, Principal, World	548, 550	Production	826, 827, 854
Conjugal Condition	565	Value of Crop	828, 855
Density	545, 557	Poultry Products, Consumption	1053, 1055
Distribution	543, 559, 1148	Trade	939
Estimates	543, 1148	Poultry-farming	937, 1048, 1049
Fertility	590	Powdered Egg Production	938
General Characteristics	559, 1166	Milk Production	236, 257, 931
Growth	543, 1148	Power, Electric (<i>see</i> Electric Power)	
Immigrant	567	Stations	263, 288
Increase	543, 551	Resources	265
Natural	551	Used in Factories	205, 224, 238-264, 1135
Net Migration	554, 556, 572	Powers, Commonwealth, as to Commerce	323
Industry	569	Immigration	580
Local Government Areas	659	Magistrates	473
Masculinity	545, 559, 1165	Precious Stones (<i>see</i> Gems).	
Mean	550, 1148	Preference, British	323, 327, 328
Metropolitan	545-548, 659	Canadian	323, 324, 327
Migration, Oversea	554, 571	New Zealand	323, 327
Nationality	567	Papua-New Guinea	323, 324
Occupational Status	571	Rhodesia and Nyasaland	323, 327
Of Military Age	1021	Union of South Africa	328
Provincial Urban Areas	545, 549	Preferential Tariffs	323, 327, 328, 1166
Rates of Increase	553, 556	Voting	1166
Religion	568	Pregnancy, Complications of, Deaths	619, 620,
Reproduction	593, 594	623, 1152	
Residence, Period of	567	Prematurity, Deaths	613, 618-620, 1152
Rural	545	Premiers' Plan	1166
Sex Distribution	542, 552, 559	State	76, 1128
Territories 103, 115, 119, 125, 131, 138, 142,	542-556, 559, 583, 1148	Premiums, General Insurance	746, 747
Total	542, 583, 1148	Life Assurance	733-741, 1156
Unemployment	570, 571	Pre-school Centres	447
Urban	545, 549	Child	513
World	558	Education	447
Pork, Consumption	935, 1053, 1055	Teachers, Training of	447
Oversea Trade	345, 350, 936, 941, 942	Preserved Fish	959, 962, 967
Production	935, 1161	Fruit	236, 255, 869, 870
Port Augusta—Alice Springs Railway	108	Press Telegrams	424, 428
Charges	694	Pressures, Barometric	50
Kembla	694	In Capital Cities	53-60
Ports and Harbours	384, 658, 693, 1166	Price Indexes and Index Numbers—	
Depth of Water	384	Agricultural Production	829, 1050
Distances by Sea	384	Export	355, 1139
Principal Australian	375, 381	Farm Production	1049
Cargo Movements at	381	Farmyard, Dairy and Bee Production	923,
Oversea Trade at	348	1049	
Shipping at	375, 381, 693	Pastoral Production	887, 1050
Post Offices	416	Retail	143, 200, 1128
Postal Communication, Territories	109, 120	International Comparisons	152
Facilities	416	Wholesale	152, 1131
Notes	421, 761	Prices Acts, States	155
Postcards Posted	420	Barley	851
Post-graduate Research	453	Coal	1000
Postmaster-General's Department	415	Control	155
Cables	427	Transfer to States	155
Carriage of Mails, Cost	421	Copper	989
Cash on Delivery Parcels Post	420	Dried Fruits	867
Dead Letter Offices	421	Eggs	938
Employees, Number	416	Export	355, 1139
Facilities	416	Gold	703
Finance	417-419, 421, 426, 761, 762,	Maize	848
772, 780		Oats	846
Fixed Assets	419	Referendum	155
Mail Contractors	416	Regulations	155
Money Orders and Postal Notes	421	Retail	143, 200, 1128
Postal Matter Handled	419	Silver, Lead, Zinc	985
Registered Articles	420	Stabilization	155, 767, 779
Telegraph Offices	424	Sugar	863
Telephones	424	Tin	991
Posts, Telegraphs, Telephones, Cable and		Wheat	830, 839
Radio Communication 109, 120, 130, 137, 141,	415, 1143	Wholesale	152, 1131
Post-war Training Scheme	454-457, 767, 1041	Wool	908
Potash Salts, Imports	878	Prickly Pear Leases	88
		Primage Duty	323, 324, 351, 756
		Primary Producers, Financial Assistance	762, 767,
		791, 877	
		Prime Ministers	74

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE
Printergram Service	424
Printing Works	261
Prisons, Prisoners	486, 1145
Private Dwellings	644
Finance	701, 1154
Omnibus Services	402
Railways	385
Savings Banks	71, 721, 724
Schools	445
Probate Duties, States	783-785
Probates	748
Producers' Co-operative Societies	729, 1164
Production (see also Value of Production)—	
Agricultural 104, 115, 119, 122, 821, 1048-1051, 1160	764, 1027
Aircraft	266, 288
Electric Power	919, 1048-1052, 1161
Farmyard, Dairy, etc. 919, 1048-1052, 1161	106, 120, 128, 134, 959, 1048, 1049
Fisheries	113, 127, 133, 950, 1048, 1049
Forestry	1049
Indexes	301, 305, 306, 315
Irrigation Areas	227, 234, 237-264, 1048, 1049, 1135
Manufacturing 227, 234, 237-264, 1048, 1049, 1135	105, 127, 134, 139, 971, 1048, 1049, 1161
Mineral 105, 127, 134, 139, 971, 1048, 1049, 1161	1026
Munitions	105, 115, 119, 124, 885, 1048-1051, 1160
Pastoral	1047
Valuation of Australian	456
Professors, University	327
Prohibited Exports	326
Imports	326
Properties, Commonwealth, transferred from States	796
Property, Income, Further Tax on	811, 814
Proportional Representation, Senate	66
Provincial Urban Areas, Population	545, 549
Public Art Galleries	471
Debt, Commonwealth and State 797, 809, 1157	Municipal and Semi-Governmental
Bodies	664
States	795, 1158
Expenditure on	788, 789
Taken over by Commonwealth	795
Finance	753, 1156
Health and Related Institutions	489, 1145
Tropical Medicine, School of	507, 1165
Legislation and Administration	489, 1166
Hospitals	515, 1145
Revenue and Expenditure	516, 1146
Instruction (see Education).	
Justice	473, 1145
Libraries	464
Museums	470
Servants, Number	188, 1134
Service Board	768
Superannuation Fund	751
Works and Services, Commonwealth 762, 763, 772-774, 780, 1156	States
States	785-794
Publications, Lists of Selected	1084
Official	1082
Puerperal Diseases	512, 619, 620, 623
Pulp Fruit, Production	255
Wood	951
Purchases of Freehold	86, 87
Pyritic Ore and Concentrate	971, 972
Q.	
Qantas Empire Airways	409, 412
Quadruplets	590, 596, 601, 1150
Quantum and Price Indexes—	
Agricultural Production	829, 1050, 1051
Farm Production	1051, 1052
Farmyard, Dairy and Bee Production	923, 1051, 1052
Pastoral Production	887, 1050, 1051

	PAGE
Quarantine	509-511, 769
Quarrying	973-976, 979
Industrial Census	976
Queanbeyan-Canberra Railway	114
Queen Elizabeth II.	61
Queensland University	452, 453, 455-459, 467
Fire Brigades Boards	699
R.	
R.A.A.F. (see Royal Australian Air Force).	
Rabbit Skins, Exports	915-918
Rabbits, Frozen, Exports	978
Racial Origin, Arrivals and Departures	514
Racing, State Taxation	785
Radio (see also Wireless) 423, 427, 429, 1143	Airways
Airways	410
Coast Stations	428, 1143
Communication	427, 1143
Inductive Interference	434
Stations	428, 430, 431, 1143
Traffic, International	427
"Radio Australia"	433
Radio-active Minerals	1012
Radiocommunication Stations Authorized	428
Radiogram Service	423, 424
Radium Laboratory, Commonwealth X-ray and	506
Railways	384
Accidents	397, 624
Deaths	397, 624
Australian Capital Territory 114, 387, 761, 774	Coal, Oil and Petrol Used
Coal, Oil and Petrol Used	397
Commonwealth and States	384
Communication in Australia	385
Employees	387, 398
Finance 387-396, 761-763, 773, 780, 785-789, 791	Gauges
Gauges	108, 385-387, 1166, 1167
Standardization	108, 386, 1166, 1167
Goods and Livestock Carried 387-389, 392, 395, 396	Traffic Classification
Traffic Classification	395
Interest on Loan Expenditure	391
Lines under Construction	385
Mileage Open, Surveyed, etc.	386, 388
Northern Territory	108, 386, 761, 774
Passenger-journeys, etc.	387, 388, 392-394
Private	385, 1166
Rolling Stock	244, 397
Salaries and Wages Paid	398
Standardization Agreement 108, 386, 1166, 1167	Traffic
Traffic	386, 392
Trans-Australian	1167
Working Expenses	387, 389
Workshops	244
Rainfall	28, 45, 52, 322
Australian Capitals	48, 52-60, 1127
Cities of the World	52
Distribution	45, 47
Influence of Forests on	52
Remarkable Falls	48
States and Territories 47, 104, 119, 123, 137, 141	Raisins
Raisins	866, 867
Ratable Property, Area, Population and Value	659
Ready-made Clothing Production	250
Real or Effective Wage Rates	163, 200
Receipts, Life Assurance	739
Reciprocal Tariffs	327
Reconstruction and Development, International Bank for	807
Training Scheme, Post-war 454-457, 767, 1041	Redemption Loans, New York
Redemption Loans, New York	807
Re-exports	349, 351
Referenda, Commonwealth	68, 165
Refineries, Sugar	254
Refining, Metal	241-243
Refrigerating Works	258
Regional Electricity Boards, Queensland	278

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
Registered Articles Posted and Received ..	420	Rife Clubs	1024
Companies	726	River Murray Waters Agreement ..	294, 295
Dairy Premises	497	Rivers and Water Supply Commission, Victoria ..	304, 684
Registration, Births, Deaths and Marriages ..	585	Of Australia	28, 1166
Copyright	1058	Road Boards, Western Australia ..	674
Land Titles, New Guinea	133	Safety Council, Australian	1066
Motor Vehicles	403-405, 1142	Traffic Accidents	406, 1142
Private Schools	445	Roads	657, 667
Trade Unions	196	And Bridges, Expenditure ..	669, 671, 673-676, 678, 791
Vessels	382	Commonwealth Aid	667, 775, 777
Rehabilitation Service, Commonwealth ..	525	Composition of	669, 671, 674, 678
Relief of Unemployment 521, 522, 533, 1146, 1147		Rock Phosphate (see Phosphate).	
Religions, Marriages Celebrated	589	Rockhampton Harbour Board	696
Of Population	568	Population	548
Renmark Irrigation Trust	315, 316	Rolling Stock, Railways	244, 397
Rent Control, 1939-45 War	1166	Royal Australian Air Force	764, 1015, 1024
Group	146, 1129, 1130	Administration	1024
Retail Price Index Numbers 148, 149, 151, 200, 1129, 1130		Strength	1015, 1025
Weekly, Tenanted Private Dwellings ..	652	Australian Army Nursing Corps ..	1022
Repatriation	762, 767, 774, 780, 1033	Australian Navy	764, 1015, 1017
Commission	767, 1033, 1041	Papua and New Guinea Division ..	1019
Cost of	767, 1042, 1043	Ships	1017, 1019
Reports, Departmental	1084, 1166	Strength	1015, 1017
Parliamentary	1084, 1166	Commission, Basic Wage	166
Representation, Proportional, Senate ..	66	Electric Power, Queensland ..	278
Representatives, Consular	1070	Health	504
Diplomatic	1070	Monetary and Banking Systems ..	705
House of	66	Television	429
Trade	332, 1071-1073	Wheat Industry	828
Reproduction Rates	593, 594	Flying Doctor Service	514
Research, Council for Educational	438	Humane Society	539
Establishment, Weapons	1029	Life Saving Society	539
In Education	438	Military College	1023
Universities	453	Societies	472
Laboratories, Aeronautical	1029	Style and Titles	61
Organization, Commonwealth Scientific and Industrial 202, 292, 454, 464, 769, 771, 873, 880, 963, 1060		Rubber	123, 129
Silvicultural	948	Goods	263
Reservations, Crown Lands	84, 99	Rubella	512
Forest	85, 945, 949	Rural Areas, Provision of Education in ..	438
Reservoirs and Dams	267, 268, 289, 295	Bank Advances	95
Resins and Gums	953	Broadcasts	432
Retail Establishments, Census	1073	Credits Department, Commonwealth Bank	709-711
Type of Business	1076	Employment	184, 881, 883
Retail Price Indexes—		Holdings, Employment on	881, 883
" A " Series	143	Number and Area	880
" B " Series	143	Salaries and Wages Paid	881, 884
" C " Series (see " C " Series Retail Price Index).		Tractors on	880
" Court " Series	144, 168, 169, 171, 178	Population	545
" D " Series	144	Rutile	971, 972, 994, 1009
Interim	144, 1128	Rye	823, 824, 826
Group Weights	146		
Retail Price Index Numbers	143, 200, 1128	S.	
And Basic Wage Variations	144, 166-182	Safety Council of Australia, National ..	1065
" C " Series Index	147, 150, 200, 1130	Sago and Tapioca, Consumption ..	1054, 1056
Interim Index	147, 148, 1128	Sailing Vessels	383
International Comparisons	152	Salaries, Parliamentary	65, 82, 1127
Tabular Statements	148, 200	Sale of Crown Lands	86, 87, 782, 787
Retail Sales, Value of	1073	Food, Drugs and Poisons	497
Retiring Allowances, Parliamentary ..	72, 752	Sales Tax	755-758, 794, 1156
Returned Soldiers, Advances to	93	Salt Production	971, 973-975, 1006
Medical Treatment	1041	Sapphires	1007
Settlement	84, 91, 767, 791, 1166	Sauce Factories	255
Revenue, Ferries	403	Sausage Casings, Net Exports	918
Motor Vehicle Registrations	404	Savings Banks (see Banks).	
Omnibus Services	401, 402	Certificates	722, 797, 802, 806
Postmaster-General's Department ..	417, 421, 426, 761	Sawmills	261, 950, 954
Railways	387-396, 785, 786	Scallops	961
Tramways and Trolley-bus Services ..	399, 400, 785, 786	Scarlet Fever	512, 618-620, 1152
Rheumatic Fever, Deaths	618-620, 1152	Scheelite	971, 993, 994, 1009, 1010
Rhodesia and Nyasaland, Federation of ..	323, 327	School Age	435
Rice	105, 236, 291, 300, 301, 823-828, 852	Buildings and Grounds	441
Consumption	1054, 1056	Children, Free Milk for	504
		Medical Inspection of	494
		Dental Clinics	494-496
		Forestry, Australian	947
		Libraries	469

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
School— <i>continued.</i>		Shipping	369
Of Public Health and Tropical Medicine	507, 1165	And Transport Department	769, 771
The Air, Northern Territory	109	Board, Australian	369
Savings Banks	445, 722	Cargo	370, 376
System, Government Schools	435	Casualties	384
Teachers	439, 442, 446, 447	Communication with Various Countries	371
Schools, Attendance	443, 446, 1144	Construction	382, 1018, 1059
Broadcasts to	432, 439	Control	369
Correspondence	439, 449	Freight Rates	384
Enrolments	443, 446, 448, 1144	Interstate	372
Equipment	441	Legislation	384
Evening	460	Line, Commonwealth	369
Expenditure	444, 450, 1144	Losses	384
Furniture	441	Nationality	371, 382
Government	435, 1143	Oversea	370, 373
Health Services to	437, 494	Principal Australian Ports	375, 381, 693
Industrial	538	System of Record	370, 372
Kindergarten	436, 447	Territories	108, 120, 130, 136, 140
Non-Government	445	Tonnage, World	383
Private	445	Vessels Built, etc.	382, 1018, 1059
State	435	Ships Built and Registered	382, 1018, 1059
Technical	448, 450	Ships' Stores	335, 352
Territories	109, 115, 120, 132, 138, 438	Shirt, Collar and Underclothing Factories	250
Text Books and Materials	441	Shoe Factories	251
Visual Aids	442	Shops, New Building	641, 642
Science, State Expenditure	472	Short-term Debt	804
Scientific and Industrial Research Organization, Commonwealth	202, 292, 454, 464, 769, 771, 873, 880, 963, 1060	Sickness Benefits	190, 521, 522, 533, 1146, 1147
Societies	472	Friendly Societies	748
Scotch Barley, Exports	852	Silica, Production	971, 1007
Seasons	30	Silos, Ensilage	879
Seat of Government	112, 1166	Silver	972-975, 983, 1009, 1010
Secondary Schools, Maintenance	444	Coinage	701, 1154
Security Council, The United Nations	1069	Standard Weight and Fineness	701
Seed, Wheat used for	840	Imports and Exports	352
Seismology of Australia	29, 1166	Local Extraction	983
Selected Immigrants	572, 576	Mine Production in Principal Countries	986
Semi-Governmental Authorities	657	Mining, Employment	987, 1007
Debt	797	Prices	986
Borrowings	664	Production and Sales	985, 1161, 1162
Employment	188, 1134	Sources of Production	984
Finance	664	Silvicultural Research	948, 1166
Senate	66	Sinking Funds	772, 775, 796, 809
Proportional Representation	66	Skins and Hides, Trade	345, 350, 914, 918
Senility, Deaths	618-620, 1152	Used in Tanneries	249
Separations, Judicial	482	Slaughtering Cattle	892
Sequestrations	485	Pigs	935
Serum Laboratories, Commonwealth	505	Sheep	896
Service Pensions	1039	Sleepers, Railway, Exports	955
Services, Air 108, 114, 120, 130, 136, 142, 409, 412		Slippers, Production	234, 251
By Universities	454	Small Fruits	868, 869
Canteens Trust Fund	1043	Smallpox, Deaths	618-620, 1152
Welfare	521, 1146	Smelting Works	241
Settlement, Closer	84, 91	Snowfall	50
In Australia, Climatic Factors Influencing	1166	Snowy Mountains Hydro-electric Authority	266, 297
Land	84	Scheme	266, 297, 1166
Norfolk Island	119	Soap and Candle Factories	240
Of Industrial Disputes	195	Social Services	190, 521, 1146
Returned Soldiers	84, 91, 767, 791, 1043, 1166	Benefits	190, 521, 1146
Settlers, Advances to	94, 791, 1163	Department	769, 771
Sewage Farm, Metropolitan, Victoria	683	Legislation	190
Sewerage	658, 679, 785-789, 791	Tax Contribution	755, 810-820
Sex Distribution in Factories	212, 215-221	Societies, Building and Investment	727
Of Population	542, 552, 559	Co-operative	729, 1164
Sheep	885, 894, 918	Friendly	747, 1164
Classification, Age, Sex and Breed	895	Lifesaving	539
Imports and Exports	896, 918	Royal	472
In Territories	105, 115, 124, 894, 1160	Scientific	472
Various Countries	895, 902	Society, British Astronomical	472
Slaughtered	896	Linnean, New South Wales	472
Sheepskins, Exports	914, 918	Royal Humane	539
Marketing	903, 916	Life Saving	539
Used in Tanneries	249	Sodium Nitrate, Imports and Exports	878
Shipbuilding Board, Australian	1059	Softwoods	944, 945, 950, 955, 956
		Soil Erosion	292
		Soldier Settlement Commission, Victoria	96
		Soldiers' Children Education Scheme	1042
		Land Settlement	91, 767, 791, 1166
		Solomon Islands	130
		Sorghum	823-826, 853

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
South African Preference	328	State— <i>continued.</i>	
Australia, Fire Brigades	699	Industrial Arbitration Legislation ..	158,
Harbors Board	697	177-182, 196	
Brisbane-Grafton Railway	386	Tribunals	156, 177-182
Pacific Air Transport Council	409	Land Legislation	84
Southerly Bursters	51, 1166	Libraries	464, 469
Southern Electric Authority of Queensland	279	Loan Funds	790
Electricity Supply of New South Wales	269	Lotteries	749, 783-785
Sovereign, The	61	Ministers	76, 1128
Sown Pastures	822	Parliaments	69-72
Special Accounts of Trading Banks with		Price Control Administration	155
Commonwealth Bank .. 710-715, 1154		Properties transferred to Commonwealth	796
Financial Assistance Grants .. 775-777		Publications	1084
Grants to States	775-777	Railways	384, 785-789, 791
Trade	333, 359	Revenues	781, 793
Specie and Bullion, Imports and Exports	351, 352,	Business Undertakings	781, 782, 785
360, 1136		Commonwealth Payments .. 455, 516, 519	
Spirits, Consumption	478	667, 762, 773, 780-782, 787, 1156	
Excise Revenue	756	Fisheries	968
Quantity on which Excise Paid	361	Hospitals	516, 519, 1146
Stabilization of Prices	155, 767, 779	Railways	387-396, 785
Scheme, Butter	925	Surplus	790
Wheat	830	Taxation	781-785
Staff College, Army	1022	Trust Funds	781, 790
Stamp Duties, States	783-785, 794	Rivers and Water Supply Commission,	
Standard Times in Australia	27	Victoria	304, 684
Weight and Fineness of Coinage	701	Roads, Bridges, etc.	567
Standardization of Railway Gauges	108, 386,	Savings Banks	719, 723, 726
1166, 1167		Schools	435, 1144
Standardized Death Rates	607	Short-term Debt	804
Standards Association of Australia	1062	Sinking Funds	796, 809
Laboratories, Defence	1030	Taxation Reimbursements .. 775, 776, 781, 782,	
State Accounts	781	787	
Aid to Mining	791, 1011	Tramway and Trolley-bus Services ..	398
And Commonwealth Finance .. 776, 793, 795,		Trust Funds	781, 790
1157		States, Areas	5, 25, 27, 102
Price Control	155	Constitutions	6, 69-72
Semi-Governmental Employment ..	188,	Dates of Creation	4
1134		Local Government	657, 658
Banking Legislation	705	Statistical Conferences	1079, 1166
Basic Wages	177, 1133	Organization	1079
Borrowings	795	Publications of Australia	1082
Children	494, 538	Summary	1123
Consolidated Revenue Funds .. 781, 793, 1157		Civil Aviation	411
Debts	775, 776, 795, 797, 809, 1158	New Building	636, 1153
Taken over by Commonwealth	795	Statisticians, Conference of British Common-	
Educational Systems	435	wealth	1084
Elections	68	Statistics, Australian, Development of ..	1079, 1166
Electricity Commission of Queensland ..	278	Ranking, Presentation of	705, 720
Victoria	272	Commonwealth Bureau of Census and	
Western Australia	284	1079, 1164	
Employees	83, 1134	Steam Vessels	383
Expenditure	787, 791-794	Steamship Services, Coastal	375
Benevolent Homes	537	Steel (<i>see also</i> Iron)	235, 241, 992
Education, Science and Art .. 444, 450,		Stevedoring Industry Board	369
458, 459, 472, 788, 789, 1144		Charge	760
Health	788, 789	Stillbirths	585, 590, 604, 1150
Hospitals	516, 519, 1146	Stocks, Wheat and Flour	840, 842
Justice	488, 788, 789	Stores and Transport Branch	1031
Loan	791, 794	Ships'	335, 352
Orphanages, etc.	538	Storms	51, 1165
Per Head of Population	788, 789, 791,	Strikes and Lock-outs	191, 1134
792		Students, Financial Assistance	454
Police	488, 788, 789	Schools	443, 446, 448, 1144
Railways	387, 389, 788, 789, 791	Technical	448, 450
Roads and Bridges	669, 671, 673-676,	Universities	456
678, 791		Sub-artesian Bores	293, 303-321, 692
Water Supply, etc.	788, 789, 791	Subsidies and Bounties—	
Finance	780, 793, 795	Commonwealth to States (<i>see also</i>	
Forestry Departments	949	Grants)	767
Funds, Consolidated Revenue .. 781, 793		Import	768
Loan	781, 790	Price Stabilization	155, 767
Sinking	795, 809	Primary Producers	762, 767, 877
Trust	781, 790	Woolen Goods	905
Governments, Functions	780	Succession Duties	783-785, 794
Governors	62, 76-78, 1127	Sugar	859-864
Grants .. 455, 516, 519, 667, 762, 775, 780-782,		Agreements	862
787, 1156		Bounties	1166
Income Taxes	781, 783-785	Bulk Handling	864
		By-products	863

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

	PAGE		PAGE
Sugar—continued.		Taxi-cabs and Other Hire Vehicles	403
Cane .. 291, 310, 311, 823-828, 859		Tea, Consumption .. 1054, 1056	
Consumption .. 861, 1054, 1055		Imports .. 346, 350	
Factories .. 259, 861		Subsidy .. 768	
Control of Production .. 862		Teachers, Kindergarten .. 447	
Exports .. 863		Private Schools .. 446	
Inquiry Committee .. 864		Sex and Status of .. 441	
Mills and Refineries .. 253, 254		State Schools .. 439, 442, 1144	
Prices .. 863		Technical Schools .. 441, 448-450	
Production .. 236, 253, 860, 861		Training and Recruitment of .. 439	
Suicide .. 618-620, 624, 1152, 1166		Universities .. 436	
Age at Death .. 624		Teachers' Training Colleges .. 440	
Modes Adopted .. 624		Technical Education .. 448	
Sulphur .. 1003		Teacher Training .. 449	
Sultanas .. 866, 867		Technology, New South Wales University of .. 452, 453, 455-459, 467	
Sunshine at the Capital Cities .. 53-60		Telecommunications, Aeronautical .. 410	
Super Tax .. 755		Telegrams, Dispatched .. 424	
Superannuation, Fund, Commonwealth		International .. 427	
Public Service .. 751		Telegraph Offices .. 424	
Parliamentary Schemes .. 72, 752		Telegraphs .. 423	
Schemes, Government, etc. .. 751		Northern Territory .. 109	
Superphosphate .. 768, 878		Profit and Loss .. 419	
Supervision of Dairies .. 497, 920		Revenue .. 417, 761	
Infant Life .. 493		Telegraphy, Radio .. 428, 1143	
Supply Department, Acts Administered .. 1029		Telephone Exchanges .. 425	
Expenditure .. 764, 1031		Telephones .. 424	
Functions of .. 1029		Oversea Services .. 426	
Research and Development Branch .. 1029		Profit or Loss .. 419	
Surrenders, Life Assurance .. 736-742		Revenue .. 417, 426, 761	
Switzerland, Trade Agreement with .. 328		World Statistics .. 427	
Sydney, Climatological Data .. 48, 57, 1127		Telephony, Radio .. 428, 1143	
County Council .. 269		Teletypewriter Service .. 424	
Electricity Supply .. 269		Television .. 429, 434, 1143	
Fire District .. 698		Temperate Regions of Australia .. 25	
Harbour Bridge .. 670		Temperature .. 29, 52-60	
Libraries .. 464, 465, 469		Australian Capitals .. 52-60	
Population .. 548, 550		Cities of the World .. 52	
Port of .. 693		Effective .. 29	
University .. 452-459, 467		Territories .. 119, 123, 137, 141	
Water Supply and Sewerage .. 679		Tenanted Private Dwellings, Weekly Rent .. 652	
Syphilis, Deaths .. 618-620, 1152.		Tenure, Land .. 84, 1165, 1166	
		Territories, Australian 23, 103, 754, 762, 774, 780	
		Electric Power Generation .. 286	
		Expenditure 110, 116, 121, 130, 137, 140, 762, 774, 780	
		Revenue .. 110, 116, 121, 130, 137, 140, 754	
		Tetanus .. 512	
		Tides of Australia .. 1166	
		Timber .. 261, 950, 955, 956	
Tailoring Factories .. 250		Distribution .. 945	
Tallow .. 917		Mills .. 261, 950, 954	
Consumption in Factories .. 917		New Guinea .. 133, 136	
Exports .. 345, 917, 918		Oversea Trade .. 345, 350, 955	
Marketing .. 918		Reserves .. 85, 945, 949	
Production .. 237, 917		Supply .. 948	
Used in Soap and Candle Factories .. 249		Types and Uses .. 943, 1166	
Tanneries .. 249		Times, Standard, in Australia .. 27	
Tanning Barks and Tannin .. 953, 956		Tin .. 971-975, 989, 1009, 1010, 1161, 1162	
Tantalite-Columbite .. 995		Mining .. 989, 1166	
Tantalite .. 1054, 1056		Employment .. 1007	
Tapioca and Sago, Consumption .. 1002		Prices .. 991	
Tar Production .. 323		Production, Australia .. 990, 1166	
Tariff Acts .. 324, 873		Principal Countries .. 990	
Board .. 323, 327, 328, 1164		World .. 990	
Customs .. 323, 327, 328, 1164		Tinplate Control .. 1031	
New Guinea and Papua .. 128, 134, 323, 324, 325		Tobacco 123, 237, 291, 310, 312, 823-828, 872	
Industries Preservation Act .. 325		Advisory Committee .. 873	
Negotiations, International .. 327		Board, Australian .. 872	
Tariffs and Trade, General Agreement on 328, 331		Excise Revenue .. 756	
Preferential and Reciprocal .. 323, 327, 328		Factories .. 260, 873	
Taxation Acts .. 1166		Production .. 872	
Branch .. 769		Quantity on which Excise Paid .. 361	
Commonwealth (see also Income Tax) 754, 755, 794, 810, 1156		Tomatoes, Consumption .. 1054, 1056	
And States 754, 755, 776, 794, 810, 1156		Tonnage, Carried, Railways 387, 388, 392, 395, 396	
Concessional Deductions .. 811		Topography .. 25, 1166	
Local Government .. 660		Totalizator Investments .. 750	
Motor .. 404, 783-785, 794		Trachoma .. 512	
On Specified Incomes .. 813		Trackers, Black .. 487	
Papua, Natives .. 126		Tractors on Rural Holdings .. 880	
Per Head of Population .. 754, 782, 794			
Property Income .. 811, 814			
Reimbursements .. 775, 776, 781, 782, 787			
States .. 781, 783			

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
Trade (<i>see also</i> Imports and Exports)	323, 1136	Tropical Medicine, School of Public Health	
Agreements	327	and	507, 1165
Balance of Oversea	335, 1136	Regions of Australia	25
Calendar Years	360	Trunk Lines, Telephones	426
Classified Summary of Australian	348, 1137	Trust Districts, Water	300, 302
Commissioners	332, 1071-1073	Electricity, of South Australia	282
Commodity Control	327	Funds, Commonwealth	779
Countries to which Imports Credited	335	States	781, 790
Customs Tariffs	323	Municipal Tramways, South Australia	283
Descriptions Act	325	Territories of Australia	23, 24, 121, 131, 137
Direction of Oversea	337, 1136	Trustee Companies	727
External, Compared with other Countries	359	Savings Banks	719, 720
General	334	Trusteeship Council, The United Nations	1069
General Agreement on Tariffs and	328, 331	Trusts, Harbour (<i>see</i> Harbour Trusts)	
Import Licensing Regulations	325	Irrigation	300, 302-306, 315, 316
International Conference on	328	Waterworks, Victoria	304, 684, 685
Interstate	367	Tuberculosis	489-491, 501, 512, 1152, 1167
Legislation Affecting	323	Deaths	613, 618-621
Marks	1058, 1167	Age at Death	621
Merchandise	337, 360, 1136	Tully Falls Hydro-electric Project	280, 281
Method of Recording	333	Tumours (<i>see</i> Neoplasms)	
Monetary Areas, According to	338, 1137	Tungsten Concentrates	.971-973, 993, 1009, 1010
Negotiations, United Kingdom-Australia	328	Tutorial Classes, University Department of	460
Organization, International	328	Workers'	462
Pre-Federation Records	335	Tweed and Cloth Mills	247
Preferential and Reciprocal Tariffs	323, 327, 328	Twins	590, 596, 601, 1150
Primage Duty	323, 324, 351, 756	Typhoid Fever	512, 618-620, 1152
Principal Articles	340-347, 349, 1138	Typhus	512, 618-620, 1152
Ports, Oversea Trade	348	Tyres, Motor and Cycle	237
Proportion of, from United Kingdom			
and Competing Countries	338		
Representatives	332, 1071-1073		
Retail	103		
Ships' Stores	335, 352		
Special	333, 359		
Specie and Bullion	351, 352, 360, 1136		
System of Recording	333		
Territories	107, 120, 128, 134, 140		
Unions	196, 1167		
Valuation of	334		
Winds	49, 50		
With Eastern Countries	346		
United Kingdom	329, 331, 337, 340, 353, 360, 1136		
Various Countries	337-347, 353, 360, 1136		
Year, The	334		
Traffic Accidents	406, 624, 1142		
Control, Air	410		
Radio, International	427		
Railway	386, 392		
Tramway	399, 400		
Training Colleges, Teachers'	440		
Scheme, Reconstruction	454-457, 1041		
Technical	448		
Vocational (Soldiers')	1042		
Train-miles Run, Railways	387, 393, 394		
Tramway and Trolley-bus Services	244, 398		
Accidents	399		
Deaths	399		
Capital Cost and Financial Results	399, 400		
Car-miles	399, 400		
Employees	399, 400		
Gauges	398		
Revenue and Expenditure	399, 400, 785-789, 791		
Traffic	399, 400		
Tramcars	244, 398		
Workshops	244		
Transport and Communication	369, 1142		
Territories	107, 114, 120, 130, 136, 140, 142		
Trapping	1048, 1049		
Treasury Bills	710-715, 577, 804		
Tribunals (<i>see</i> Courts)			
War Pensions Appeal	1035		
Trieste, Migration	579, 580		
Triplets	590, 596, 601, 1150		
Trochus-shell	127, 128, 134, 961, 964, 965, 968		
		U.	
		Unconditional Purchases of Freehold	84, 86
		Underclothing, Shirt, etc., Factories	250
		Underground Water	293, 303-321, 692
		Unemployment	189, 570, 571
		Benefits	190, 521, 522, 533, 1146, 1147
		Relief	521, 522, 533, 1146, 1147
		Union of South Africa, Trade Agreement	328
		Unions, Kindergarten	448
		Trade	196, 1135
		United Kingdom-Australia, Trade Negotiations	328
		Customs Legislation	328
		Imports of Beef	893
		Dairy Products	941
		Mutton and Lamb	898
		Wool	913
		Long-term Contracts with	331
		Preferential Tariff	323, 327, 328
		Shipping at Principal Ports	376
		Trade with	329, 331, 337, 340, 353, 360, 1136
		United States Trade Agreement	330
		Nations, The	1068
		Specialized Agencies	1070
		The Security Council	1069
		Universities	452, 467
		Benefactions	458
		Commission	454
		Commonwealth Grants	454
		Degrees Conferred	459
		Department of Tutorial Classes	460
		Finance	457-459
		Services	454
		Students Enrolled	456
		Teaching and Research Staff	456
		University College, Canberra	452, 453, 456-459, 467
		New England	452, 457, 458
		Libraries	467
		of Technology, New South Wales	452, 453, 455-459, 467
		Unoccupied Dwellings	627, 643, 644
		Upholstery Works	261
		Uranium	106, 1010, 1012
		Urban Population	545-549

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

V.	PAGE	PAGE	
Valuations, Local Government	659	Water— <i>continued.</i>	
Value of Exports .. 334, 336-355, 1136		Ground	292, 294
Imports	334, 336-353, 1136	Pattern of Conservation	298
New Buildings	640, 1153	Power, Papua-New Guinea	128, 322
Production (<i>see also</i> Individual Industries)	1047	Resources	265
Agricultural	828	Supply	289, 658, 679
Electricity Generated	288	Revenue and Expenditure, States	785-
Factories .. 227, 238-264, 1135, 1136		Trusts	789, 791
Farmyard, Dairy and Bee	920	Utilization of Resources	289
Fishing and Whaling	966	Water-bearing Basins	293
Forestry	953	Waterworks Trusts, Victoria	304, 684, 685
Mining and Quarrying .. 972-979, 1161		Wattle Bark Extract, Imports	956
Pastoral	886	Weapons Research Establishment	1029
Per Head of Population	1049	Weather	29
Vapour Pressure	32, 53-60	Weekly Rates of Wage .. 159, 172, 182, 1132	
Veal, Production, Consumption and Trade	892	Weights, Agricultural	825
Vegetables	236, 255, 871, 1054, 1056	Weirs and Locks	295-297, 299, 305-307
Vehicles, Motor	245, 403, 1142	Welfare Fund, National	762, 771
Veneral Diseases	512, 618-620, 1152	Services	521, 1146
Vessels (<i>see also</i> Shipping).		Social Service Benefits .. 190, 521, 1146	
Built and Registered	382	Western Australian Artesian Basins	293, 319
Entered and Cleared, Interstate	373, 374	Fire Brigades	699
Oversea	370-372	University	452-459, 467
Naval	1017, 1019	Wettest Regions	46
Veterinary Hygiene	510	Whaling	963, 966
Vineyards 291, 300, 305, 316, 821, 823-825, 827, 828, 864		Wheat	829, 1160
Violent Deaths	618-620, 623, 1152	Agreement, International	836
Visual Aids in Schools	442	Area	821, 823-825, 837, 843, 1160
Vital Statistics	585, 1148	Board, Australian	830
Births	590, 1150	Bounty	768, 779
Marriages	586, 1148	Bulk Handling and Storage	842
Mortality	605, 1151	Consumption	840
Vocational Training (Soldiers')	1042	Disposal	835, 840
Volcanic Action in Australia, Past	1167	Export Charge	755, 760
Voting at Commonwealth Elections	67, 68	Exports .. 345, 347, 350, 835, 840, 844	
Referenda	68	Principal Countries	844
State Elections	68	F.A.Q. Standard	839
		Farms	836
		Grain Elevators	842
		Ground for Flour	252
		Growers, Financial Assistance .. 768, 779	
		Grown for Fodder	840
		Holdings, Special Tabulation	837
		Imports, Principal Countries	845
		Industry, Royal Commission	829
		Stabilization	830
		Legislation	830
		Licences	830
		Marketing	835
		Pools	835
		Prices	830, 839
		Production .. 826, 827, 837, 840, 843, 1160	
		Various Countries	843
		Stabilization	830
		Stocks	840, 842
		Tax	755, 760
		Value of Crop	828, 840
		Varieties Sown	838
		World Crops	843
		White Lead, Paint and Varnish Factories	240
		Whole Milk (<i>see</i> Milk).	
		Wholesale Prices and Price Indexes .. 152, 1131	
		Basic Materials and Foodstuffs	
		Index	153, 1131
		Melbourne Index	154
		Whooping Cough, Deaths .. 613, 618-620, 1152	
		Widows' Pensions .. 521, 522, 532, 1146, 1147	
		Willy Willies	51
		Wimmera-Mallee Irrigation System .. 304, 306	
		Wind	45, 50
		Capital Cities	53-60
		Wine	827, 865
		Board, Australian	866
		Bounty	865
		Consumption	478, 865, 1054, 1056
		Imports and Exports	865
		Marketing	866
		Production	827, 865
		Wineries	259
		Wire Netting Advances	95, 96

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, see page 1163.

	PAGE		PAGE
Wireless (<i>see also</i> Radio)	427, 429, 1143	Working Expenses, Omnibus Services	401
Apparatus	246	Postmaster-General's Department	418
Beam	427	Railways	387, 389
Licences	434, 1143	Tramways	399, 400
Revenue	761	Works and Services, Capital Expenditure	762, 763, 772-774, 780, 1156
Stations	109, 115, 130, 137, 141, 430, 1143	World, Area of Countries	26
Traffic	427	Motor Vehicle Statistics	405
Wolfram	106, 971, 993, 994, 1009, 1010	Population of Principal Cities	548, 550
Women's Royal Australian Air Force	1025	Countries	558
Army Corps	1022, 1023	Production, Barley	852
Naval Service	1017	Copper	989
Services, Military	1022, 1023	Gold	982
Wood Pulp	951	Lead	986
Wool	898	Maize	849
Bureau, Australian	904	Oats	847
Carried on Railways	395	Pig-iron and Steel	993
Classification According to Quality	902	Silver	986
Consumption	905	Tin	990
Contributory Charge	755, 760, 904	Wheat	843
Disposal Plan	903	Wool	902
Exports	345, 347, 350, 906, 918	Zinc	986
Imports into United Kingdom	908, 913	Shipping Tonnage	383
Joint Organization	903	Telephone Statistics	427
Levy	755, 759, 904		
Local Consumption	906	X.	
Marketing	903, 904	X-ray and Radium Laboratory, Commonwealth	506
Prices	908		
Principal Importing Countries	913	Y.	
Production	898, 902, 914	Yallourn Power Station	275, 276
Products Bounty	768	Youth Education	109, 432, 435
Publicity and Research	905		
Realization Commission	903	Z.	
Sales	908	Zinc	971-975, 983, 1009, 1010, 1161, 1162
Deduction	755, 758	Local Extraction	983
Statistical Service	904	Mine Production in Principal Countries	986
Stocks	908	Mining	983
Stores	904	Prices	985
Tax (<i>see</i> Wool Levy).		Production and Sales	983, 985, 1161, 1162
War-time Contracts	903	Sources of Production	984
World Production	902	Zircon	971, 972, 994, 1009
Woollen Goods Subsidy	905		
Mills	247		
Woomera	1029		
Workers' Compensation	195, 1167		
Educational Association	460-462		

* Page numbers of chief references are italicized. For list of special articles and other matter in preceding issues of the Official Year Book, *see* page 1163.

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