

IAH3/24

The
Official Year Book
of
New South Wales.
1930-1931.



T. WAITES.

COPYRIGHTED AND PUBLISHED

By Authority of the Government of the State of
New South Wales.

This page was added on 11 January 2013 to included the Disclaimer below.
No other amendments were made to this Product

DISCLAIMER

Users are warned that this historic issue of this publication series may contain language or views which, reflecting the authors' attitudes or that of the period in which the item was written, may be considered to be inappropriate or offensive today.



THE
OFFICIAL YEAR BOOK
OF
NEW SOUTH WALES.
1930-31.



PREFACE AND INDEX.

T. WAITES,
GOVERNMENT STATISTICIAN.

PUBLISHED BY AUTHORITY OF THE GOVERNMENT OF
NEW SOUTH WALES.

SYDNEY: ALFRED JAMES KENT, I.S.O., GOVERNMENT PRINTER.

1932.

Price 1 Vol.—Cloth, 7s. 6d. : Paper, 5s.

Separate Parts—On application.

*82311—a

Wholly Set up and Printed in New South Wales by the
Government Printer, Sydney, Year of Publication—1930.
Registered by the Postmaster General for transmission
through the post as a book.

PREFACE.

THIS is the thirty-eighth issue of the Official Year Book, which from the first issue in 1886 to 1904 was known as the "Wealth and Progress of New South Wales."

In order to render as prompt service as possible, the contents of the volume have been published already in eight parts, as they became available from the printer at dates between September, 1931, and August, 1932. Each part contains the latest information available at the time it was sent to press. Much of the text, therefore, relates to the year 1931.

Every care has been taken to keep the work free from errors, but if any be noticed by readers, notification regarding them would be appreciated.

A diagram map of New South Wales is published with the volume to show the railways, the land and statistical divisions, the shire boundaries, and the wheat belt. The boundaries of the statistical divisions coincide with those of Shires instead of Counties as in issues prior to 1923, because it is thought desirable that statistics generally should be compiled with the local governing area as the geographical unit. There are also a number of graphs and diagrams illustrating various economic factors.

The "Statistical Register of New South Wales," published annually from this Bureau, will prove serviceable to those who wish to obtain more details regarding the matters treated generally in this Year Book. The "Statistical Bulletin," issued quarterly, and the "Monthly Summary of Business Statistics" published monthly, contain a summary of the latest available statistics of the State.

My thanks are tendered to the responsible officers of the various State and Commonwealth Departments, and to others who have kindly supplied information, often at considerable trouble.

Finally, I wish to express my appreciation of the services rendered by those officers of the Bureau who have been associated with me in the preparation of this volume.

T. WAITES,
Government Statistician.

Bureau of Statistics,
Sydney, 12th August, 1932.

CONTENTS.

	PAGE.
Geography	1
Climate	5
Constitution and Government	17
Defence	34
History	36
Factories	39
Mines	78
Commerce	107
Shipping	126
Railways and Tramways	147
Motor Transport, etc.	173
Aviation	179
Posts and Telegraphs	180
Agriculture	2

Errata.

- Page 363, 4th line below table, for "18th," read "1st."
 Page 393, 19th line, for "April, 1930," read "January, 1930."
 Page 470, for 4th line from bottom read "two executions—both in 1924."
 Page 637, 7th line, for " $\frac{1}{300}$ " read " $\frac{1}{230}$."

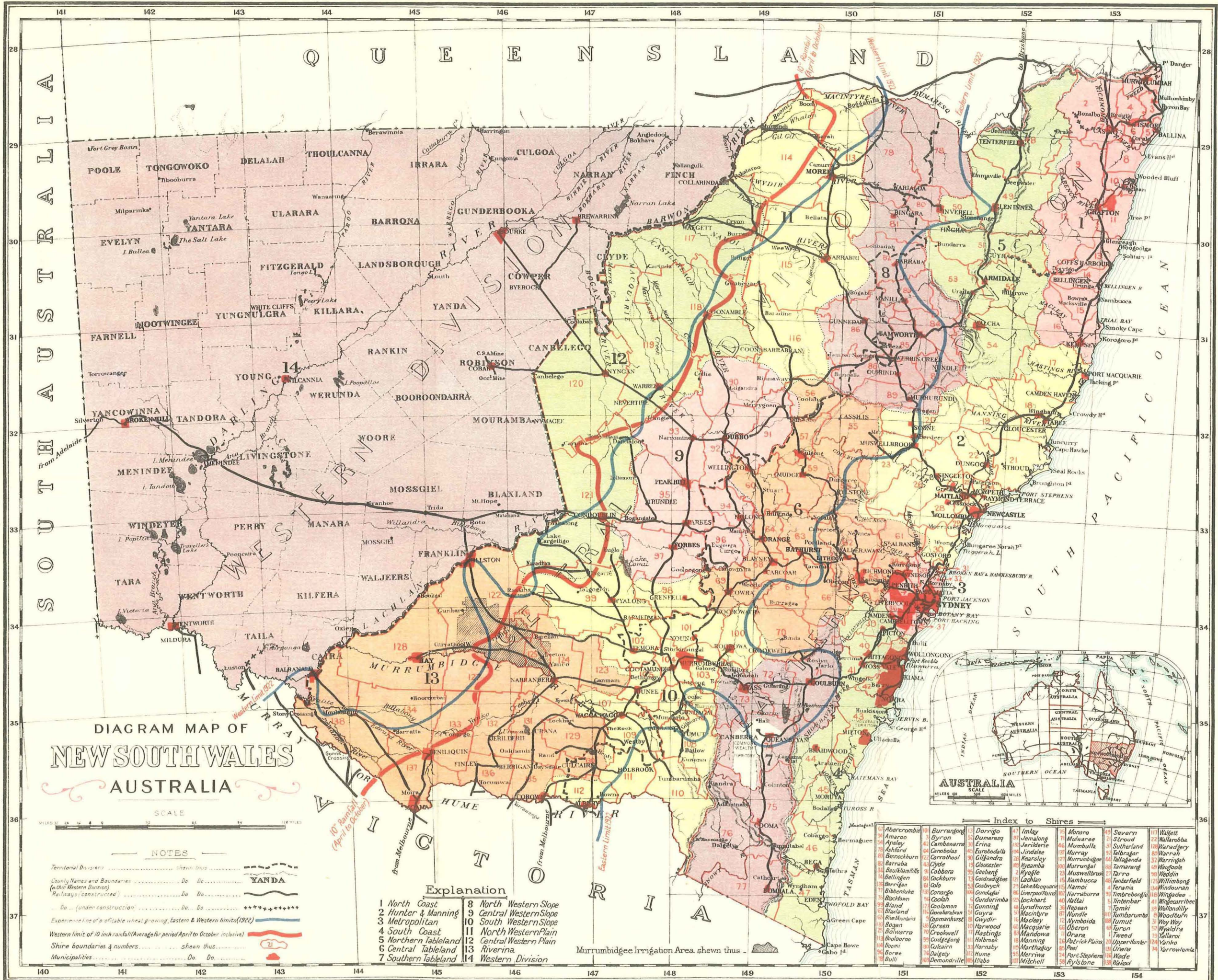
Land Legislation and Settlement	300
Social Condition	327
Education	361
Law Courts	414
Police	445
Prisons	467
Population	469
Vital Statistics	475
Food, Prices, Rents, and Cost of Living	495
Employment	549
Industrial Arbitration	577
Wages	589
Production	607
Industrial History	617
Public Finance	624
Private Finance	633
Local Government	687
General Index	743
Map of New South Wales	791
	<i>Frontispiece</i>

CONTENTS.

	PAGE.
Geography	I
Climate	5
Constitution and Government	17
Defence	34
History	36
Factories	39
Mines	78
Commerce	107
Shipping	126
Railways and Tramways	147
Motor Transport, etc.	173
Aviation	179
Posts and Telegraphs	180
Agriculture	185
Water Conservation and Irrigation.. .. .	237
Pastoral Industry	243
Dairying Industry	274
Forestry	298
Fisheries	302
Rural Settlement	306
Land Legislation and Settlement	327
Social Condition	361
Education	414
Law Courts	445
Police	467
Prisons	469
Population	475
Vital Statistics	495
Food, Prices, Rents, and Cost of Living	549
Employment	577
Industrial Arbitration	589
Wages	607
Production	617
Industrial History	624
Public Finance	633
Private Finance	687
Local Government	743
General Index	791
Map of New South Wales	<i>Frontispiece</i>

LIST OF GRAPHS.

	PAGE.
Temperature, Monthly—Mean	10
Rainfall, Monthly—Mean	11
Mineral Production—1890 to 1930.. .. .	88
Value of Tin, Copper, Iron, 1890 to 1930	89
Oversea Trade, 1895 to 1930-31	110
Oversea Imports—Country of Origin, 1905 to 1930-31.. .. .	125
Railways, 1890-91 to 1930-31	150
Principal Crops—Area, 1890-91 to 1929-30	189
Production, 1890-91 to 1929-30	190
Live Stock and Production of Wool, 1880 to 1929-30	244
Dairying Production, 1890 to 1929-30	283
Land Tenure, 1884, 1904, 1924	330
Population and Annual Increase, 1860 to 1930	482
Births, Deaths, Marriages, and Natural Increase—Rates, 1860 to 1930	501
Infantile Mortality, 1860 to 1930	511
Death Rates—Principal Diseases, 1875 to 1930	524
Prices and Wages—Index Numbers, Sydney, 1901 to 1931	572
Prices, Monthly—Butter, Wheat, Wool, Silver, and Lead, July, 1929, to April, 1932	622
Savings Banks, 1872 to 1931	707
Life Assurance—Ordinary Business, 1906 to 1931	726



GEOGRAPHY.

NEW SOUTH WALES is situated entirely in the temperate zone of the Southern Hemisphere, and is on the opposite side of the world from the seat of the British Empire, of which it forms a part. It is distant from London 11,200 miles by the Suez Canal—the shortest shipping route.

The name "New South Wales" was given to the eastern part of Australia (then known as New Holland) on its discovery by Captain Cook in 1770, and for fifty-seven years all Australian territory east of longitude 135° east was known by that name. In 1825, shortly after the separation of Tasmania (Van Diemen's Land), the western boundary was moved to longitude 129°. The steps by which the territory of the State assumed its present boundaries and dimensions are shown below:—

Date.	Nature of Territorial Adjustment.	Area involved in adjustment.	Area of New South Wales after adjustment §	Population of Territory known as New South Wales at end of year.
		sq. miles.	sq. miles.	
1788	New South Wales defined as whole of Australasia east of longitude 135° east.*	...	1,584,389	1,024
1825	Tasmania practically separated from New South Wales.	26,215	1,558,174	(26th Jan.).
1825	Western boundary of New South Wales moved to longitude 129° east.	518,134	2,076,308	33,500†
1836	South Australia founded as a separate colony.	309,850	1,766,458	78,929
1841	New Zealand proclaimed a separate colony...	103,862	1,662,596	145,303
1851	Victoria proclaimed a separate colony ...	87,884	1,574,712	197,265
1859	Queensland proclaimed a separate colony ...	554,300	1,020,412	327,459
1861-3	Northern Territory and territory between longitude 129° and 132° east separated.	710,040	310,372	377,712
1911	Federal Capital Territory ceded to Commonwealth.	912	309,460	1,701,736
1915	Territory at Jervis Bay ceded to Commonwealth.	28	309,432	1,895,603

* Literally interpreted, the boundaries defined included Fiji, Samoa, and some neighbouring islands.
† Approximate. § Exclusive of area of Pacific Islands, except New Zealand.

The area of New South Wales in the years 1788 to 1841, as shown above is approximate only.

BOUNDARIES AND DIMENSIONS.

The present boundaries of New South Wales are as follow:—On the east, the coastline from Point Danger to Cape Howe; on the west, the 141st meridian of east longitude; on the north, the 29th parallel of south latitude, proceeding east to the Barwon River, and thereafter along the Macintyre and Dumaresq Rivers to the junction with Tenterfield Creek; thence along the crest of a spur of the great Dividing Range, the crest of that range

north to the Macpherson Range, and along the crest of the Macpherson Range east to the sea; on the south, the southern bank of the Murray River to its source at the head of the river Indi, and thence by a direct marked line to Cape Howe.

From Point Danger, along a diagonal line, to the south-west corner of the State—a distance of 850 miles—the greatest dimension of the State is found. The length of coast, measured direct from Point Danger to Cape Howe, is 683 miles, the actual length of seaboard being 907 miles. The greatest breadth, measured along the 29th parallel of latitude, is 756 miles. The shortest dimension, along the western boundary, is about 340 miles.

AREA.

The total area of New South Wales, including Lord Howe Island, but excluding the Federal Territory, is 309,432 square miles, or 198,036,480 acres, being rather more than one-tenth of the area of Australia. About 4,639 square miles, or 2,969,080 acres, of the total surface are covered by water, including 176 square miles, or 112,750 acres, by the principal harbours. The area of Lord Howe Island is 5 square miles.

The area of New South Wales in relation to the total area of Australia is shown in the following statement:—

State or Territory.	Area.	Per cent. of total Area.
	sq. miles.	
New South Wales	309,432	10·40
Victoria	87,884	2·96
Queensland	670,500	22·54
South Australia	380,070	12·78
Western Australia	975,920	32·81
Tasmania	26,215	·88
Northern Territory	523,620	17·60
Federal Capital Territory	912	·03
Federal Territory at Jervis Bay ...	28	·00
Commonwealth	2,974,581	100·00

New South Wales is approximately three and a half times as large as Victoria, nearly twelve times as large as Tasmania, and one-sixth smaller than South Australia. Queensland is more than twice and Western Australia three times as large as New South Wales.

The following table shows the extent of the State of New South Wales and of the Commonwealth of Australia in comparison with the total area of all countries of the world, the British Empire, and certain individual countries:—

Country.	Area.	Ratio of Area to Area of New South Wales.	Ratio of Area to Area of Australia.
	sq. miles.		
New South Wales	309,432	1·000	·104
Commonwealth... ..	2,974,581	9·613	1·000
Great Britain	89,041	·288	·030
Canada	3,729,665	12·053	1·254
Argentina	1,153,119	3·729	·388
United States	3,026,789	9·782	1·018
British Empire	13,257,584	42·845	4·456
The World	52,055,879	168·231	17·500

LORD HOWE ISLAND.

Lord Howe Island is a dependency of New South Wales, and, for the purpose of representation in the State Parliament, is included in King, one of the metropolitan electorates; it is situated about 300 miles east of Port Macquarie, and 436 miles north-east of Sydney. The island was discovered in 1788; it is of volcanic origin, and Mount Gower, the highest point, reaches an altitude of 2,840 feet. The climate and soil are favourable to the growth of subtropical products, but on account of the rocky formation of the greater part of the surface of 3,220 acres, only about 300 acres are arable. The land has not been alienated, and is occupied rent free on sufferance, being utilised mainly for the production of *Kentia* palm seed. A Board of Control at Sydney manages the affairs of the island and supervises the palm seed industry. At the Census of 1921 the population numbered 111 persons.

PHYSICAL FEATURES.

An outline of the physiography of the State was published on pages 3 to 9 of the Official Year Book for 1929-30. More particular reference to the distribution of industries and settlement will be found in "Rural Settlement" of this or previous issues of the Year Book and in the chapters relating to individual industries. A map showing the distribution of rainfall, rural population, and the principal industries was published at page 728 of the Year Book for 1924.

Size of Rivers.

Owing to the existence of conflicting statements as to the lengths of the various rivers of the State steps were taken in 1926 by the Lands Department of New South Wales to compute the lengths of the principal rivers on a uniform basis. Considerable data were obtained from the results of surveys of the greater part of the Murray, Darling, Murrumbidgee and Lachlan Rivers and the remainder of the lengths were carefully measured on the standard parish maps. In every case the starting point was the furthest source of the river. The lengths as determined were as follow:—

Inland Rivers.	Length.	Coastal Rivers.	Length.	Coastal Rivers.	Length.
	miles.		miles.		miles.
Murray	1,609	Tweed	50	Wollomba	46
Darling	1,702	Richmond	163	Hunter	237
Murrumbidgee	981	Clarence	245	Hawkesbury	293
Lachlan	922	Bellinger	68	Shoalhaven	206
Bogan	451	Nambucca	69	Clyde	67
Macquarie	590	Macleay	250	Moruya	97
Castlereagh	341	Hastings	108	Tuross	91
Namoi	526	Camden Haven	33	Bega	53
Gwydir	415	Manning	139	Towamba	57

The relative magnitude of rivers as shown by the average annual volume of water which they carry may be ascertained in respect of some of the more important streams from the records of river gaugings, extending in some cases back to 1885.

The following comparison is based on the records of the period 1905-1924:—

River.	Gauging Station.	Distance from Source of River.	Drainage Area.	Average Annual Run off of Water.
		miles.	sq. miles.	acre-feet.
Murray	Tocumwal	435	10,160	5,072,618
Murrumbidgee	Wagga	396	10,700	2,850,856
Darling	Menindie	1,383	221,700	1,620,194
Macquarie	Narromine	318	10,090	623,180
Lachlan... ..	Condobolin	380	10,420	411,875
Namoi	Narrabri	302	9,820	408,387

In making the comparison gauging stations have been selected with drainage areas of approximately equal extent, except in the case of the Darling. The range of choice has been limited by the number of stations with available records. In the case of the Lachlan River the average run-off at Forbes, 126 miles above Condobolin, is 584,582 acre-feet per annum. Similar particulars are not available in respect of coastal rivers, except the Hunter, which at Singleton has a draining area of 6,580 square miles and an average annual run-off of 609,636 acre-feet of water. An acre-foot of water is such a quantity as would cover an acre of land to a uniform depth of 1 foot.

CLIMATE.

NEW South Wales is situated entirely in the temperate zone, and its climate is generally mild and equable, and free from extremes of heat and cold. Abundant sunshine is experienced in all its seasons. On an average the capital city is without sunshine on only twenty-three days per year, and the average range of temperature between the hottest and coldest months is only about 17° Fah. In the hinterland there is even more sunshine, and the range of temperature is greater, but observations with the wet bulb thermometer show that the temperature is not maintained at so high a level as to be detrimental to the health and physique of persons engaged in outdoor labour in any part of the State.

Practically the whole of New South Wales is subject to the bracing influence of frosts during five or more months of the year. Snow has been known to fall over nearly two-thirds of the State, but its occurrence is comparatively rare except in the tableland districts. Perennial snow is found only on the highest peaks of the southern tableland.

The seasons are not so well defined in the western interior as on the coast. They are generally as follows:—Spring during September, October, and November; summer during December, January, and February; autumn during March, April, and May; winter during June, July, and August.

Meteorological Observations.

Meteorological observations are directed from Sydney as the centre of a subdivision of Australia, embracing the whole of the State of New South Wales. Climatological stations are established at a number of representative towns, and rainfall recording stations at most centres.

Weather observations are telegraphed daily to the Meteorological Bureau, Sydney, where bulletins, rain maps and isobaric charts are prepared and issued for public information. Weather forecasts for the State, sections of the State and the Metropolitan Area are prepared daily, telegraphed to country centres and disseminated through the press and broadcasting companies. Forecasts of conditions over the ocean and for aviation purposes are also issued daily. On request, detailed forecasts of conditions likely to effect any particular area or function can be obtained free of charge from the Divisional Meteorologist and, if required, the advice will be telegraphed on payment of the cost of the message.

When occasion warrants, flood and storm warnings are issued to the press, broadcasting companies and to public departments, enabling precautions to be taken wherever possible.

Particulars of meteorological observations at various stations in New South Wales are published annually in the Statistical Register of New South Wales.

Winds.

The weather in New South Wales is determined chiefly by anticyclones, or areas of high barometric pressure, with their attendant tropical and Antarctic depressions, in which the winds blow spirally outward from the

centre or maximum. These anticyclones pass almost continually across the face of the continent of Australia from west to east, and the explanation of the existence of such high-pressure belts lies probably in the fact that this area is within the zone in which polar and equatorial currents meet and circulate for some time before flowing north and south. The easterly movement depends on the revolution of the earth.

A general surging movement occasionally takes place in the atmosphere, sometimes towards, and sometimes from, the equator. The movement causes sudden changes in the weather—heat when the surge is to the south, and very cold weather when it moves towards the equator. Probably these sudden displacements of the air systems are due to thermal action, resulting in expansion or contraction in the atmospheric belts to the north and south of Australia.

New South Wales is peculiarly free from cyclonic disturbances, although occasionally a cyclone may result from monsoonal disturbances, or may reach the State from the north-east tropics or from the Antarctic low-pressure belt which lies to the south of Australia.

In the summer months the prevailing winds on the coast of New South Wales blow from the north, with an easterly tendency which extends to, and in parts beyond, the highlands; in the western districts the winds are usually from the west. Southerly winds, which are characteristic of the summer weather on the coast, occur most frequently during the months from September to February, and between 7 p.m. and midnight. These winds, which blow from the higher southern latitudes, cause a rapid fall in temperature, and are sometimes accompanied by thunderstorms.

During winter, the prevailing direction of the wind is westerly. In the southern areas of the State the winds are almost due west, but proceeding northwards there is a southerly tendency, while on reaching latitudes north of Sydney the direction is almost due south. When they reach the north-eastern parts of the State, these winds are deflected in a westerly direction, and are merged in the south-east trade winds north of latitude 30°. During the cold months of the year, Australia lies directly in the great high-pressure stream referred to previously, and the high pressure when passing over the continent tends to break up into individual anticyclonic circulations.

Rainfall.

New South Wales is dominated by two rain belts—the tropic and the Antarctic. The amount of rainfall varies very greatly over the wide expanse of territory, the average decreasing from more than 80 inches per annum in the north-eastern corner to less than 7 inches in the north-western corner. Rainfall plays a very powerful part in determining the character of settlement. Its effects can be gauged only in a general way from annual averages because factors such as seasonal distribution and reliability exercise an important modifying influence.

The coastal districts receive the largest annual falls, ranging from an average of 30 inches in the south to 80 inches in the extreme north. Despite their proximity to the sea, the mountain chains are not of sufficient elevation to cause any great condensation; so that, with slight irregularities, the average rainfall gradually diminishes towards the north-western limits of the State.

An approximate classification of areas in New South Wales (including the Federal Territory) in accordance with the average annual rainfall shows the following distribution:—

Annual Rainfall.	Area.		Proportion per cent. of total area.	Annual Rainfall.	Area.		Proportion per cent. of total area.
	Sq. Miles.	Acres.			Sq. Miles.	Acres.	
inches. Over 70	668	427,520	·2	inches. 20 to 30	77,202	49,409,280	24·8
60 to 70	1,765	1,129,600	·6	15 to 20	57,639	36,888,960	18·6
50 to 60	4,329	2,770,560	1·4	10 to 15	77,268	49,451,520	24·9
40 to 50	15,804	10,114,560	5·1	Under 10	44,997	28,798,080	14·5
30 to 40	30,700	19,648,000	9·9	Total ..	310,372	198,638,080	100·0

Approximately 42 per cent. of the area of the State receives rains exceeding on the average 20 inches per year. Over the greater part of the State the annual rainfall varies on the average between 20 per cent. and 35 per cent. from the mean, but in the south-eastern corner the degree of variation is less and in the north-western quarter it is more. Protracted periods of dry weather in one part or another are not uncommon, but simultaneous drought over the whole territory of the State has been experienced only very rarely.

Three clearly defined seasonal rain-belts cut diagonally across the State from west to east with a southerly incline. A winter rain region, which includes the southern portion of the Western Plains and about two-thirds of the Riverina, is bounded on the north by a direct line from Broken Hill to Wagga with a curve around Albury. A summer rain region, including the whole of the northern subdivisions, is bounded on the south by a line which waves regularly, first south and then north of a direct line from the north-western corner of the State to Newcastle. Between these, where the two dominating rain-belts merge, there extends a region, including the central and south-eastern portions of the State, where the rains are non-seasonal. A narrow coastal strip between Nowra and Broken Bay receives its heaviest rains in the autumn.

The chief agencies causing rainfall are Antarctic depressions, monsoonal depressions, and anticyclonic systems. Antarctic depressions are the main cause of the good winter rains in the Riverina and on the South-western Slope. A seasonal prevalence of this type of weather would cause a low rainfall on the coast and tablelands, and over that portion of the inland district north of the Lachlan River. A monsoonal prevalence ensures a good season inland north of the Lachlan, but not necessarily in eastern and southern areas. An anticyclonic prevalence results in good rains over coastal and tableland districts, but causes dryness west of the mountains.

The distribution of rainfall is dependent on three factors—(1) the energy present in the atmospheric systems, (2) the rate of movement of the atmospheric stream, and (3) the prevailing latitudes in which the anticyclones are moving.

A map published on page 728 of the 1924 edition of this Year Book shows diagrammatically the distribution of rainfall in New South Wales.

Records of Rainfall.

Records of annual rainfall at individual stations in New South Wales are published in the Statistical Register of New South Wales annually. Detailed records over a period of years are contained in the Statistical Register for 1924-25.

Summary tables indicating the average rainfall of the principal districts of New South Wales are published in this section (pages and). The first table shows the average amount of rainfall registered at recording stations in each of thirty topographical divisions of New South Wales during each of the past ten years in comparison with the mean annual rainfall for each division over a long period of years. The second table shows the mean monthly averages or normal rainfall in each division on the basis of the actual rainfall recorded at the various stations over a long period of years.

These tables indicate in some degree the variability of annual rainfall in various parts of the State as well as the seasonal and divisional distribution.

NEW SOUTH WALES.

Average Annual Rainfall in Divisions.

Division.		Mean Annual Rainfall, in inches.	Average Rainfall (in inches) in District for Years—									
			1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
Coast—												
North ...	N	55.33	84.83	46.95	32.14	51.62	80.20	45.61	68.97	54.53	66.61	66.04
	S	56.35	103.18	61.21	55.15	49.50	69.40	45.74	60.13	67.27	77.58	58.99
Hunter and Manning	N	50.13	66.88	59.62	36.94	47.18	49.82	42.58	60.27	46.66	84.22	68.81
	S	34.72	49.12	31.59	26.20	38.33	31.29	38.79	39.69	34.45	39.78	29.02
Metropolitan Area	...	42.69	43.34	37.49	35.37	36.48	47.16	35.72	48.22	37.83	51.21	41.79
Balance of Cumberland	N	30.02	37.00	25.13	16.05	27.66	28.74	25.73	28.76	25.37	37.57	25.19
South ...	N	41.02	45.99	42.24	36.48	35.43	51.14	33.55	42.07	43.95	52.63	38.83
	S	35.36	38.88	39.72	24.79	34.25	47.92	27.86	39.33	37.35	44.54	32.68
Tablelands—												
North ...	E	37.63	54.86	31.06	25.78	44.85	48.42	24.96	46.84	49.95	37.05	42.50
	W	31.25	47.75	24.91	21.72	37.93	29.13	26.95	27.48	36.82	30.06	29.96
Central ...	N	25.65	35.25	16.63	17.53	29.75	16.46	39.65	20.21	26.40	18.44	28.25
	S	34.84	42.58	30.54	27.96	33.44	34.10	36.17	32.33	36.12	35.59	34.12
South ...	N	24.57	29.51	28.08	24.09	26.07	33.65	22.85	22.21	24.55	26.51	20.69
Kosciusko Plateau...	...	40.24	41.90	35.18	45.12	42.15	38.70	36.88	31.96	36.07	32.17	32.86
Slopes—												
North ...	N	26.31	40.97	19.76	18.04	30.98	24.14	18.28	24.29	26.55	24.94	28.72
	S	26.17	37.62	19.92	18.67	30.80	19.59	23.00	19.20	27.85	19.76	24.58
Central ...	N	24.99	34.48	12.90	18.04	26.35	17.65	36.50	17.50	22.65	17.61	26.87
	S	22.67	26.29	15.90	18.56	25.61	23.05	30.05	18.29	21.73	17.50	23.24
South ...	N	22.44	22.49	18.04	24.54	25.27	24.25	23.21	17.77	25.11	17.98	20.99
	S	30.00	32.96	24.74	32.24	36.38	28.00	31.44	21.34	26.84	21.29	28.41
Plains—												
North ...	E	23.12	36.56	19.46	15.31	26.41	18.52	20.93	17.22	22.01	20.61	20.23
	W	19.85	31.13	15.15	14.20	25.62	18.82	19.58	18.49	17.39	12.58	18.83
Central ...	N	18.17	25.39	10.57	13.51	21.85	20.88	20.92	12.82	16.47	9.35	20.66
	S	17.67	20.35	10.34	13.61	20.45	21.34	20.49	15.64	22.95	12.63	18.78
Riverina ...	E	17.85	21.08	12.59	18.23	11.55	18.00	19.28	11.60	20.00	14.07	19.26
	W	13.66	16.10	10.07	13.83	8.63	12.34	13.50	8.41	13.76	11.38	16.11
Western Division—												
Eastern half ...	N	13.68	20.87	7.41	8.02	14.04	13.24	16.13	9.51	10.57	5.69	14.14
	S	13.21	14.43	8.98	12.88	14.75	14.22	12.31	7.05	13.34	9.27	14.69
Western half ...	N	8.29	9.64	4.81	8.02	5.65	9.18	7.52	4.37	7.74	4.00	12.13
	S	10.22	15.43	6.96	10.51	8.37	8.36	9.97	4.66	8.90	6.13	9.45

NOTE.—The main divisions (Coast, Tablelands, Slopes and Plains) divided into Northern, Central and Southern sections, refer to areas delineated on the map forming the frontispiece of this Year Book. For purposes of this table these are again subdivided into northern or southern or eastern and western sectors indicated above by the letters "N," "S," "E," or "W" respectively.

NEW SOUTH WALES.

Average Monthly Rainfall in Divisions.

Division.		Mean of Average Monthly Rainfall (in inches) Period ended 1930.											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Coast—													
North	N	6.78	6.55	7.36	5.56	5.19	4.11	3.84	2.70	2.64	2.88	3.77	4.73
	S	6.53	6.95	7.31	6.49	5.23	4.22	3.62	2.58	2.73	3.56	3.83	4.76
Hunter and Manning	N	4.68	5.52	5.23	5.18	5.15	3.92	4.27	3.11	3.15	3.02	3.33	4.50
	S	3.31	3.23	3.54	3.36	2.80	2.76	3.16	2.18	2.43	2.27	2.52	3.50
Metropolitan Area	...	3.86	3.31	3.97	4.96	4.40	3.07	3.97	2.12	2.35	2.66	2.58	3.31
Balance of Cumberland	...	3.11	2.98	3.22	2.82	2.57	2.25	2.99	1.85	1.75	2.07	2.25	2.90
South	N	4.07	3.61	4.09	4.13	4.14	3.66	4.31	2.45	2.52	2.66	2.58	3.53
	S	3.65	3.57	3.81	2.90	3.30	3.19	2.76	1.94	2.52	2.46	2.36	3.02
Tablelands—													
North	E	5.42	5.22	5.00	3.98	2.12	2.36	1.92	1.30	1.80	2.56	3.29	4.16
	W	3.88	3.02	2.34	1.85	1.72	2.55	2.15	1.95	2.08	2.47	3.08	3.67
Central	N	2.43	2.09	2.21	1.86	1.83	2.44	1.93	1.93	1.99	2.04	2.25	2.71
	S	3.46	2.98	3.32	2.70	2.56	3.18	2.94	2.46	2.41	2.56	2.61	3.11
South	...	2.50	2.03	2.22	1.66	1.94	2.25	2.07	1.82	1.99	2.07	1.93	2.35
Kosciusko Plateau	...	3.03	2.47	2.69	2.18	3.12	3.78	3.30	3.06	3.71	3.61	2.73	3.08
Slopes—													
North	N	3.42	2.73	2.48	1.72	1.63	2.12	1.80	1.59	1.55	2.12	2.41	2.96
	S	2.80	2.45	2.46	1.82	1.54	2.14	1.77	1.78	1.73	1.93	2.41	3.01
Central	N	2.55	2.32	2.14	1.88	1.80	2.26	2.12	1.79	1.76	1.65	2.06	2.71
	S	2.12	1.63	1.88	1.72	1.72	2.32	1.87	1.93	1.82	1.73	1.74	2.18
South	N	1.86	1.41	1.74	1.65	1.79	2.60	2.11	2.06	1.93	1.90	1.62	1.92
	S	1.94	1.64	2.19	2.05	2.59	3.90	3.09	3.09	2.69	2.73	1.98	2.11
Plains—													
North	E	2.63	2.38	2.19	1.56	1.62	2.05	1.69	1.37	1.39	1.60	2.11	2.70
	W	2.42	2.18	1.86	1.31	1.40	1.82	1.34	1.08	1.03	1.28	1.72	2.36
Central	N	1.87	1.66	1.57	1.54	1.34	1.72	1.37	1.29	1.14	1.14	1.50	1.87
	S	1.78	1.45	1.40	1.47	1.35	1.98	1.43	1.40	1.34	1.25	1.39	1.66
Riverina	E	1.23	1.22	1.35	1.23	1.62	2.19	1.63	1.75	1.61	1.64	1.22	1.26
	W	1.01	0.90	0.99	0.95	1.37	1.64	1.14	1.22	1.16	1.15	1.02	1.03
Western Division—													
Eastern half	N	1.56	1.49	1.23	0.92	1.02	1.26	0.88	0.81	0.82	0.95	1.19	1.51
	S	1.11	1.02	1.04	0.88	1.23	1.44	1.05	1.17	1.10	1.06	0.97	1.19
Western half	N	0.82	0.84	0.79	0.51	0.69	0.87	0.55	0.53	0.53	0.68	0.65	0.92
	S	0.69	0.82	0.71	0.65	1.07	1.22	0.75	0.93	0.86	0.85	0.77	0.85

For description of divisions see footnote to previous table.

Evaporation.

In New South Wales the amount of evaporation is so great as to make it a climatic element only second in importance to rainfall in its influence upon the State. Results so far obtained show that the rate of evaporation (measured by the loss from exposed water) increases from 40 inches per annum on the coast to nearly 100 inches in the north-western corner of the State, that is, the amount of evaporation is inversely related to the rainfall of the respective districts. Indeed, only on a small coastal patch in the north-eastern corner does the rainfall exceed the evaporation measured as above. This fact sheds light on the special needs of New South Wales in conserving surface water and soil moisture not only for successful agriculture, but also in connection with pastoral pursuits.

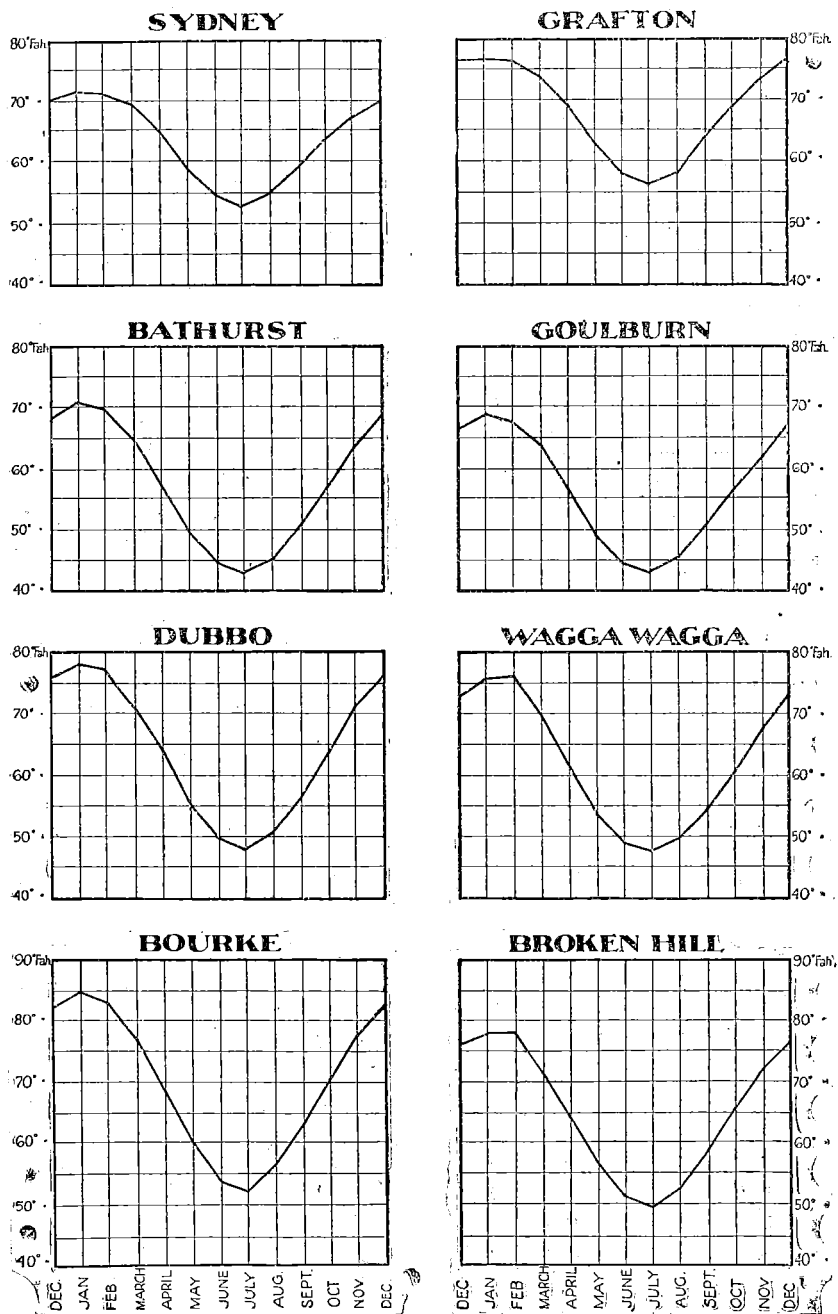
CLIMATIC DIVISIONS.

The territory of New South Wales may be divided into four climatic divisions, which correspond with the terrain—the Coast, the Tablelands, the Western Slopes of the Dividing Range, and the Western Plains.*

The northern parts of the State are generally warmer than the southern, the difference between the average temperatures of the extreme north and

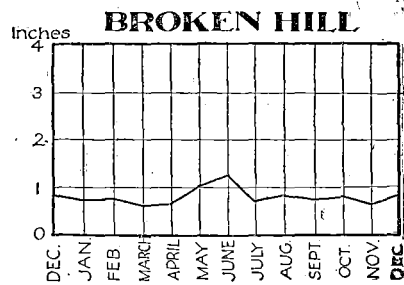
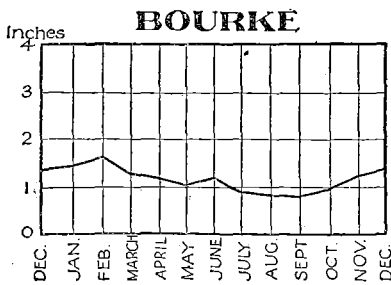
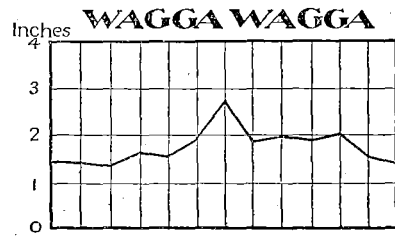
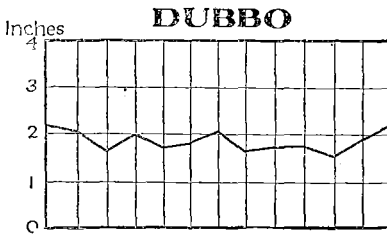
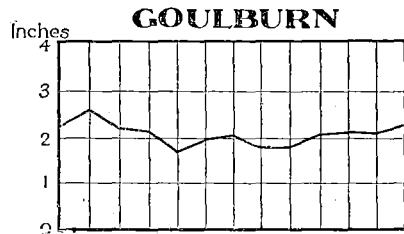
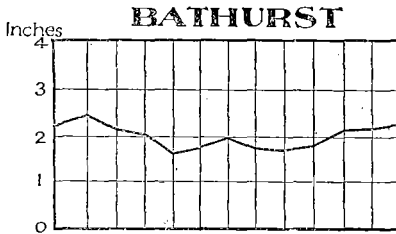
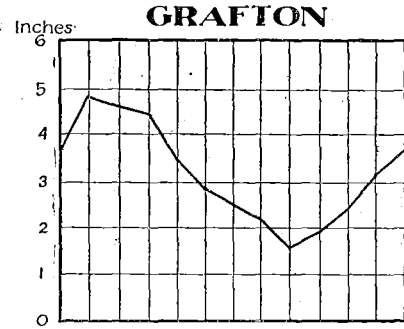
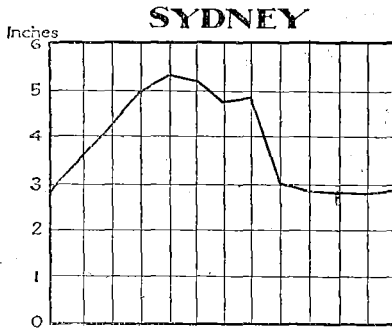
*See map in frontispiece.

MEAN MONTHLY TEMPERATURE.



The graph shows Mean Temperature in shade (Deg. Fah.) at each station over a series of years.

MONTHLY RAINFALL.



The graph shows Average Monthly Rainfall (inches) at each station over a series of years.

south being about 7° on the coast, 5° on the tablelands, and 6° on the slopes and plains. It should be noted, however, that the length of the State decreases from nearly 700 miles on the coast to about 340 miles on the western boundary. From east to west the average mean annual temperatures vary little except where altitudes are different, but usually the summer is hotter and the winter colder in the interior than on the coast. Thus at Sydney the average temperatures range from 71° in summer to 54° in winter, as compared with 76° in summer and 51° in winter at Wentworth in the same latitude in the western interior. Similar variations are found in the north. The mean daily range at any station is seldom more than 30° or less than 13° .

Coastal Division.

In the Coastal Division, which lies between the Pacific Ocean and the Great Dividing Range, the average rainfall is comparatively high and regular, and the climate, though more humid, is generally milder than in the interior.

The following table shows the meteorological conditions of the principal stations in the Coastal Division, arranged in the order of their latitude. These stations are representative of the whole division, and the figures are the average of a large number of years:—

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual, 1909–1928.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
<i>North Coast—</i>									
Lismore	13	52	66·7	75·0	56·7	22·4	113·0	23·0	48·67
Grafton	22	21	67·8	76·2	57·6	24·7	114·0	24·9	34·51
<i>Hunter and Manning—</i>									
Singleton	40	135	64·1	76·1	52·1	20·3	113·9	22·0	26·80
West Maitland	18	40	64·4	74·7	53·2	21·4	114·0	28·0	34·36
Newcastle	1	34	64·6	72·2	55·5	14·9	110·5	31·0	43·40
Sydney	5	138	63·1	71·0	54·1	15·8	108·5	35·9	45·06
<i>South Coast—</i>									
Wollongong	0	54	63·0	70·2	54·8	17·0	106·0	33·6	50·39
Nowra	6	30	62·8	71·1	54·0	19·9	110·0	32·6	40·48
Moruya Heads	0	50	61·0	67·9	53·0	18·3	114·8	22·6	34·37
Bega	8	50	60·0	69·0	49·9	26·5	109·0	20·0	36·04

Taking the coast as a whole, the difference between the mean summer and mean winter temperature is about 19° only.

The North Coast districts are favoured with a warm, moist climate, the rainfall being from 40 to 80 inches annually. The mean temperature for the year is from 66° to 69° , the summer mean being 75° to 77° , and the winter mean 56° to 59° . On the South Coast the rainfall varies from 30 to 60 inches, and the mean temperature ranges between 60° and 63° , the summer mean being from 66° at the foot of the ranges to 70° on the sea coast, and the winter from 48° to 55° over the same area.

Coastal rains come from the sea with both south-east and north-east winds, being further augmented in the latter part of the year by thunderstorms from the north-west.

Sydney is situated on the coast half-way between the extreme northern and southern limits of the State. Its mean annual temperature is 63° Fahrenheit. The mean seasonal range is only 17°, calculated over a period of seventy-two years, the mean summer temperature being 71°, and the mean winter temperature 54°.

The following table shows the average meteorological conditions of Sydney, based on the experience of the seventy-two years ended 1930:—

Month.	Hourly Average Reading of Standard Barometer, corrected to 32° Fah.; Standard Gravity and Mean Sea Level.	Temperature (in shade).			Rainfall.			
		Mean Standard.	Average Reading of Maximum Thermometer.	Average Reading of Minimum Thermometer.	Average.	Greatest.	Least.	Average number of days Rain.
		°	°	°	inches.	inches.	inches.	
January ...	29·897	71·6	78·4	64·9	3·62	15·26	0·32	14
February..	29·943	71·3	77·7	65·0	4·28	18·56	0·34	14
March ...	30·012	69·3	75·7	62·9	4·96	18·70	0·42	15
April ...	30·072	64·7	71·3	58·1	5·51	24·49	0·06	13
May ...	30·080	58·8	65·5	52·1	5·22	23·03	0·18	15
June ...	30·062	54·7	61·1	48·3	4·85	16·30	0·19	12
July ...	30·071	52·8	59·7	45·9	4·79	13·21	0·12	12
August ...	30·069	55·1	62·7	47·5	2·94	14·89	0·04	11
September	30·008	59·2	67·0	51·4	2·76	14·05	0·08	12
October ...	29·967	63·6	71·3	55·8	2·91	11·14	0·21	12
November	29·939	67·0	74·4	59·6	2·79	9·88	0·07	12
December	29·881	70·1	77·2	62·9	2·85	15·82	0·23	13
Annual ...	30·000	63·2	70·2	56·2	47·48	82·76	23·01	155

Tablelands.

On the Northern Tableland the rainfall is consistent, ranging from 30 inches in the western parts to 40 inches in the eastern. The temperature is cool and bracing, the annual average being between 56° and 60°; the mean summer temperature lies between 67° and 72°, and the mean winter between 44° and 47°. The Southern Tableland is the coldest part of the State, the mean annual temperature being about 56°. In summer the mean ranges from 56° to 70°, and in winter from 33° to 44°. At Kiandra, the elevation of which is 4,640 feet, the mean annual temperature is 44·4°. Near the southern extremity of the tableland, on the Snowy and Muniong Ranges, the snow is usually present throughout the year.

The statement below shows, for the Tableland districts, particulars of average temperature and rainfall at typical stations over a period of years:—

Station.	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual, 1900-1928.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
<i>Northern Tableland—</i>	miles.	feet.	°	°	°	°	°	°	inches.
Tenterfield	80	2,827	58·6	68·7	46·9	24·2	101·0	18·0	30·28
Inverell	124	1,980	59·6	71·2	47·0	29·6	105·5	14·0	29·32
Glen Innes	90	3,518	56·2	66·8	44·3	24·5	101·4	16·0	30·88
<i>Central Tableland—</i>									
Cassilis (Dalkeith) ...	120	1,500	60·1	72·0	47·5	24·4	109·5	19·0	22·15
Mudgee	121	1,635	60·0	72·4	47·0	28·5	108·0	15·0	24·88
Bathurst	96	2,200	57·2	69·7	44·3	27·9	112·9	13·0	23·65
Katoomba	58	3,349	53·8	63·2	43·2	15·3	98·0	26·5	52·88
<i>Southern Tableland—</i>									
Crookwell	81	2,000	52·8	63·9	41·3	22·1	100·0	20·0	34·05
Goulburn	54	2,129	56·1	67·8	44·1	23·6	111·0	13·0	24·23
Yass	92	1,657	57·2	70·2	44·9	24·4	108·0	21·0	23·72
Kiandra	88	4,640	44·4	55·7	32·6	20·8	91·0	4 below zero	62·67
Bombala	37	3,000	52·9	63·1	42·0	24·2	100·5	17·0	24·91

Western Slopes.

On the Western Slopes the rainfall is distributed uniformly, varying from an annual average of 20 inches in the western parts to 30 inches in the eastern; the most fertile part of the wheat-growing area of the State is situated on the southern part of these slopes, where the average rainfall is about 25 inches per annum. The mean annual temperature ranges from 63° in the north to 59° in the south; in the summer from 81° to 73°, and in the winter from 53° to 46°.

North of the Lachlan River, good rains are expected from the monsoonal disturbances during February and March, although they may come as late as May, and at times during the remainder of the year. These monsoonal or seasonal rains are caused by radiation in the interior of Australia during the summer months, when the heat suspends the moisture accumulated chiefly from the Southern Ocean.

In the Riverina district, south of the Murrumbidgee generally, and on the South-western Slopes, fairly reliable rains, light but frequent, are experienced during the winter and spring months.

The next statement gives information as to average temperature and rainfall for the principal stations on the Western Slopes over a period of years:—

Station	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual, 1900-1928.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
<i>North Western—</i>	miles.	feet.	°	°	°	°	°	°	inches.
Moree	204	680	67·5	80·2	53·4	29·0	117·0	24·0	22·55
Bingara	153	1,200	64·2	77·1	50·4	28·7	112·5	16·0	30·22
Quirindi	115	1,278	61·8	74·0	48·4	30·1	107·6	13·0	26·51
<i>Central Western—</i>									
Dubbo	177	863	63·6	77·4	49·5	27·9	115·4	16·9	21·27
<i>South Western—</i>									
Young	140	1,416	59·4	72·9	46·2	25·3	109·0	21·9	24·40
Wagga Wagga	158	615	62·0	75·7	48·3	25·3	116·8	22·0	20·95
Urana	213	400	63·2	76·6	49·4	26·6	113·0	27·0	17·48
Albury	175	531	60·8	74·3	47·8	27·1	117·3	19·9	27·27

Western Plains.

The Western District consists of a vast plain, its continuity being broken only by the Grey and Barrier Ranges. Owing to the absence of mountains in the interior, the annual rainfall over a great part of this division, which lies in the zone of perpetual high pressure, does not exceed 10 inches. It increases from 7 inches on the north-western boundary of the State to 10 and 15 inches along the Darling River, and 20 inches on the eastern limits of the plain country. The mean annual temperature ranges from 69° in the north to 62° in the south; in the summer from 84° to 75°, and in the winter from 54° to 49°.

The summer readings of the thermometer in this district are from 10° to 20° higher than those on the coast. Excessive heat is experienced occasionally during the summer season, its occurrence in all probability being due to a temporary stagnation in the easterly atmospheric drift. Under normal conditions, air entering Western Australia with a temperature of 70° or 80° accumulates only 20° to 25° by contact with the radiation from the soil during its passage across the continent to the western districts of New South Wales.

The winter, with an average temperature over 49°, accompanied by clear skies and an absence of snow, leaves little to be desired from the standpoint of health; while, owing chiefly to the dryness of the climate, these inland regions produce merino wool of the highest quality.

The meteorological conditions of the Western Plains and the Riverina division will be seen from the following statement, corresponding to those given already for the other divisions of the State:—

Station	Least Distance from East Coast.	Altitude.	Temperature (in Shade).						Rainfall— Mean Annual, 1908-1922.
			Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	
	miles.	feet.	°	°	°	°	°	°	inches.
Brewarrina ...	345	430	68·6	82·4	53·8	26·7	120·0	28·0	14·03
Bourke ...	386	350	69·2	83·5	54·1	27·5	127·0	25·0	11·49
Wilcannia ...	473	246	66·5	80·2	52·3	26·2	120·8	21·8	9·21
Broken Hill ...	555	1,000	64·7	77·7	51·4	23·2	115·9	28·5	10·18
Condobolin ...	227	700	65·2	78·9	51·2	26·9	115·0	20·0	16·64
Wentworth ...	478	144	63·8	76·5	51·6	24·5	117·0	21·0	11·81
Hay ...	309	291	63·1	76·0	50·3	26·8	117·3	22·9	13·46
Deniliquin ...	287	268	62·0	74·7	49·6	25·1	116·5	22·0	15·53

OBSERVATORY.

Sydney Observatory, lat. 33° 51' 41·1" south, long. 151° 12' 23·1" east, established in the year 1856, is a State institution. The work of the Observatory is astronomical and the principal instruments are the transit circle, astrophotograph, equatorial, and seismograph. Owing to the unsuitableness of the atmosphere in Sydney the astrograph has been removed to Pennant Hills. The principal scientific work is the determination of the position,

distribution, and movement of stars in the region allotted to Sydney (viz., 52° to 65° south declination) in the great international scheme. In addition, occasional observations, such as those of comets, are made with the equatorial, and systematic records of earth tremors are sent to the Earthquake Committee of the British Association for the Advancement of Science. Practical work embraces the determination and notification of the standard time of the State; correspondence of an educational nature on astronomical matters, and day and evening reception of visitors interested in astronomy.

The activities of the Observatory were restricted to the more important branches of research work as from July, 1926.

STANDARD TIME.

The mean time of the 150th meridian of east longitude, or 10 hours east of Greenwich, has been adopted as the standard time in New South Wales, which is, therefore, 10 hours ahead of the standard time adopted in England. In the district of Broken Hill, South Australian standard time is generally observed, viz., $142\frac{1}{2}^{\circ}$ of east longitude, or 9 hours 30 minutes east of Greenwich. In the States of Queensland, Victoria, and Tasmania, the standard time is the same as in New South Wales. In Western Australia the standard time is the 120° of east longitude, or 8 hours east of Greenwich.

TIDES.

A self-recording tide-gauge has been in operation at Fort Denison, in Port Jackson, since 1867. The tidal datum adopted is Low Water, Ordinary Spring Tide. Taking this as zero, the mean sea-level is 2.52 feet; ordinary low water, 0.78 feet; ordinary high water, 4.20 feet; and the mean daily range is 3 feet 5 inches. The lowest tide was recorded on 16th July, 1916, when the gauge fell 1 foot 3 inches below datum. The highest tide was recorded on 26th May, 1880, viz., 7 feet $6\frac{1}{2}$ inches; in 1876 the gauge recorded 7 feet $4\frac{1}{2}$ inches on 22nd June, and 7 feet 3 inches on 21st July. On 3rd August, 1921, the gauge registered 7 feet 2 inches, and on that day occurred the greatest tidal range on record—6 feet $9\frac{1}{2}$ inches.

At Port Hunter the average rise and fall of ordinary tides is 3 feet 3 inches, and of spring tides 5 feet $4\frac{1}{2}$ inches; the greatest range being 6 feet 5 inches. The highest tide registered was 7 feet 4 inches in May, 1898.

On the coast the average rise of spring tides is 5 feet 6 inches approximately.

CONSTITUTION AND GOVERNMENT.

THERE are in New South Wales three administrations, viz., the Federal, whose seat is in the Federal Capital at Canberra (New South Wales), and which controls matters affecting the interests of Australia as a whole; the State, which meets in Sydney and deals with the more important questions of State and local interest; and the Local Government bodies, whose headquarters are at convenient centres within their areas, in which they control matters of purely local concern—these areas extend over nearly two-thirds of the State.

The State Government is the oldest, dating in its present form from 1856. Its constitution was modified in 1901, when the Federal Government was established, and in 1906, when Local Government was extended over its present area.

Early Forms of Government.

A brief account of the early forms of government in New South Wales and of the introduction of the existing system was published in the Year Book for 1921, at page 25. An account of the Commonwealth Government may be found in the same edition at page 38.

PRESENT SYSTEM OF STATE GOVERNMENT.

The Constitution of New South Wales is not framed completely in the Constitution Act of 1902, and is not entirely written. It is drawn from several diverse sources, viz., certain Imperial statutes, such as the Colonial Laws Validity Act (1865) and the Commonwealth of Australia Constitution Act (1900); the Letters Patent and the Instructions to the Governor; an element of inherited English law; some Federal statutes; including amendments to the Commonwealth of Australia Constitution Act; certain State statutes; numerous legal decisions; and a large element of English and local convention.

The Imperial Parliament is legally omnipotent in local as well as in Imperial affairs, and it may exercise effective control over the affairs of the State by direct legislation and some indirect control through the Secretary of State for the Colonies, by whom the Governor is directed in the exercise of his powers. Imperial legislation forms the basis of the existing Constitution, and the Imperial Parliament regulates all matters of Imperial concern in addition to controlling the extensive powers which remain vested in the Crown by virtue of its prerogative. These include such important matters as foreign relations in peace and war, and control of the forces. In local affairs the prerogatives of the Crown are generally exercised by the Governor on the advice of the Executive Council, but where Imperial interests are involved the prerogative powers are exercised through the medium of the Privy Council, the Secretary of State for the Colonies, and the Governor.

The Governor.

In New South Wales the position of the Governor is primarily that of local representative of the Crown, and through him the powers of the Crown in matters of local concern are exercised. In addition he is titular head of the Government of New South Wales; he possesses powers similar to those of a constitutional sovereign, and he performs the formal and ceremonial functions which attach to the Crown in its august capacity.

His constitutional functions are defined and regulated partly by various statutes, which from time to time cast new duties upon him, partly by the Letters Patent constituting his office, and partly by the Instructions to the Governor. The Letters Patent and Instructions were given under the Royal Sign Manual in 1900, and amended in 1909. These functions cover a wide range of important duties, and it is directed that "in the execution of the powers and authorities vested in him the Governor shall be guided by the advice of the Executive Council." This provision, however, is modified by the further direction that if, in any case the Governor should see sufficient cause to dissent from the opinion of his Ministers, he may act in the exercise of his powers and authority in opposition to the opinion of his Ministers, reporting the matter to His Majesty through the Secretary of State for the Dominions without delay. The extent of the Governor's powers, however, tends to contract, though he possesses important spheres of discretionary action as *e.g.* in regard to dissolution of Parliament. Moreover, he is entitled to full information on all matters to which his assent is sought, and in this way he may exercise a general supervision over his officers, and use his personal influence for the good of the State. The general nature of his position is such that he is guardian of the Constitution and bound to see that the great powers with which he is entrusted are not used otherwise than in the public interest. In extreme cases his discretion constitutes a safeguard against malpractice. His more important constitutional duties are to appoint the Executive Council and to preside over its deliberations; to summon, prorogue, and dissolve the Legislature; to assent, to refuse to assent, or to reserve bills passed by the Legislature; to appoint members of the Legislative Council; to keep and use the Public Seal of the State; to appoint all ministers and officers of State; and, in proper cases, to remove and suspend officers of State. He exercises the King's prerogative of mercy, but only on the advice of the Executive Council in capital cases, and of a Minister of the Crown in other cases.

With respect to responsibility for his actions the Governor does not occupy the same position as the King. He is amenable to the law; and, although the State accepts responsibility for his official acts, he is personally liable for his unofficial actions, civil and criminal. Politically he is indirectly responsible to the Imperial Parliament through the Secretary of State for the Colonies, but in State politics he usually acts on the advice of his Ministers, and they take the responsibility for their advice. However, in an extreme case if good reason existed the local Legislature might be justified in asking for his removal.

The Governor's normal term of office is five years. His salary is £5,000 per annum, which, with certain allowances, is provided by the Constitution Act out of the revenues of the State. As from June, 1931, His Excellency returned 25 per cent. of his salary to the Treasury.

The periods for which the Governor may absent himself from the State are limited by the Instructions. When he is absent the Lieutenant-Governor acts in his stead in all matters of State. For that purpose the Chief Justice is usually appointed. In the event of the Lieutenant-Governor not being available to fill the Governor's position, an Administrator assumes office under a dormant Commission appointing the Senior Judge of the State as Administrator.

Air Vice-Marshal Sir Philip Woolcott Game, G.B.E., K.C.B., D.S.O., was appointed Governor of New South Wales on 29th May, 1930.

The Executive.

All important acts of State are performed or sanctioned by the Governor-in-Council, and, except in the limited spheres where the Governor possesses discretionary powers, he is required, in matters of local concern, to act on the advice of the Executive Council or of a Minister of the Crown.

The Council is established by virtue of the Letters Patent constituting the office of Governor, and it is composed of such persons as the Governor is pleased to appoint. Its members are invariably members of the Ministry formed by the leader of the dominant party in the Legislative Assembly. When a member resigns from the Ministry he resigns also from the Executive Council, otherwise he may be dismissed by the Governor.

The Executive Council meets only when summoned by the Governor, who is required by his Instructions to preside over its deliberations unless absent for "some necessary or reasonable cause." In his absence the Vice-President presides.

The Ministry or Cabinet.

In New South Wales the terms "Ministry" and "Cabinet" are synonymous, since both bodies by custom consist of those members of Parliament chosen to administer departments of State, and to perform other executive functions. The Ministry is answerable to Parliament for its administration, and it continues in office only so long as it commands the confidence of the Legislative Assembly, from which nearly all its members are chosen. An adverse vote in the Legislative Council does not affect the life of the Ministry. The constitutional practices of the Imperial Parliament with respect to the appointment and resignation of Ministers have been adopted tacitly with some minor modifications. Cabinet acts in a similar way to the English Cabinet under direction of the Premier, who supervises the general legislative and administrative policy and makes all communications to the Governor.

Frequent meetings of Cabinet are held to deliberate upon the general policy of the administration, the more important business matters of the State, and the legislative measures to be introduced to Parliament, and to manage the financial business of the State. Its decisions are carried into effect by the Executive Council or by individual Ministers as each case requires.

Administrative matters of minor importance are determined by ministerial heads of departments without reference to the Executive Council, and every Minister possesses considerable discretionary powers in the ordinary affairs of his department.

A Ministry comprised by members of the Labour Party assumed office on 4th November, 1930. The Ministry consisted of the following members in August, 1931:—

Premier and Colonial Treasurer:—The Hon. J. T. Lang, M.L.A.

Secretary for Mines and Minister for Labour and Industry:—The Hon. J. M. Baddeley, M.L.A.

Attorney-General:—The Hon. J. Lamaro, B.A., LL.B., M.L.A.

Minister for Agriculture and Forests:—The Hon. W. F. Dunn, M.L.A.

Colonial Secretary:—The Hon. M. Gosling, M.L.A.

Minister for Education:—The Hon. W. Davies, M.L.A.

Secretary for Lands:—The Hon. J. M. Tully, M.L.A.

Minister of Justice:—The Hon. W. J. McKell, M.L.A.

Secretary for Works:—The Hon. M. A. Davidson, M.L.A.

Minister for Public Health:—The Hon. W. T. Ely, M.L.A.

Minister for Local Government:—The Hon. J. McGirr, M.L.A.

Vice-President of the Executive Council:—The Hon. J. M. Concannon, M.L.C.

The salaries of Ministers were fixed as from 1st January, 1908, at the following rates:—Premier, £1,370; Attorney-General, £1,520; five other Ministers, £1,370 each; Vice-President of the Executive Council, £800. They were increased in 1920 upon the recommendation of a judge of the Arbitration Court to the following rates:—Premier, £2,445; Attorney-General, £2,095; Vice-President of the Executive Council, £1,375; nine other Ministers, £1,945 each; and these continued until 31st March, 1930, except that between 1st July, 1922, and 1st July, 1925, they were on the following scale:—Premier, £2,000; Attorney-General, £1,600; nine other Ministers, £1,500 each; Vice-President of the Executive Council, £900.

The salaries were reduced by 15 per cent. by the Parliamentary Allowances and Salaries Act, 1930, and further by the Public Service Salaries (No. 2) Act, 1931, the respective rates being:—

	As from 1st April. 1930. £	As from 7th August, 1931. £
The Premier	2,078	1,800
The Attorney-General	1,781	1,564
The Vice-President of the Executive Council (and leader of the Government in the Legislative Council)	1,169	1,072
Nine other Ministers of the Crown	14,879*	13,167†
Total	19,907	17,603

*£1,653 each. †£1,463 each.

These amounts include the annual allowances paid to Ministers as members of the Legislative Assembly.

THE STATE LEGISLATURE.

The State Legislature consists of the Crown and two Houses of Parliament, and all State laws are enacted "by the King's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and the Legislative Assembly in Parliament assembled." It exercises a general power of legislation, and possesses plenary and not delegated authority. The Constitution Act of 1902 provides that "the Legislature shall, subject to the provisions of the Commonwealth of Australia Constitution Act, have power to make laws for the peace, welfare, and good government of New South Wales in all cases whatsoever." It can delegate its powers, and within its territory its actions are restricted only by legislation of the Imperial Parliament intended to apply to New South Wales, and by valid Federal enactments.

The two Houses of Parliament are the Legislative Council (or Upper House), and the Legislative Assembly (or Lower House). Their powers are nominally co-ordinate, but it is provided that bills appropriating money or imposing taxation and bills affecting itself must originate in the Legislative Assembly, which is the elective Chamber, and which, it is recognised, must control taxation and expenditure. Moreover the responsibility of the Ministry for financial measures is secured by a provision of the Constitution Act that the Legislative Assembly may not appropriate any part of the Consolidated Revenue Fund or of any other tax or impost for any purpose unless it has been first recommended by a message of the Governor to the Assembly during the current session.

Every member of Parliament must take an oath or make an affirmation of allegiance.

By virtue of the Constitution Act it is a function of the Governor to summon, prorogue, and dissolve Parliament, but it is provided that both Houses shall meet at least once in every year, so that a period of twelve months shall not elapse between sessions. The continuity of Parliament is ensured by law. The Parliamentary Electorates and Elections Act, passed in 1912 and amended in subsequent years, provides that writs for the election of new members must be issued within four days after the dissolution of the Legislative Assembly, that they must be returned within sixty days after issue (unless otherwise directed by the Governor), and that Parliament shall meet within seven days of the return of writs. The duration of Parliament was limited to three years in 1874.

It is agreed tacitly that the procedure in each House shall be conducted according to its prototype in the Imperial Parliament, but comprehensive Standing Orders regulating the business of each House have been drawn up. When a disagreement arises between the two Houses each appoints "managers" to confer upon the matters in dispute. There is no provision to meet a deadlock other than by dissolution of the Legislative Assembly, which may be granted by the Governor. The new Legislative Assembly is regarded as representing the will of the people; and the overwhelming opinion is that the Legislative Council should recognise it.

Much interest and some controversy centres around the powers of the Governor in granting a dissolution of Parliament. Strictly speaking, only the Legislative Assembly is dissolved, but Parliament is ended thereby, because both Houses are necessary to constitute a Parliament. There are two main cases in which a dissolution may be granted in addition to that mentioned above; they arise when, on a question of policy, the Ministry sustains an adverse vote in the Legislative Assembly, and when the Legislative Assembly becomes factious, or will not form a stable administration.

The Legislative Council.

The Legislative Council is a nominee Chamber consisting of a variable number of members appointed for life without remuneration. The Governor, with the advice of the Executive Council, may summon to the Legislative Council any person who is of the full age of 21 years, and is a natural-born subject of his Majesty or naturalised in Great Britain or in New South Wales. An Act to authorise the appointment of women as members of the Council received Royal Assent in February, 1926.

In making appointments to the Legislative Council the Governor acts ordinarily on the advice of the Ministry, and no special instructions have been issued to him respecting the acceptance or rejection of such advice. Not more than one-fifth of the members summoned to the Council may be persons holding office of emolument under the Crown. The seats of members become vacant by death, resignation, absence, accepting foreign allegiance, bankruptcy, accepting public contracts, or by criminal conviction. The presence of one-fourth of the members, exclusive of the President, is necessary to form a quorum for the despatch of business.

In 1917 there were seventy-one members of the Council, and this number was not exceeded until 1921, when sixteen new appointments were made. The total membership in July, 1931, was 85.

A President appointed from among the members by the Governor presides over the Council. He receives an annual salary of £945. There is also a Chairman of Committees, who receives a salary of £573 per annum. Members of the Legislative Council are supplied with free passes on State railways and tramways.

Proposed Reform of Legislative Council.

Under the provision of the Constitution (Legislative Council) Amendment Act, 1929, a bill for the abolition of the Upper House or for the alteration of its constitution or powers may not be presented for Royal Assent until it has been approved by the electors at a referendum at least two months after the bill has been passed by Parliament. A bill for the reform of the Council was passed by both Houses of Parliament in November, 1929, providing for a vote of the electors to be taken on a date to be proclaimed. An outline of the provisions of this Bill was published on page 26 of the Official Year Book for 1929-30.

On 10th March, 1930, assent was given to the Constitution Further Amendment (Referendum) Act, 1930, which provided for the holding of a referendum upon this bill and for means of giving effect to the bill if approved by the electors and assented to by the King. The referendum, however, was not held during 1930 and, after a change of Government at the general elections of 25th October, 1930, two further bills were passed. The first repealed the Constitution (Legislative Council) Amendment Act, 1929, and the Constitution Further Amendment (Referendum) Act, 1930. The second (The Constitution Further Amendment—Legislative Council Abolition Bill, 1930) provided that the Legislative Council of New South Wales should be abolished. Thereupon certain members of the Legislative Council applied on Constitutional grounds to the Supreme Court of New South Wales for an injunction restraining the President of the Legislative Council from presenting these bills for His Majesty's assent. The injunction was granted and an appeal against it by the Government of New South Wales to the High Court was disallowed. The appeal was then carried to the Privy Council.

The Legislative Assembly.

The Legislative Assembly is the elective or popular House of Parliament, and is the most important factor in the government of the country. By its power over supply it ultimately controls the Executive. It consists of ninety members elected on a system of universal adult suffrage for a maximum period of three years. Any person who is enrolled as an elector of the State is eligible to be elected to the Legislative Assembly, except persons who are members of the Federal Legislature or of the Legislative Council, or who hold non-political offices of profit under the Crown, other than in the army or navy; but any officer of the public service of New South Wales may be elected to the Legislative Assembly on condition that he forthwith resign his position in the service. All legal impediments to the election of women to the Legislative Assembly were removed in 1918. Several women have since contested seats at the elections, and one has been elected. The seat of a member becomes vacant in similar cases to those stated above for Legislative Councillors.

A Speaker presides over the House, and his election is the first business when the House meets after election. He presides over debate, maintains order, represents the House officially, communicates its wishes

and resolutions, defends its privileges when necessary, and determines its procedure. There is also a Chairman of Committees elected by the House at the beginning of each session; he presides over the deliberations of the House in Committee of the Whole, and acts as Deputy-Speaker.

Payment of members of the Legislative Assembly was introduced as from 21st September, 1889. The amount, fixed originally at £300 per annum, was increased to £500 by an Act assented to on 17th September, 1912, further increased to £875 as from 1st November, 1920, after inquiry and report by a Judge of the Court of Industrial Arbitration, reduced to £600 in July, 1922, restored to £875 in July, 1925, reduced to £744 in April, 1930, and £706 on 7th August, 1931. An aggregate amount of £2,700 is provided for postage, each member receiving an order monthly for one-twelfth of his annual allowance. In addition, each member is supplied with a free pass on State railways and tramways. The salary of the Speaker is £1,281, and of the Chairman of Committees £833 per annum. The leader of the Opposition formerly received an annual allowance of £250 in addition to his allowance as member, but as from 7th August, 1931, the two allowances combined were £881 per annum.

State Parliamentary Committees.

A number of committees consisting of members of Parliament are appointed to deal with special matters connected with the business of the country and of either House; from time to time select committees are chosen to inquire into and report on specific matters for the information of Parliament and the public. Each House elects a committee to deal with its Standing Orders and with printing, and a joint committee to supervise the library. In addition there are the more important committees described below.

Committees of Supply and of Ways and Means.

These committees consist by custom of the whole of the members of the Legislative Assembly, and they deal with all money matters. The Committee of Supply debates and determines the nature and amount of the expenditure, and the Committee of Ways and Means debates and authorises the issue of the sums from the Consolidated Revenue Fund and frames the resolutions on which taxing proposals are based.

Parliamentary Standing Committee on Public Works.

A joint committee of members of the Legislative Council and Legislative Assembly, called the Parliamentary Standing Committee on Public Works, is usually appointed by ballot soon after the commencement of the first session of every Parliament. The committee consists of three members of the Legislative Council and four members of the Legislative Assembly, and it has power, under the Public Works Act, to conduct inquiries, to summon witnesses, and to compel the production of books, etc. Up to June, 1931, no appointments to this committee had been made by the present Parliament.

Proposals for public works of an estimated cost exceeding £20,000 must be submitted and explained by a Minister in the Legislative Assembly, and then referred to the Public Works Committee for report.

The Chairman receives as remuneration £3 3s. for each sitting of the committee, and the other members £2 2s. each, subject to the Public Service Salaries (No. 2) Act, 1931.

Public Accounts Committee.

For the better supervision of the financial business of the State a Public Accounts Committee is appointed every Parliament under provisions of the Audit Act, 1902, from among the members of the Legislative Assembly. It consists of five members, and is clothed with full powers of inquiry into any question arising in connection with the public accounts and upon any expenditure by a Minister of the Crown made without Parliamentary sanction. It reports on such matters to the Legislative Assembly.

Court of Disputed Returns.

The Parliamentary Electorates and Elections (Amendment) Act of 1928, provides for the establishment of a Court of Disputed Returns—a jurisdiction conferred on the Supreme Court. The business of the Court is to inquire into and determine matters connected with election petitions and questions referred to it by the Legislative Assembly concerning the validity of any election or the return of any member, and questions involving the qualifications of members.

Its decisions are final, but it must report to the House.

Commissions and Trusts.

In addition to the Ministerial Departments, various public services are administered by Commissions, Boards, and Trusts; the more important are:—

- Railway Commissioners for New South Wales.
- Metropolitan Water, Sewerage and Drainage Board.
- Hunter District Water Supply and Sewerage Board.
- Sydney Harbour Trust Commissioners.
- Water Conservation and Irrigation Commission.
- Commissioners of the Government Savings Bank of New South Wales.
- Board of Fire Commissioners of New South Wales.
- Metropolitan Meat Industry Board.
- Forestry Commission.
- Western Land Board.
- Main Roads Board.
- Prickly-pear Commission.
- Hospital Commission.
- Workers' Compensation Commission.
- Metropolitan Transport Trust.
- Newcastle Transport Trust.

In each case the authority controls a specific service, and administers the statute law in relation to it, subject to a limited degree of supervision by a Minister. There are also a number of marketing boards constituted in respect of primary products under the Marketing Act.

Auditor-General.

The Auditor-General is appointed by the Governor, and holds office during good behaviour. In certain cases he may be suspended by the Governor, but he is removable from office only on an address from both Houses of Parliament. He is required to take an oath that he will faithfully perform his duties, and he is debarred from entering political life. He is endowed with wide powers of supervision, inspection, and audit in regard to the collection and expenditure of public moneys and the manner in which the public accounts are kept. He exercises control over the issue of public moneys, and all warrants must be countersigned by him.

Matters connected with the public accounts are subject to special or annual report to Parliament by him, and he may refer any matter to the Public Accounts Committee.

STATE ELECTORAL SYSTEM.

The electoral system is controlled by an Electoral Commissioner—who is charged with the administration of the Act and legal provisions relating to the registration or enrolment of electors, the preparation of rolls and the conduct of elections of the Legislative Assembly. The Electoral Commissioner holds office for seven years and is eligible for reappointment. He may be removed from office only by resolution of both Houses of Parliament or through performing some disqualifying action laid down in the law.

Franchise.

The elections of members of the Legislative Assembly are conducted by secret ballot. Adult British subjects, men and women, are qualified for enrolment as electors when they have resided in the Commonwealth for a period of six months, in the State for three months, and in any subdivision of an electoral district for one month preceding the date of claim for enrolment.

Persons are disqualified from voting who are of unsound mind or who have been convicted and are under sentence for an offence punishable in any part of the British Empire by imprisonment for one year or longer.

Each elector is entitled to one vote only. The electoral rolls are compiled under provisions for compulsory enrolment introduced in 1921. Compulsory voting first came into force at the elections of 1930. In accordance with an Act passed in 1928, arrangements have been made with the Commonwealth for joint electoral rolls for State and Federal purposes.

Electors absent from their districts are permitted to record their votes at any polling-place in the State, and 97,958 votes were so recorded in 1930, compared with 64,871 in 1927, and 36,054 in 1925. Postal voting is provided for in the case of persons precluded from attendance at any polling-place by reason of illness or infirmity, distant over 10 miles, or travelling. In 1927 there were 9,289 such votes, and 15,947 in 1930.

Where any qualified elector is blind or otherwise incapacitated from voting or is unable to write, he may require the deputy returning-officer to mark his ballot-paper according to his instructions. In 1925 there were 13,490 "open votes" made in this way. The number has not been recorded since. At the elections of 1930 provision was made under the amended legislation whereby an elector, who was not enrolled or whose name had been marked as having voted, might in certain circumstances vote after making a declaration that he had not already voted. There were 6,757 such votes known as "section" votes.

At general elections polling is conducted on the same day in all electorates. Polling-day is a public holiday from noon, and during the hours of polling (8 a.m. to 8 p.m.) the hotels are closed.

A system of voting intended to secure proportional representation was introduced by an Act passed in 1918 and operated at the general elections of 1920, 1922, and 1925. A description of the system and an analysis of the party representation secured under it is shown on page 42 of the Year Book for 1926-27. In 1926 an Act was passed restoring the system of single seats and providing for preferential voting. This Act also provided that casual vacancies occurring after the dissolution of the twenty-seventh Parliament should be filled at by-elections.

Voters must number the candidates in order of preference on the ballot-paper, and votes are informal unless preferences have been duly expressed for all candidates. In counting votes, the candidate is elected who has secured an absolute majority of votes either of first preferences outright or of first preferences plus votes transferred to him in due order of preference by excluding in turn candidates with the lowest number of votes and re-allotting their votes according to the next preference indicated.

Electorates and Electors.

The electoral law provides that electorates are to be redistributed whenever directed by the Governor. In the event of there being no direction by the Governor, a distribution must take place on the expiration of nine years from the date of the last redistribution. The redistribution is made by a special commission of three persons, viz., the Electoral Commissioner, the Government Statistician, and the Surveyor-General.

For the purposes of the distribution it is prescribed by the Parliamentary Electorates and Elections (Amendment) Act of 1928 that the State must be divided into three parts, viz., the Sydney area, to which 43 seats are allotted, the Newcastle area 5 seats, and the Country area 42 seats.

The first Legislative Assembly consisted of fifty-four members elected in thirty-two districts. As settlement extended and population increased, provision was made for increased representation, until in 1891 the electorates numbered seventy-four and the members 141. Under the Parliamentary Electorates and Elections Act of 1893, the State was divided into 125 electoral districts, each returning one member.

After the federation of the Australian States the question of a further reduction in the number of members in the State Parliament was submitted to the electors by referendum, and as a result the number of districts and of representatives was reduced to 90 in 1904.

The following table shows certain particulars as to parliamentary representation at the various dates on which the membership of the Assembly or the franchise was altered, and for each year in which elections have been held since 1901:—

Year of Election.	Number of Members of Legislative Assembly.	Population per Member.	Proportion of persons enrolled to Total Population.	Total Number of Electors qualified to Vote.	Average number of Electors per Member.
			per cent.		
1856	54	5,200	15·8	...	...
1858	72	4,500	22·3	...	...
1880	108	6,900	25·2	...	...
1885	122	7,800	24·5	...	...
1891	141	8,100	26·7	...	...
1894	125	9,800	24·3	298,817	2,390
1901	125	10,900	25·3	346,184	2,769
1904	90	15,900	48·3	689,490	7,661
1907	90	17,000	48·8	745,900	8,288
1910	90	18,200	53·3	867,695	9,641
1913	90	20,500	55·1	1,037,999	11,533
1917	90	21,000	58·5	1,109,830	12,331
1920	90	22,800	56·1	1,154,437	12,827
1922	90	23,800	58·5	1,251,023	13,900
1925	90	25,300	58·8	1,339,080	14,879
1927	90	26,300	59·1	1,409,493	15,661
1930	90	27,700	57·8	1,440,785	16,008

The number of individual electors cannot be ascertained for any period prior to the year 1894, as the franchise was based on the ownership of property, and electors were allowed to vote in each electorate in which they

possessed the necessary qualification. The proportion of the population entitled to vote in those years, as shown above, has been calculated on the total number of votes to which the electors on the roll were entitled; they are, therefore, somewhat in excess of the actual proportions. Women voted for the first time in 1904, and since that year practically the whole of the adult population has been qualified to vote.

Votes cast at Elections.

The following table shows the voting at the elections held in New South Wales since the general election in 1894, when a system based on single electorates and the principle of "one man one vote" was introduced. The number of electors as stated for elections in the years 1904 to 1917, inclusive, represents the gross number enrolled, and the figures for the later elections indicate the number qualified to vote:—

Year of Election.	Electors Enrolled (whole State).	Contested Electorates.					
		Electors Enrolled.	Votes Recorded.		Informal Votes.		
			Number.	Percentage.	Number.	Percentage.	
1894—Men	298,817	254,105	204,246	80.38	3,310	1.62	
1898—Men	324,339	294,481	178,717	60.69	1,638	.92	
1901—Men	346,184	270,861	195,359	72.13	1,534	.79	
1904 { Men	363,062	304,396	226,057	74.26			
	Women	326,428	262,433	174,538	66.51		
1904 { Total	689,490	566,829	400,595	70.67	3,973	.99	
1907 { Men	392,845	370,715	267,301	72.10			
	Women	353,055	336,680	204,650	60.78		
1907 { Total	745,900	707,395	471,951	66.72	13,543	2.87	
1910 { Men	458,626	444,242	322,199	72.53			
	Women	409,069	400,139	262,154	65.52		
1910 { Total	867,695	844,381	584,353	69.20	10,393	1.78	
1913 { Men	553,633	534,379	385,838	72.20			
	Women	484,366	468,437	302,389	64.55		
1913 { Total	1,037,999	1,002,816	688,227	68.63	14,439	2.10	
1917 { Men	574,308	525,681	328,030	62.40			
	Women	535,522	487,585	295,354	60.57		
1917 { Total	1,109,830	1,013,266	623,384	61.52	5,844	.94	
1920 { Men	593,244	593,244	363,115	61.21			
	Women	561,193	561,193	285,594	50.89		
1920 { Total	1,154,437	1,154,437	648,709	56.19	62,900	9.70	
1922 { Men	636,662	636,662	466,949	73.34			
	Women	614,361	614,361	408,515	66.49		
1922 { Total	1,251,023	1,251,023	875,464	69.98	31,771	3.63	
1925 { Men	678,749	678,749	489,126	72.06			
	Women	660,331	660,331	435,853	66.00		
1925 { Total	1,339,080	1,339,080	924,979	69.07	30,155	3.28	
1927 { Men	714,886	706,316	*591,820	*83.79			
	Women	694,607	687,938	*558,957	*81.25		
1927 { Total	1,409,493	1,394,254	1,150,777	82.54	15,086	1.08	
1930 { Men	724,471	717,999	682,747	95.09			
	Women	716,314	710,649	673,876	94.79		
1930 { Total	1,440,785	1,428,648	1,356,623	94.94	15,947	1.17	

* Estimated, only partly recorded.

The analysis shown above indicates that prior to the introduction of compulsory voting at the election of 1930 the proportion of electors who failed to record their votes was large, even if due allowance were made for obstacles to voting. The highest proportion of votes to enrolment under

the voluntary system was 82.54 per cent., recorded in 1927. Previous to that the best record was 80.4 in 1874, when there was a strenuous contest on the question of fiscal reform; and the lowest proportion, 56.2 per cent., was recorded in 1920. Under the compulsory system nearly 95 per cent. of electors recorded their votes in 1930.

The abnormally low proportion of votes recorded in 1920 was probably due to the complexities of the procedure for voting in that year. Before the elections in 1922 the method was simplified, the statutory declaration was abolished, and the recording of preferences was required only to the extent of the number of candidates to be elected. The proportion of voters to enrolment was greater at the elections of 1922 and 1925 than it had been at most elections under the system of single-member electorates. It is probable that provision for compulsory enrolment and the simplification of the method of voting contributed to this result, though there is little doubt that the main factor which influenced the size of the polling was the intensity of interest in party issues.

The number of women exercising their right to vote under the voluntary system was considerably less than the number of men, but the proportions were approximately equal under the compulsory system in 1930.

Referendum.

A referendum relating to the prohibition of intoxicating liquor was held in New South Wales on 1st September, 1928, the question being, "Are you in favour of prohibition with compensation?" Voting was compulsory, and the result was as follows:—

Yes	..	..	..	..	..	357,684
No	..	..	..	..	..	896,752
Informal	..	..	..	..	..	13,683

In all, 1,268,119 votes were cast, equal to a proportion of 88.21 per cent. of persons enrolled and qualified to vote.

State Parliaments

A list of the Parliaments since 1889, when payment of members was instituted, is shown below:—

Number of Parliament.	Return of Writs.	Date of Opening.	Date of Dissolution.	Duration.	Number of Sessions.
				Yrs. mths. dys.	
14	22 Feb., 1889...	27 Feb. 1889...	6 June 1891...	2 3 15	4
15	11 July, 1891...	14 July 1891...	25 June 1894...	2 11 14	4
16	3 Aug., 1894...	7 Aug. 1894...	5 July 1895...	0 11 2	1
17	10 Aug., 1895...	13 Aug. 1895...	8 July 1898...	2 10 28	4
18	13 Aug., 1898...	16 Aug. 1898...	11 June 1901...	2 9 29	5
19	17 July, 1901...	23 July 1901...	16 July 1904*	3 0 0	4
20	20 Aug., 1904...	23 Aug. 1904...	20 Aug., 1907†	3 0 0	4
21	28 Sept., 1907...	2 Oct. 1907...	14 Sept. 1910...	2 11 19	5
22	31 Oct. and 10 Nov., 1910†	15 Nov. 1910...	6 Nov. 1913...	2 11 26	5
23	23 and 29 Dec., 1913† ...	23 Dec. 1913...	21 Feb. 1917...	3 1 29	5
24	10, 16, and 23 April, 1917† ...	17 April 1917...	18 Feb. 1920...	2 10 8	4
25	21 April, 1920 ...	27 April 1920...	17 Feb. 1922...	1 10 25	3
26	19 April, 1922...	26 April 1922...	18 April 1925†	3 0 0	5
27	20 June, 1925...	24 June, 1925...	7 Sept., 1927...	2 2 17	5
28	29 Oct., 1927...	3 Nov., 1927...	18 Sept., 1930...	2 10 22	4
29	21 Nov., 1930...	25 Nov., 1930...	Sitting* .....	.....	...

*31st July, 1931.

† Expired by effluxion of time.

‡ Under system of second ballots.

The normal duration of Parliament is three years. Unless previously dissolved Parliament expires by effluxion of time three years after the day prior to the original date of the return of the writs.

On account of war conditions and the disturbed state of public affairs, it was deemed advisable to extend the 23rd Parliament to a period exceeding the three years fixed by the Constitution Act, and the Legislative Assembly Continuance Act, 1916, was passed to provide for an extension from three years to four years. The Parliament, however, terminated after three years and sixty days.

State Ministries.

The various Ministries which have held office since 1894, together with the duration in office of each, are shown below. The life of a Ministry is not co-terminous with the life of a Parliament. In seventy-five years under the present system there have been forty-five Ministries, but only twenty-nine Parliaments. Up to 3rd August, 1894, twenty-seven Ministries had held office.

Ministry.		In Office.		Duration.
Number.	Name of Premier and Party.	From—	To—	
				yrs. mths. days.
28	Reid	3 Aug. 1894	13 Sept. 1899	5 1 11
29	Lyne	14 Sept. 1899	27 Mar. 1901	1 6 14
30	See	28 Mar. 1901	14 June 1904	3 2 18
31	Waddell	15 June 1904	29 Aug. 1904	0 2 15
32	Carruthers (Liberal) ...	30 Aug. 1904	1 Oct. 1907	3 1 2
33	Wade (Liberal)	2 Oct. 1907	20 Oct. 1910	3 0 19
34	McGowen (Labour)	21 Oct. 1910	29 June 1913	2 8 9
35	Holman (Labour)	30 June 1913	15 Nov. 1916	3 4 16
36	Holman (National)	16 Nov. 1916	12 April 1920	3 4 28
37	Storey (Labour)	13 April 1920	10 Oct. 1921	1 5 27
38	Dooley (Labour)	10 Oct. 1921	20 Dec. 1921	0 2 11
39	Fuller (National)	20 Dec. 1921	20 Dec. 1921	About 7 hours.
40	Dooley (Labour)	20 Dec. 1921	13 April 1922	0 3 24
41	Fuller (National)†	13 April 1922	17 June 1925	3 2 4
42	Lang (Labour)	17 June 1925	26 May 1927	1 11 9
43	Lang (Labour)	27 May 1927	18 Oct. 1927	0 4 22
44	Bavin (National)†	19 Oct. 1927	3 Nov. 1930	3 0 15
45	Lang (Labour)	4 Nov. 1930	*	...

* In office 31st July, 1931.

† And Country Party.

COST OF STATE PARLIAMENTARY GOVERNMENT.

The following statement shows the cost of State Parliamentary Government in New South Wales during recent years. Expenses of Federal and Local Government are not included:—

Head of Expenditure.	1915-16.	1925-26.	1928-29.	1929-30.
	£	£	£	£
Governor—				
Salary	5,000	5,000	5,000	5,000
Salaries, etc., of Staff... ..	3,549	4,028	4,198	3,988
Other expenses	1,547	1,946	978	1,014
	10,096	10,973	10,176	10,002
Executive Council—				
Salaries of Officers ... ..	...	570	839	834
Other expenses ... ..	...	333	...	46
	...	903	839	880
Ministry—				
Salaries of Ministers	11,040	23,420	23,414	22,542
Conferences, Special Reports, etc. ...	5,244	1,078	283	91
	16,284	24,498	23,697	22,633
Parliament—				
Legislative Council—				
Salaries of President and Chair-				
man of Committees	1,220	1,900	1,900	1,829
Railway passes for Members	6,070	15,906	18,213	17,744
Postage for Members ... ..	...	...	40	80
Legislative Assembly—				
Salaries of Speaker and Chairman				
of Committees	1,740	2,790	2,790	2,685
Allowances to Members*	40,335	67,417	69,378	66,680
Railway passes for Members	10,387	17,462	18,396	18,542
Postage for Members	1,770	2,700	2,692	2,700
Both Houses—Joint expenditure—				
Standing Committee on Public				
Works—				
Remuneration of Members	3,599	3,966	4,992	5,123
Salaries of Staff and contin-				
gencies	2,626	2,145	3,004	2,036
Salaries of Reporting Staff	included	8,269	10,099	8,946
Library—Salaries of Staff	in	2,541	2,875	2,883
Contingencies... ..	“ other ”	942	986	951
Other Salaries of Staff	below.	23,516	26,983	26,726
Printing—Hansard	6,689	6,189	6,865	11,290
Other	14,967	13,562	12,145	13,837
Other Expenses	24,490	5,478	3,653	3,219
	113,893	174,783	185,011	185,271
Electoral—				
Salaries	1,123	2,104	2,456	4,743
Contingencies	56,491†	8,195	58,131†	12,491
	57,614	10,299	60,587	17,234
Royal Commissions and Select Committees	4,114	7,790	2,452	18,493
Grand Total	£ 202,001	229,246	282,762	254,513
Per head of population	2s. 2d.	2s. 0d.	2s. 4d.	2s. 1d.

* Excluding salaries of Ministers, Speaker, and Chairman of Committees. † Includes Liquor Referendum £30,244. ‡ Includes Liquor (Prohibition) Referendum £54,962.

In considering such a table as shown above it is necessary to remember that there is no clear line of demarcation between costs incurred in respect of parliamentary government and the costs of ordinary administration. This is to be observed particularly in regard to ministers of the Crown who fill dual roles as administrative heads and parliamentary representatives. Similar difficulties arise in regard to Royal Commissions, which are, in many cases, partly administrative inquiries. In the absence of any means of dissecting the expenditure under these headings the whole of it has been treated as incidental to the system of parliamentary government. On the other hand such factors as the costs of ministerial motor cars and the salaries of ministers' private secretaries are omitted from account as appertaining mainly to administration.

The cost of Parliamentary Government included the cost of the prohibition referendum in 1928-29, and it represented 1.4 per cent. of the total expenditure from Consolidated Revenue during the year. In 1929-30 the corresponding proportion was 1.2 per cent.

The foregoing statement does not, however, represent the total cost of Parliamentary Government because it excludes the expense of Federal government. During the year 1928-29 this amounted to \$614,841 for the whole Commonwealth, equivalent to 1s. 11d. per head of population.

THE COMMONWEALTH.

The federation of the six Australian States was inaugurated formally on 1st January, 1901, for their mutual benefit in matters upon which it was agreed that joint action was desirable. A detailed account of the inauguration of Federation and the nature and functions of the Federal Parliament in their relation to the State was published in the Year Book for 1921 at pages 38-40 and 625. The broad principles of federation were:—The transfer of limited and defined powers of legislation to a Federal Parliament consisting of a Senate and a House of Representatives, the former being a revisory Chamber wherein the States are equally represented, and the latter, the principal Chamber, consisting of members elected from the States in proportion to their population; complete freedom of action for the State Parliaments in their own sphere; a High Court to determine the validity of legislation; and an effective method of amending the Constitution. State laws remain operative in all spheres until superseded by laws passed by the Federal Parliament in the exercise of its assigned powers. State laws, however, are invalid only to the extent of their inconsistency with valid Federal enactments.

The Senate consists of 36 members, six being elected in each State.

It is prescribed by the Constitution Act that the number of members in the House of Representatives shall be as nearly as practicable twice the number of senators. The number to be elected in each State is determined in the following manner: A quota is ascertained by dividing the number of people of the Commonwealth by twice the number of senators, then the number of the people of each State is divided by the quota. The result indicates the number of representatives for each State, one more member being chosen if on the division there is a remainder greater than one-half of the quota. It is provided also that at least five members shall be elected in each original State. The representation of the States may be adjusted in every fifth year.

The number of representatives elected from the various States to the House of Representatives in 1929 was as follows:—New South Wales, 28; Victoria, 20; Queensland, 10; South Australia, 7; Western Australia, 5; Tasmania, 5. In addition, one representative of the Northern Territory was elected to attend and participate in debates without having the right to vote.

For the purpose of electing representatives to the Senate of the Federal Parliament, each State is treated as one constituency, returning six members, each for six years, three of whom retire triennially. The members of the House of Representatives are elected for three years from single-member constituencies. The system of voting is preferential, and the electoral system is similar to that of the State. In 1924 the Commonwealth Electoral Act was amended to make provision for compulsory voting.

The voting at elections of members of the House of Representatives from New South Wales has been as follows:—

Year.	Electors Enrolled (Contested Divisions only).		Votes Recorded.		Percentage of Votes Re- corded to Electors Enrolled.			Informal Votes.	
	Men.	Women.	Men.	Women.	Men.	Women.	Total.	Number.	Proportion per cent.
1901	315,962	...	215,105	...	68·08	...	68·08	4,070	1·70
1903	303,254	274,763	164,133	118,381	54·12	43·08	48·88	7,834	2·77
1906	363,723	314,777	216,150	141,227	59·43	44·87	52·67	11,705	3·28
1910	431,702	379,927	294,049	207,868	68·11	54·71	61·84	8,002	1·59
1913	554,028	482,159	405,152	312,703	73·13	64·85	69·28	22,262	3·10
1914	491,086	429,906	351,172	257,581	71·51	59·92	66·10	14,816	2·43
1917	484,854	447,437	370,618	292,925	76·44	65·47	71·17	19,874	2·98
1919	527,779	508,129	385,614	308,183	73·06	60·65	66·97	26,517	3·82
1922	517,388	498,209	330,362	239,980	63·85	48·17	56·16	25,823	4·53
1925	640,533	627,214	531,678	503,215	90·81	89·80	90·31	21,389	1·87
1928	584,545	576,857	547,095	534,817	93·59	92·71	93·16	52,229	4·83
1929	624,068	614,550	591,438	583,007	94·77	94·87	94·82	33,158	2·82

The percentage of voters increased steadily at the elections during the period 1903-1913. The improvement was not continued in 1914, when the electoral contest was modified in consequence of the outbreak of war in Europe, but in 1917, when considerable political feeling was excited by the question of compulsory military service, the percentage was higher than at any Federal elections before the introduction of compulsory voting at the elections of 1925.

At the Senate elections of 1928, the total number of votes cast was 1,244,918, of which 109,720 or 8·08 per cent. were informal. Included in the votes cast were 1,118,772 ordinary votes, 8,953 postal, 106,924 absent, 4,330 under Section 121 (persons whose names were not on roll by reason of error, etc.), and 227 declaration votes. The proportion of votes recorded to electors enrolled was 93·21 per cent.

FEDERAL REFERENDA.

Analyses of the voting on Federal questions submitted to referenda were shown in the 1921 edition of this Year Book at page 42, and in the 1926-27 edition at page 47.

On 17th November, 1928, the question of amending the Federal Constitution in such a way as to permit the Commonwealth to make statutory provision in respect of the agreement relating to the public debts of the States was submitted to referendum. Statistics of the polling in New South Wales were as follows:—Electors enrolled, 1,335,660; votes polled, 1,244,918; affirmative votes, 754,446; negative votes, 415,846; informal, 74,626.

SEAT OF FEDERAL GOVERNMENT.

An outline of the provisions of the Constitution Act with respect to the seat of government and the development of the territory was published on page 48 of the Year Book for 1926-27. The Federal Parliament commenced its regular sittings at Canberra on 9th May, 1927.

DEFENCE.

UPON the inauguration of the Commonwealth the duty of providing for the defence of Australia devolved upon the Federal Government, and the Parliament of the Commonwealth has paramount power, to legislate for the naval and military defence of Australia, and for the control of the forces to execute and maintain the federal laws. The Constitution provides that the States may not raise nor maintain forces, but enjoins the Commonwealth to protect every State against invasion, and, on the application of the executive government of the State, against domestic violence. It is provided in the Defence Act that the citizen forces may not be called out nor utilised in connection with an industrial dispute.

In terms of the Defence Act male citizens between the ages of 18 and 60 years are liable for service in the citizen forces for home defence in time of war. Male citizens are liable also to undergo military or naval training between the ages of 12 and 26 years.

The system of compulsory training was brought into operation on 1st January, 1911. The duration of the training in each year is prescribed by the Act, the trainees being liable for service in the following age groups:—Junior cadets, 12 to 14 years of age; senior cadets, 14 to 18 years; citizen forces, 18 to 26 years. The duration of the training was curtailed during the war period, also in 1921 and in 1922 owing to the resolutions passed at the Washington Conference on limitation of armaments. As from 1st November, 1929, all compulsory obligations under Part XII of the Defence Act were suspended and the forces were reconstituted on the basis of voluntary enlistment. The peace nucleus was reduced from 48,000 Citizen Forces and 16,000 Senior Cadets to 35,000 Militia Forces and 7,000 Senior Cadets. Under the voluntary system men from 18 to 40 years of age are enlisted in the Militia Forces for a first period of three years subject to annual re-engagement until reaching the retiring age of 48 years. The normal duration of training is sixteen days per year inclusive of eight days continuous training in camp.

Senior Cadets.

Formerly training was commenced by senior cadets in the year in which they reached the age of 17 years, one year later they were transferred to the citizen forces to undergo courses during a further period of three years. The training of boys under 16 years as part of the defence system was suspended in 1922, though they were still required to register during the months of January and February of the year in which they reached the age of 14 years.

The Senior Cadet Corps, in which enrolment is voluntary, is now organised on the following basis:—

(a) Detachments affiliated with Militia Units:—

Light Horse—Nil;

Infantry, Signals and A.S.C.—25 per cent. of the establishment of the Militia Unit;

Other Arms—20 per cent. of the establishment of the Militia Unit; and (b) Detachments consisting of pupils attending approved educational establishments. The ages for enrolment in the regimental detachments are 16 and 17 years, and in the school detachments over 14 years.

TRAINING STRENGTH OF ACTIVE MILITARY FORCES.

Date.	*1 Mar., 1901.	30 June, 1913.	31 Dec., 1922.	1 Aug., 1926.	1 Feb., 1929.	30 April, 1930.	31 Mar., 1931.
Commonwealth ...	28,886	34,537	37,156	44,634	47,931	27,454	31,282
New South Wales	9,772	12,105	14,561	17,249	18,825	10,810	11,524

* Date of taking over the military forces from States by Commonwealth.

The following table shows the strength of the Land Forces in the Commonwealth and New South Wales, classified according to the nature of the Service, on the 31st March, 1931:—

Branch of Service.	Commonwealth.	New South Wales.
Permanent Forces	1,556	613
Militia Forces	29,726	10,911
Engineer and Railway Staff Corps	58	10
Unattached List of Officers.....	381	145
Reserve of Officers	6,314	2,204
Chaplains	285	84
Total	38,320	13,967

The strength of Militia Forces and Senior Cadets in New South Wales on 31st March, 1931, was as follows:—

Military Formation.	Militia Forces.	Senior Cadets.	
		Regimental Detachments.	Educational Establishments.
1st Cavalry Division	2,009	99	75
1st Division	3,285	398	335
2nd Division	4,527	826	545
2nd District Base.....	1,090	195	...
Total	10,911	1,518	955

Royal Military College.

This College was established in 1911 at Duntroon, in the Federal Capital Territory, for the purpose of providing trained officers for the permanent forces. In January, 1931, the College was transferred to Victoria Barracks, Sydney. Admission is by open competitive examination, but no new entry was accepted for 1931.

Rifle Clubs.

On the 30th June, 1930, there were 302 rifle clubs with a membership of 11,850 and 12 miniature rifle clubs, having a membership of 305. Members of rifle clubs must fire an annual course of musketry, but do not undergo any drill.

For the purposes of administration, the control of rifle club activities reverted from the Secretary for Defence to the Military Board, with effect from 1st March, 1931. Government grants are made for the construction and maintenance of rifle ranges, &c., and 200 rounds of ammunition are issued free annually to each efficient member.

NAVAL DEFENCE.

The Naval defence of Australia was undertaken by the Imperial Navy under agreement between the Imperial Government and the Governments of Australia and New Zealand until 1913, when the Imperial squadron was replaced by Australian war vessels.

In May, 1931, the Australian Squadron in commission consisted of 2 cruisers, 1 seaplane carrier, and 1 flotilla leader. In addition, there were in reserve 2 cruisers, 5 destroyers, 3 sloops, 1 surveying ship, 1 depot ship, and 1 fleet auxiliary.

The seagoing force consisted of 363 officers and 2,964 ratings. Ninety-seven per cent. of the personnel were Australians, the remainder being on loan from the Royal Navy.

Reserves of officers and men for the Royal Australian Navy are provided for from the following sources, the number of personnel in May, 1931, being shown in brackets:—(a) Royal Australian Fleet Reserve (183 men); (b) Royal Australian Naval Reserve (Seagoing) (44 officers); (c) Royal Australian Naval Reserve and Royal Australian Naval Volunteer Reserve (258 officers and 4,956 men).

Junior officers are trained at the Naval College, Flinders Naval Depot, which contained 37 cadet midshipmen undergoing training in May, 1931. The general depot of the navy is at Western Port, Victoria, where the more advanced training of petty officers and men and the training of the men on first entry are conducted.

AIR DEFENCE.

A Royal Australian Air Force for defence purposes was established in 1921 by proclamation under the Defence Act. It formed part of the military forces until the Air Force Act was passed in September, 1923, to provide for its administration as a separate branch of the defence system. The present approved establishment of the Permanent Air Force is 104 officers and 788 airmen, and of the Citizen Air Force 43 officers and 277 airmen.

CHRONOLOGICAL TABLE OF EVENTS IN THE HISTORY OF NEW SOUTH WALES.

A brief historical sketch of New South Wales was published in the Official Year Book for 1929-30, at pages 40 to 52, and a chronological table of events in the history of New South Wales from 1770 to 1919 was published in the Official Year Book for 1919, at pages 1 to 8. This table is repeated below in a revised form as from 1901 with a continuation from 1920 to 1930.

- 1901 Federation of Australian Colonies—Interstate free-trade established—Industrial Arbitration Act (State)—Sydney Harbour Trust formed—Closer Settlement Act—Western Lands Act—Introduction of Pacific Islanders prohibited.
- 1902 Mt. Kembla Colliery Explosion (ninety-five lives lost)—Women's Franchise—Pacific Cable completed—First sitting of (State) Arbitration Court—Parliamentary Select Committee *re* Greater Sydney—First Federal Tariff.
- 1903 High Court of Australia inaugurated.
- 1904 Reduction of number of members of (State) Parliament from 125 to 90—Educational Reforms commenced—Patents, Trade Marks, &c., transferred to Commonwealth—Commonwealth Conciliation and Arbitration Act.
- 1905 Assisted Immigration reintroduced—Children's Courts instituted—Local Government (Shires) Act extending local government to whole State.
- 1906 Barren Jack (Burrinjuck) Dam authorised—Public School fees abolished—Sydney Central Railway Station opened.

- 1907 Invalidity and Accident Pensions—Telephone connected, Sydney-Melbourne—Opening of blast furnace for manufacture of iron and steel at Lithgow—Medical inspection of School Children initiated—"Harvester" Wage determined.
- 1908 Visit of United States (American) Fleet—Minimum Wage Act—Industrial Wages Boards constituted—Subventions to Friendly Societies Act—Yass-Canberra Federal Capital Site selected—Crown Lands Amendment Act (Conversions)—Cataract Dam completed—Private Hospitals Act.
- 1909 Fisher Library (Sydney University) opened—Old-age Pensions administration transferred to Commonwealth—Pure Food Act.
- 1910 Mitchell Library opened—Referenda favouring transfer of State Debts to Federal Government and rejecting proposed States finance agreement with Commonwealth—Australian Notes Act—Australian silver coinage issued—Saturday Half-holiday instituted in Sydney and the larger towns of N.S.W.—Workmen's Compensation Act—Federal Land Tax—Invalidity and Accidents Pensions administration transferred to Commonwealth—Arrival of "Yarra" and "Parramatta," first vessels of Australian Navy—Australian Penny Postage.
- 1911 First Australian Notes issue—Federal Referenda relating to monopolies and industrial legislation; proposals rejected—Federal Capital Site at Yass-Canberra transferred to Commonwealth—Compulsory defence training initiated—Murrumbidgee Irrigation Trust appointed—First wireless station (private) licensed for transaction of public business—Imperial Conference in London—Randwick wireless station transmitted messages over 2,000 miles—First section of North Coast Railway opened—Flight of first Australian Aviator (W. E. Hart) from Sydney to Penrith.
- 1912 Bursary Endowment, Secondary Education—Murray Waters Agreement—Murrumbidgee Irrigation Farms available, and irrigation commenced—Commonwealth Bank established—Commonwealth Maternity allowances—Sydney (Pennant Hills) Wireless Station opened.
- 1913 Federal Capital City named Canberra, and foundation stones laid—Visit of Dominions Royal Commission—British Trade Commissioners office established at Sydney—First elective Senate, University of Sydney—Arrival at Sydney (4th October) of Australian Fleet, including battle cruiser "Australia" and cruisers "Sydney" and "Melbourne"—Departure of (Imperial) Admiral King-Hall—First Cost of Living and Living Wage Inquiry in Industrial Arbitration Court—Appointment of Interstate Commission—Commonwealth Savings Bank established.
- 1914 Norfolk Island transferred to control of Commonwealth Government—First Aerial Mail, Melbourne to Sydney, carried by M. Guillaux—Direct telephone, Sydney to Adelaide, opened—Murray Waters Agreement (Premiers' Conference)—First Baby Clinic opened—State advances for homes initiated—European War—Expeditionary force of volunteers despatched to co-operate with Imperial forces—Australian Naval Unit transferred to direct Imperial control—Necessary Commodities Control and Wheat Acquisition Acts—War Precautions Act.
- 1915 Australian Expeditionary Forces in action at Dardanelles and in Egypt—Iron and steel works opened at Newcastle—Conservatorium of Music opened—War census—Commonwealth Powers (War) Act—Commonwealth Income Tax—Wheat harvest marketed by Australian Governments.
- 1916 Australian Expeditionary Forces in action in France—Liquor Referendum resulted in closing hotels at 6 p.m.—Fair Rents Court established—Valuation of Land Act—Eight Hours Act (48-hours week)—Soldiers Repatriation Fund established—Military Service Referendum rejected—Registration of private schools initiated—Workmen's Compensation law extended to all workers—Imperial Wool Purchase Scheme initiated.
- 1917 Transcontinental Railway opened—River Murray Waters Act in operation—Daylight Saving initiated and abandoned—Second Military Service Referendum rejected—Extensive industrial dislocation—Interstate Commission Prices investigation—War-time Profits Tax imposed.

- 1918 European War Armistice declared—N.S.W. Board of Trade constituted—Women's Legal Status Act passed—Commonwealth Repatriation Department created—Poor Persons Legal Remedies Act—Introduction of proportional representation at State Parliamentary elections.
- 1919 Peace signed between European Powers—State Housing scheme initiated—Influenza epidemic—Wheat Silos scheme initiated—First aeroplane flight, England to Australia (twenty-eight days) by Sir Ross and Sir Keith Smith—Commonwealth Royal Commission appointed to inquire into basic wage and cost of living—First Federal General Elections on preferential voting system—Federal Referenda; proposals to extend legislative powers and to provide for nationalisation of monopolies rejected.
- 1920 Compulsory school attendance introduced—Proportional representation and multiple electorates—Profiteering Prevention Act—Control of Note issue transferred to Commonwealth Note Board.
- 1921 Forty-four hour week introduced (State)—Voluntary wheat pool inaugurated—First direct wireless press message, England to Australia.
- 1922 Rural Bank established—Sydney Harbour Bridge Act—Conference of employers and employees (Sydney)—Reversion to 48-hour week (State).
- 1923 Agreement to extend certain Victorian Railways into New South Wales.
- 1924 Grafton-Kyogle-South Brisbane Railway Agreement—Migration Agreement with British Government on basis of £34,000,000 loan—Control of Notes Issue transferred to Commonwealth Bank Board.
- 1925 Main Roads Board established—Sydney Harbour Bridge commenced—Broadcasting stations established—Compulsory voting at Federal elections—Visit of American Fleet.
- 1926 First section of City Underground Railway opened—Electrification of suburban railway lines commenced—44-hour week re-introduced—Widows' pensions instituted—Workers' Compensation extended—Sydney Branch of Royal Mint ceased operations.
- 1927 First sitting of Federal Parliament at Canberra opened, 9th May—Commercial wireless communication established with England—Family Endowment instituted—Marketing of Primary Products Act—System of single seats and preferential voting introduced at State elections—Forty-four hour week (Federal awards).
- 1928 Financial Agreement signed between Australian States—Loan Council created—Prohibition proposal negatived at referendum—Aeroplane flight, United States to Australia, by Kingsford-Smith and Ulm—Aeroplane flight, England to Australia, in sixteen days (Hinkler)—Visit of British Economic Mission.
- 1929 Protracted disputes in timber and coal-mining industries—Royal Commission on Coal Industry—Compulsory voting at State elections—Suspension of compulsory military training.
- 1930 Wireless telephone service to England established—Reversion to 48-hour week (1st July)—Transport Trust appointed—Unemployment Relief Tax imposed—Aeroplane flight, England to Australia, in 10½ days (Kingsford-Smith)—Acute economic depression—Prohibitive duties and embargoes placed on certain imports—Sales tax imposed.
- 1931 Forty-four hour week re-introduced (1st January)—Aeroplane flight, England to Australia in 10 days (Scott)—Government Savings Bank of New South Wales suspended payment (22nd April)—Premiers' Financial Agreement (reduction of expenditure)—Commonwealth Conversion Loan (internal debts £556,000,000)—Aeroplane flight Australia to England (Mollison 8½ days).

FACTORIES.

THE manufacturing industries of New South Wales expanded rapidly during the post-war decade, signs of progress being apparent in all phases of factory production. There was a steady increase in the number of employees, in the use of machinery, in the amount of capital invested in premises and equipment, and in the value of the output. Many new industries were established and existing industries were expanded into new branches of production, and in the introduction of scientific processes requiring a high standard of technical skill and of organisation and a large capital outlay. The progress in regard to production was attended by steady improvement in the conditions of industrial employment.

At the beginning of the twentieth century very few of the factories in New South Wales were concerned in the production of the higher classes of manufactures, notwithstanding the immense quantities of raw materials, such as wool, minerals, etc., readily available. The great majority of the establishments were engaged in the production for local use of food commodities, furniture and bricks; in making clothing from imported materials; in printing; in the repair rather than the manufacture of machinery; or in the preliminary treatment of primary products, such as wool-scouring or saw-milling.

After the federation of the Australian States a protective customs tariff was introduced in order to encourage local manufactures, with the object of rendering the Commonwealth self-contained for purposes of defence, and for other national reasons. Assistance for some industries is provided in the form of bounties on the products.

During the decade which preceded the outbreak of war the secondary industries expanded steadily. Such development was then almost world-wide, as the demand for manufactured products grew apace by reason of increasing population and changing conditions of life, while the progress of science assisted producers to increase their output. In New South Wales economic conditions were especially favourable for the growth of secondary production. The State was prosperous, primary production was increasing, and the population was being augmented by immigration as well as by natural increase. The outbreak of war, which occurred at a time when the primary industries were affected by adverse seasonal conditions, caused a measure of disorganisation in the factories. But the setback was temporary, and recovery was rapid in consequence of the demand for products for war purposes and the increase in the spending power of the people by reason of the circulation of war moneys and the returns received from high-priced exports. Moreover, the curtailment or cessation of supplies of many imported articles caused greater attention to be directed towards local resources.

Under these conditions the manufacturing industries entered upon a more advanced stage of development. Iron and steel works, and many subsidiary industries were established, the manufacture of various classes of machinery was undertaken, large ocean steamers were built, and many other high-grade products were added to the list of commodities made in New South Wales. The production of woollen goods and clothing became sufficient to meet local requirements.

In 1927-28, however, the movement became irregular and there were signs of decreasing activity in some of the more important groups of industries though the aggregate value of production was greater than in any earlier year. In 1928-29 there was a measure of recovery then the decline became general. Since the latter part of the year 1929 there have been numerous increases in the Customs tariff, and the importation of a number of manufactured commodities has been severely restricted since April, 1930, when the duty on many items was raised by 50 per cent. It is expected that the higher duties and the restrictions will lead to the establishment of new industries.

The products of the factories are used for the most part for local consumption, those which are exported in large quantities being flour, butter, frozen meat, tallow, and leather, and—in smaller, but appreciable quantities—biscuits, confectionery, tobacco, wool tops, and medicines, apparel and metal manufactures.

An account of the legislation relating to hours and conditions of work in factories will be found in chapter "Industrial Arbitration" in this Year Book.

SCIENTIFIC RESEARCH AND STANDARDISATION.

Organisations have been formed on a federal basis to promote scientific research and standardisation in the industries of Australia.

The Commonwealth Council of Scientific and Industrial Research was created in 1916, in the form of a temporary Advisory Council. It prepared the way for a permanent body, which was appointed in 1921, and reorganised in 1926 in terms of the Science and Industry Research Act, 1920-26. There is a central council and a committee in each State to advise the Council as to the problems to be investigated. The Council consists of three members appointed by the Commonwealth Government, who form the executive committee, the chairman of each State committee, and other persons with scientific knowledge co-opted by the Council.

The Council is empowered to conduct scientific researches in connection with primary and secondary industries, to train research workers, to make grants in aid of scientific research, to test and standardise scientific apparatus, to conduct investigations in reference to standardisation of machinery and materials used in industry, and to establish a bureau of information relating to scientific and technical matters.

Two sums of £250,000 each have been appropriated under the Act for the purpose of scientific and industrial investigation, and an Endowment Fund of £100,000 was created in 1926 to assist persons engaged in scientific work and students in training as research officers. Up to the present time the council has confined its activities for the most part to primary industries, its assistance to secondary industries being mainly in the form of technical and scientific information.

The Australian Commonwealth Engineering Standards Association was founded in 1922 to prepare standards in connection with engineering structures and materials, to promote their general adoption, and to coordinate efforts for their improvement. The main committee includes members representing the Governments of the Commonwealth and of the States and various technical associations. Sectional committees prepare the specifications for standardisation, which are published in a tentative form, to be

revised twelve months later, with a view to adoption as Australian standards. The specifications are based, to a large extent, upon those of the British Engineering Standards Association.

Another organisation for the improvement of industry, the Australian Association of Simplified Practice, which had been formed to eliminate waste, has amalgamated with the Engineering Standards Association, and the amalgamated body now operates under the name of the Standards Association of Australia. The Council of Scientific and Industrial Research is the means of liaison between this association and the Commonwealth Government.

The activities of the Tariff Board, which is described in the chapter "Commerce," have an important bearing on the manufacturing industries. The Board investigates proposals for altering the tariff and for granting bounties, and considers the effect of the tariff and customs laws and of bounties on the industries of Australia.

BOUNTIES.

For the encouragement of production and manufacturing in Australia the Commonwealth Government provides bounties in respect of certain commodities. The current rates of bounty on iron and steel products, sulphur, wine, cotton and power alcohol (as shown below), also the bounty on flax and linseed were reduced by 20 per cent. as from 20th July, 1931, in terms of the Financial Emergency Act, 1931.

Under the Iron and Steel Products Bounty Act, 1922, the following bounties were provided:—Fencing wire and galvanised sheets, 52s. per ton; wire netting 68s. per ton; traction engines, £10 to £90 each, according to capacity. The bounty on galvanised sheets was increased to 72s. per ton, as from 1st January, 1928, and to 90s. as from 1st January, 1930. The Act provides that if the Customs duties on any of these products are increased the rate of bounty must be reduced, after investigation by the Tariff Board, by an amount corresponding to the increase in Customs duty. Under this provision the bounty on galvanised sheets was reduced to 70s. on 20th June, 1930, and to 63s. on 10th July, 1930. It was suspended when importations of galvanised sheets were prohibited on 3rd October, 1930, and on 31st March, 1931, the Customs duty was raised by 70s. per ton, the increase exceeding the bounty which would have been payable but for its suspension. The bounty on fencing wire was reduced to 46s. on 10th July, 1930, and suspended on 6th November, 1930, and there were successive reductions to 54s. and 45s. 6d. in the bounty on wire netting on these dates. The bounty on traction engines was reduced by 16 per cent. on 7th November, 1930. It is a general rule that bounty is not payable on iron and steel products unless the goods have been made from materials produced in Australia, but the rule may be modified under certain conditions.

On sulphur from Australian pyrites and other sulphide ores or concentrates, bounty is payable at the rate of 45s. per ton.

Bounty at the rate of 4s. per gallon was provided in respect of fortified wine containing not less than 34 per cent. of proof spirit exported before 31st August, 1927. The bounty was reduced to 1s. 9d. per gallon from 1st September, 1927, and to 1s. from 9th March, 1928. It was increased to 1s. 9d. on 13th March, 1930, bounty being payable only on the product of areas planted not later than 31st March, 1928, or of irrigation areas planted with the assistance of the Government of a State.

For certain kinds of canned fruit, viz., apricots, peaches, pears, and pine-apples, canned between 1st November, 1923, and 30th September, 1924, bounties ranging, according to the kind of fruit, from 6d. to 1s. per dozen tins were paid on production, and bounties ranging from 1s. to 1s. 9d. per dozen tins on export before 1st February, 1925.

During 1926 Acts were passed to grant bounties in respect of seed cotton and cotton yarn, and on power alcohol made from cassava, sweet potatoes, arrowroot and other cultivated starch-bearing plants approved by the Minister for Trade and Customs. The cotton bounties vary according to the grade of the product. On seed cotton it is $\frac{3}{4}$ d. or 1 $\frac{1}{4}$ d. per lb., and on cotton yarn from $\frac{3}{4}$ d. to 1s. per lb., according to "count." In terms of the Cotton Industries Bounty Act, 1930, these rates are to be paid until 30th September, 1932, then reduced in each year so that no bounty will be provided after 30th September, 1936. The rate of bounty on power alcohol is 4d. per gallon; it expires at the end of the year 1931. In 1930 bounties were provided also for flax and linseed.

Particulars of the bounties paid on products of New South Wales during three years ended 30th June, 1931, are shown below:—

Product.	1928-29.		1929-30.		1930-31.	
	Quantity on which Bounty was Paid.	Amount of Bounty.	Quantity on which Bounty was Paid.	Amount of Bounty.	Quantity on which Bounty was Paid.	Amount of Bounty.
Iron and Steel Products—		£		£		£
Fencing Wire ... ..ton	45,580	118,508	43,900	114,140	16,532	39,682
Galvanised Sheets	28,515	102,651	24,118	89,561	22,054	79,429
Wire Netting	20,536	69,820	14,940	50,798	7,594	20,854
Sulphur	4,971	11,186	6,588	14,523	3,585	8,068
Fortified Wine ... ..gal.	31,206	1,784	25,295	1,795	33,267	2,821
Cotton Yarn ... ..lb.	944,692	24,623	1,359,358	38,162	1,726,058	46,817
Total, New South Wales...	...	328,612	...	309,279	...	197,671

In addition to the bounties shown above bounty is payable in respect of gold produced in Australia. Particulars as to rate, etc., are shown in the chapter relating to the mining industry.

PROGRESS OF FACTORIES SINCE 1911.

The statistics published in this chapter relate only to the establishments which may be included in the definition of a factory, as shown on page 44. The figures are not a complete record of either the income or expenditure of the undertakings concerned, and are not intended to show their financial

position collectively or individually. The following summary indicates the progress of the factories in New South Wales since 1911:—

Particulars.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	5,039	5,837	8,456	8,208
Average Number of Em- ployees. { Male ...	82,083	112,187	139,104	125,769
{ Female ...	26,541	32,824	46,038	41,921
{ Total ...	108,624	145,011	185,142	167,690
Salaries and Wages paid { Male £000	8,918	22,766	33,509	30,229
to Employees:† { Female £000	1,130	2,853	5,036	4,647
{ Total £000	10,048	25,619	38,545	34,876
Capital Value of Land, Buildings, and Fixtures (owned and rented) £000	13,140	23,429	51,375	53,785
Value of Plant and Machinery... £000	12,511	31,115	51,366	53,515
Machinery—Average Horse-power in use ... h.p.	148,218	312,309	648,450	782,528
Value of Materials and Fuel used £000	34,914	94,713	111,671	100,403
Value added to Raw Materials in process of Manufacture ... £000	19,432	43,128	73,628	66,848
Total Value of Output ... £000	54,346	137,841	185,299	167,251
Average per Factory—				
Employees ... No.	21·6	21·8	21·9	20·4
Horse-power of Machinery ... h.p.	29·4	53·5	76·6	95·3
Land and Buildings ... £	2,698	4,870	6,069	6,553
Plant and Machinery... £	2,483	5,331	6,068	6,520
Material and Fuel ... £	6,928	16,226	13,192	12,232
Value added in process of Manu- facture ... £	3,856	7,389	8,698	8,144
Total Output ... £	10,784	23,615	21,890	20,376
Average Time Worked months	11·55	11·52	11·72	11·66
Average per Employee—				
Salaries and Wages † .. { Males £	114	211	253	253
{ Females £	43	88	110	112
{ Total £	96	182	216	216
Value of Materials and Fuel... £	321	653	603	598
Value added in Manufacture... £	179	298	393	399
Total Output ... £	500	951	1,001	997

† Excluding drawings of working proprietors.

† Information not available.

Since 1911 the number of establishments has increased by 63 per cent., and the number of employees by over 54 per cent. In 1911 the capital value of land, buildings, fixtures, plant, and machinery amounted to £25,650,807, and in 1929-30 it was more than four times that amount. The value of the output in the latter year was over three times as great as in 1911. The amount paid in wages was higher by 247 per cent., and the expenditure on materials and fuel by 188 per cent.

GOVERNMENT FACTORIES AND WORKSHOPS.

The foregoing statement includes particulars of a number of factories and workshops under Government control in New South Wales.

The results shown by Government establishments, however, are not comparable with those of other establishments, because in cases where the former are not conducted for profit the value of the output has been estimated on the basis of the results shown by private establishments of similar type. Moreover, in Government establishments the profit would appear in reducing the price of the product rather than in showing a large margin over cost. Another fact which militates against comparison is that repair work constitutes a large proportion of the work done in these factories.

The following table shows the details of the operations of the establishments under the control of the State and Commonwealth in 1929-30 separately from those conducted by private enterprise.

Particulars.	Government Workshops, etc.	Other Establishments.	Total.
Number of Establishments*	78	8,130	8,208
Average Number of Em- ployees. { Male	18,124	107,645	125,769
{ Female	810	41,111	41,921
{ Total	18,934	148,756	167,690
Salaries and Wages paid to Employees.† { Male	£ 4,906,380	25,322,587	30,228,967
{ Female	£ 63,343	4,583,685	4,647,028
{ Total	£ 4,969,723	29,906,272	34,875,995
Capital Value of Land, Buildings, and Fix- tures, owned by Occupier	£ 6,340,391	30,818,778	37,159,169
Rent paid	£ 784	1,107,626	1,108,410
Value of Plant and Machinery	£ 9,218,647	44,296,721	53,515,368
Machinery—Average Horse-power in use h.p.	218,665	563,861	782,526
Value of Materials and Fuel used... ..	£ 4,371,306	96,031,702	100,403,008
Value added to Raw Materials in process of Manufacture	£ 6,767,208	60,080,402	66,847,610
Total Value of Output	£ 11,138,514	156,112,104	167,250,618

* Each railway workshop is counted as a separate establishment.

† Excluding drawings of working proprietors.

The Government establishments include railway and tramway workshops, electric light and power works, dockyards, printing works, and factories for the production of bricks, monier pipes, meat products, canned fruits, small arms, and clothing.

CLASSIFICATION OF FACTORIES.

The statistics relating to factories, as shown in this chapter, have been compiled from returns supplied by manufacturers in terms of the Census Act of 1901. A return must be supplied in respect of every factory where four or more persons are employed or where power is used—including educational or charitable institutions, reformatories and other public institutions, except penitentiaries. Returns from bakeries were collected for the first time for the year 1927-28, and returns have not been collected in respect of smallgoods-making and farriery.

In a few industries returns are collected from all establishments, even if they have less than four employees and manual labour only is used, and the particulars of such factories are included in the statistics with the object of ascertaining the total output of the products, viz., aerated waters, bacon, butter, cheese, bricks, gas, lime, soap and candles, boots, also tanneries.

For statistical purposes a standard classification of the manufacturing industries was formulated at a conference of Australian statisticians in 1902 and revised at more recent conferences. This classification has been used in the compilation of the statistics relating to factories in New South Wales as shown in this chapter, and a new classification is being used in respect of the year 1930-31.

If a manufacturing business is conducted in conjunction with an importing or a retail business, 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 power from the same generating plant is used for more than

one industry, the cost is distributed proportionately amongst such industries. The generation of electric light and power for use in other manufacturing operations, even if generated on the premises, is treated as an independent industry.

The classes are as follow:—

CLASS I.—TREATING RAW MATERIALS, THE PRODUCT OF AGRICULTURAL AND PASTORAL PURSUITS ETC.

Boiling-down, Tallow Refining, etc.
Sausage Skins, etc.
Tanneries.
Wool-scouring, Fellmongering.
Chaff-cutting, Corn-crushing, etc.

CLASS II.—OILS AND FATS, ETC.

Oil and Grease.
Soap and Candles.

CLASS III.—STONE, CLAY, GLASS, ETC.

Bricks.
Tiles.
Pipes (Earthenware and Cement).
Glass (including Bottles).
Glass (Ornamental).
Lime, Plaster, Cement, and Asphalt.
Marble, Slate, etc.
Modelling.
Pottery and Earthenware.

CLASS IV.—WORKING IN WOOD.

Boxes and Cases.
Cooperage.
Joinery.
Saw-mills.
Wood-turning, Wood-carving, etc.

CLASS V.—METAL WORKS, MACHINERY, ETC.

Agricultural Implements.
Art Metal Works.
Brass and Copper.
Cutlery.
Engineering.
Galvanized Iron-working.
Ironworks and Foundries.
Nails.
Railway Carriages, Rolling-stock, etc.
Railway and Tramway Workshops.
Metal Extraction and Ore Reduction.
Stoves and Ovens.
Tinsmithing.
Wire-working.
Gas Fittings and Meters.
Other Metal Works (including Lead Mills).
Electric Apparatus.
Lamps and Fittings.
Sewing Machines.

CLASS VI.—FOOD, DRINK, ETC.

Bacon-curing.
Biscuits.
Bread Making.
Butter Factories, Creameries, etc.
Butterine and Margarine.
Cheese Factories.
Condensed Milk.
Meat and Fish Preserving.
Confectionery.
Cornflour, Oatmeal, etc.
Flour-mills.
Jam, Fruit and Vegetable-canning.
Dried Fruits.
Pickles, Sauces, and Vinegar.
Sugar Mills.
Sugar Refining.
Aerated Waters, Cordials, etc.
Breweries.
Condiments, Coffee, Spices, etc.
Distilleries.
Bottling.
Wine Making.
Cider.
Ice and Refrigerating.
Malting.
Tobacco, Cigars, etc.
Animal, Poultry, and Stock Foods.

CLASS VII.—CLOTHING, AND TEXTILE FABRICS, ETC.

Woollen and Tweed Mills.
Silk Weaving.
Knitting Factories.
Cotton Mills.
Boots and Shoes.
Boot and Shoe Repairing.
Clothing (Slop).
Clothing (Tailoring).
Clothing (Waterproof and Oil-skin).
Dressmaking and Millinery (Makers' Material).
Dressmaking and Millinery (Customers' Material).
Dyeworks and Cleaning.
Furriers.
Hats and Caps.
Shirts, Ties, and Scarfs.
Underclothing, Whitework, Corsets.
Rope and Cordage.
Sailmaking.
Tents and Tarpaulins.
Bags and Sacks.

CLASS VIII.—BOOKS, PAPER, PRINTING, ETC.

Electrotyping and Stereotyping.
Paper-making, Paper Boxes, Bags, etc.
Photo-engraving.
Printing and Binding.
Newspapers, Magazines and Journals.
Die Sinking, Engraving, etc.

CLASS IX.—MUSICAL INSTRUMENTS, ETC.

Musical Instruments.

CLASS X.—ARMS AND EXPLOSIVES

Arms and Ammunition.
Industrial Explosives.

CLASS XI.—MOTOR AND OTHER ROAD VEHICLES AND ACCESSORIES.

Motor Vehicles and Accessories, Other.

CLASS XII.—SHIP, BOAT, AND AIRCRAFT BUILDING AND REPAIRING.

Docks and Slips, Ship and Boat Building and Repairing.
Aircraft Building and Repairing.

CLASS XIII.—FURNITURE, BEDDING, ETC.

Bedding, Flock, and Upholstery.
Billiard Tables.
Furnishing, Drapery, etc.
Furniture and Cabinet-making.
Picture Frames.
Window Blinds.
Sea Grass, Wicker and Bamboo-Furniture.
Baskets, Wickerware, and Matting.
Brooms and Brushware.
Carpets and Linoleums.

CLASS XIV.—DRUGS AND CHEMICALS.

Chemicals, Drugs, and Medicines.
Paints and Varnishes.
Inks, Polishes, etc.
Fertilisers.
Essential Oils.

CLASS XV.—SURGICAL AND OTHER SCIENTIFIC INSTRUMENTS.

Surgical Instruments.
Optical Instruments.
Other Scientific Instruments.

CLASS XVI.—JEWELLERY, TIME-PIECES, AND PLATED-WARE.

Electro-plating.
Manufacturing Jewellery, etc.
Watch and Clock Making and Repairing.

CLASS XVII.—HEAT, LIGHT, AND POWER.

Coke-works.
Electric-light and Power.
Gas-works.
Kerosene.
Matches.
Carbide.
Hydraulic Power.

CLASS XVIII.—RUBBER GOODS AND LEATHERWARE (N.E.I.).

Leather Belting, Fancy Leather, Portmanteaux, and Bags.
Rubber Goods.

CLASS XIX.—MINOR WARES (N.E.I.).

Toys.
Umbrellas.
Other Industries.

The following table summarises the operations of the factories in New South Wales and in the metropolitan district during the year 1929-30, grouped according to the class of industry. The metropolitan district includes such areas as Auburn, Granville, Lidcombe, and Parramatta, which were classed as extra metropolitan prior to the year 1928-29.

Class of Industry.	Establishments.	Average Number of Employees.			Materials and Fuel Used.	Tons, Salaries and Wages exclusive of Drawing of Working Proprietors.	Value of Goods Manufactured or Work done.	Value of Production, being Value added to Raw Materials.
		Males.	Females	Total.				
NEW SOUTH WALES.								
Treating Raw Materials, etc. ...	157	2,764	102	2,866	£(000) 3,585	£(000) 646	£(000) 4,657	£(000) 1,072
Oils, Fats, etc.	37	945	360	1,305	1,596	271	2,425	829
Stone, Clay, Glass, etc.	393	9,117	225	9,342	2,580	2,092	6,254	3,665
Working in Wood	853	7,861	198	8,059	4,057	1,638	6,638	2,581
Metal Works, Machinery, etc.	962	41,341	1,736	43,077	24,572	10,558	40,499	15,927
Food, Drink, etc.	1,200	15,692	6,863	22,555	38,131	4,604	51,314	13,183
Clothing, Textile Fabrics, etc.	1,723	10,298	23,822	34,120	8,269	4,726	16,116	7,847
Books, Paper, Printing, etc.	613	9,542	3,895	13,437	3,821	2,999	9,042	5,221
Musical Instruments, etc.	25	873	272	1,145	330	256	768	438
Arms and Explosives	3	270	9	279	18	80	121	103
Vehicles, Saddlery, Harness, etc.	1,131	7,398	351	7,749	1,416	1,585	3,896	2,480
Ship and Boat-building, etc.	51	4,314	50	4,364	622	1,171	1,880	1,258
Furniture, Bedding, etc.	424	4,643	1,114	5,757	2,116	1,111	3,893	1,777
Drugs and Chemicals	168	2,441	1,166	3,607	2,927	769	5,599	2,672
Surgical and other Scientific Instruments.	30	243	43	286	48	61	151	103
Jewellery, Timepieces, and Plated-ware.	82	581	79	660	113	130	323	210
Heat, Light, and Power	186	4,529	159	4,688	4,337	1,281	10,058	5,721
Rubber Goods and Leather-ware, n.e.i.	130	2,534	1,243	3,777	1,662	805	3,216	1,554
Minor Wares, n.e.i.	40	383	234	617	194	93	401	207
Total ...	8,208	125,769	41,921	167,690	100,403	34,876	167,251	66,848
METROPOLITAN DISTRICT.								
Treating Raw Materials, etc.....	94	2,195	99	2,294	2,944	552	3,871	927
Oil, Fats, etc.	25	887	352	1,239	1,548	259	2,357	809
Stone, Clay, Glass, etc.	213	6,145	187	6,332	1,517	1,411	3,742	2,225
Working in Wood	352	4,175	124	4,299	2,521	970	4,032	1,511
Metal Works, Machinery, etc.	796	30,610	1,595	32,205	9,749	7,555	20,373	10,624
Food, Drink, etc.	589	10,950	6,005	16,955	26,035	3,507	36,807	10,772
Clothing, Textile Fabrics, etc.	1,363	8,900	21,871	30,771	7,598	4,346	14,829	7,231
Books, Paper, Printing, etc.	408	8,228	3,717	11,945	3,623	2,672	8,328	4,705
Musical Instruments, etc.	24	867	272	1,139	330	255	766	436
Arms and Explosives	2	16	7	23	4	4	13	9
Vehicles, Saddlery, Harness, etc.	407	4,902	219	5,121	990	1,156	2,751	1,761
Ship and Boat-building, etc.	48	3,147	29	3,176	353	852	1,278	925
Furniture, Pedding, etc.	365	4,316	1,096	5,412	2,037	1,054	3,729	1,692
Drugs and Chemicals	153	2,086	1,150	3,236	2,545	674	4,905	2,360
Surgical and other Scientific Instruments.	30	243	43	286	48	61	151	103
Jewellery, Timepieces, and Plated-ware.	79	568	79	647	107	127	313	206
Heat, Light, and Power	31	2,705	130	2,835	2,997	705	7,397	4,400
Rubber Goods and Leather-ware, n.e.i.	83	2,379	1,231	3,610	1,614	785	3,118	1,504
Minor Wares, n.e.i.	36	333	230	563	176	84	367	191
Total ...	5,098	98,652	38,436	132,088	66,736	27,029	119,127	52,391

The most important group of secondary industries in the State consists of metal and machinery works, in which the number of employees, the amount of salaries and wages, and the value added to raw materials are greater than in any other group. The value of raw materials and fuel used and the value of the output are greatest in factories connected with food

and drink, and in other respects this class ranks second in importance, though the clothing factories give employment to a greater number of employees.

The number of factories of each class and the number of persons employed in the various divisions of the State in 1929-30 were as follows:—

Division.	Raw Material, etc.	Stone, Clay, etc.	Wood.	Metals and Machinery.	Food, Drink, etc.	Clothing, etc.	Books, Printing.	Vehicles, Saddlery.	Furniture, etc.	Heat, Light, Power.	Other Classes.	Total.
NUMBER OF ESTABLISHMENTS.												
Cumberland—												
Metropolis ...	94	213	352	796	589	1,863	408	407	365	31	480	5,098
Balance of ...	15	23	14	4	32	25	9	28	3	3	1	157
North Coast ...	...	9	90	18	96	32	22	82	10	18	10	387
Hunter and Manning ..	8	30	111	70	116	103	33	111	29	22	24	657
South Coast ...	2	14	40	11	76	23	18	44	1	19	2	250
Tablelands—												
Northern ...	7	7	38	6	27	13	8	84	2	8	7	157
Central ...	4	25	25	14	57	46	18	64	6	21	11	291
Southern ...	2	10	14	4	19	14	9	39	1	7	5	124
Western Slopes—												
North ...	...	12	27	4	25	10	8	46	...	7	3	142
Central ...	1	8	27	4	31	15	12	56	1	9	6	170
South ...	2	26	39	10	49	41	30	83	3	12	11	306
Plains—												
Northern ...	3	4	24	2	13	4	7	23	2	3	2	57
Central ...	3	1	15	2	8	3	4	17	...	3	...	56
Riverina ...	11	9	31	4	32	18	17	77	...	12	1	212
Western Division ...	5	2	6	13	30	13	10	20	1	11	3	114
Total ...	157	393	853	962	1,200	1,723	613	1,131	424	186	666	8,268

AVERAGE NUMBER OF EMPLOYEES.												
Cumberland—												
Metropolis ...	2,204	6,332	4,290	32,205	16,955	30,771	11,945	5,121	5,412	2,835	13,919	132,069
Balance of ...	157	543	109	149	263	967	46	74	6	19	5	2,338
North Coast ...	...	53	1,007	161	1,203	128	172	306	30	115	42	3,217
Hunter and Manning...	95	423	1,024	6,280	1,336	839	376	485	241	560	1,468	13,138
South Coast ...	13	398	318	1,234	386	73	88	149	1	434	98	3,102
Tablelands—												
Northern ...	34	46	181	79	141	90	55	139	5	36	44	850
Central ...	17	1,181	95	1,280	373	369	175	224	29	248	292	4,283
Southern ...	15	77	70	307	80	286	56	137	2	65	16	1,111
Western Slopes—												
North ...	...	52	108	132	159	30	69	146	...	32	10	738
Central ...	8	48	124	118	130	47	75	156	1	44	19	770
South ...	31	124	215	240	344	377	182	344	19	55	08	1,099
Plains—												
Northern ...	12	9	152	42	51	9	33	104	9	18	4	443
Central ...	31	4	85	9	36	16	19	66	...	14	...	280
Riverina ...	128	33	192	62	908	45	73	232	...	50	3	1,726
Western Division ...	31	14	80	779	190	73	73	66	2	157	52	1,517
Total ...	2,866	9,342	8,059	43,077	22,555	34,120	13,437	7,749	5,757	4,688	16,040	167,690

The metropolitan area contains the majority of the factories. Other important manufacturing centres are in proximity to the coal-fields, viz., at Newcastle in the Hunter and Manning division, at Port Kembla in the South Coast division, and at Lithgow in the Central Tablelands division. In the Western division the mining of the silver-lead deposits at Broken Hill has given rise to a number of subsidiary factories, such as ore treating and sulphuric acid plants.

In the metropolitan district metal and machinery workshops and clothing factories give employment to a much greater number of workers than any other group, next in order being food and drink factories. In the Hunter and Manning and in the South Coast divisions, metal and machinery workshops give employment to the greatest number of employees. In the

northern coastal districts butter and bacon factories are most prominent. In all the coastal areas there are many sawmills and other wood-working establishments.

Beyond the coastal belt there are few large groups of establishments. The Central Tableland is the most important division, as it contains the Lithgow ironworks and the principal cement works.

Particulars relating to a number of classes of factories are grouped with miscellaneous industries under the heading "other classes." All the factories connected with the manufacture of surgical instruments and leatherware, *n.e.i.*, were located in the metropolitan district. Of the establishments in which oil and fats were treated, 25, with 1,239 employees, were in the metropolis; 4 with 38 employees were in the Hunter and Manning division and there were 8 small factories in other divisions. In the metropolitan division there were 48 establishments for shipbuilding and repairing, and the number of employees was 3,176; in the Hunter and Manning division there were 2 with 1,183 employees. The factories producing drugs and chemicals, *etc.*, were distributed as follows:—Metropolis, 153 with 3,236 employees; and 15 with 371 employees in other divisions. Of 82 jewellery establishments, 79, with 647 employees, were in the metropolitan area.

The extent of the operations of the factories in each division is indicated in the following table:—

Division.	No. of Establishments.	Average Number of Persons employed	Value of Lands and Buildings and Fixtures.	Rent paid.	Value of Plant and Machinery.	Salaries and Wages paid.	Materials used.	Fuel and power consumed.	Value of Goods Manufactured or Work done.
	No.		£	£	£	£	£	£	£
Metropolis ...	5,098	132,088	28,916,117	944,070	35,673,512	27,029,155	63,461,758	3,274,587	119,127,072
Balance of Cumberland.	157	2,338	424,093	9,408	544,180	366,820	1,141,601	91,405	1,829,624
North Coast ...	387	3,217	775,718	17,242	1,579,993	642,185	5,283,274	89,586	6,609,489
Hunter and Manning.	657	13,138	3,088,636	40,304	7,593,248	3,289,467	11,580,695	1,111,506	17,864,958
South Coast ...	250	3,192	1,084,689	15,374	2,728,058	768,133	3,876,029	451,292	6,042,683
Northern Tableland.	157	850	132,037	6,952	243,517	159,712	466,355	24,237	785,459
Central Tableland.	291	4,283	1,061,242	14,613	2,157,629	1,009,465	2,299,226	357,042	4,811,675
Southern Tableland.	124	1,111	223,484	7,417	385,960	213,019	272,636	36,791	659,768
North-western Slopes.	142	738	130,959	8,749	284,160	147,109	462,213	24,946	782,851
Central-western Slopes.	170	770	173,264	9,506	245,772	148,341	388,271	28,043	703,953
South-western Slopes.	306	1,999	485,294	16,236	615,020	377,360	1,155,880	47,573	1,863,299
Northern Plains	87	443	57,578	3,824	111,332	83,714	163,898	10,316	313,706
Central Plains ...	56	280	30,521	2,791	88,879	40,547	96,599	5,119	183,134
Riverina ...	212	1,726	280,733	8,923	359,159	209,274	813,487	35,646	1,183,678
Western Division	114	1,517	294,804	3,001	904,949	391,694	2,902,736	450,261	4,489,264
Total ...	8,208	167,690	37,159,169	1,108,410	53,515,368	34,875,995	94,864,658	6,038,350	167,250,618

SIZE OF ESTABLISHMENTS.

The following comparative statement shows the distribution of establishments in the metropolitan and extra-metropolitan districts, according

to the number of persons engaged. Where two or more classes of manufacturing are conducted in one factory, each branch is treated, in the compilation of the factory statistics, as if it were a separate establishment:—

Establishments employing on the average—	1911.		1920-21.		1928-29.		1929-30.	
	Establish- ments.	† Em- ployees.	Establish- ments.	† Em- ployees.	Establish- ments.	† Em- ployees.	Establish- ments.	† Em- ployees.
METROPOLITAN DISTRICT.								
Under 4 employees	238	547	493	1,083	1,240	2,457	1,297	2,561
4 employees ...	179	716	230	920	391	1,564	362	1,448
5 to 10 employees	743	5,336	1,072	7,566	1,425	10,047	1,361	9,597
11 „ 20 „ ...	520	7,834	684	10,118	881	12,872	811	11,937
21 „ 50 „ ...	477	14,655	639	20,437	808	25,862	795	25,472
51 „ 100 „ ...	202	14,360	222	15,158	321	21,999	262	17,963
101 and upwards...	151	34,144	183	49,270	232	71,028	210	63,110
Total ...	2,510	77,592	3,523	104,552	5,298	145,829	5,098	132,088
REMAINDER OF STATE.								
Under 4 employees	538	1,282	513	1,173	1,226	2,540	1,306	2,649
4 employees ...	371	1,484	270	1,080	391	1,564	391	1,564
5 to 10 employees	993	6,817	864	5,896	962	6,509	874	5,898
11 „ 20 „ ...	381	5,390	380	5,351	340	4,857	293	4,036
21 „ 50 „ ...	164	4,874	181	5,569	155	4,769	158	4,742
51 „ 100 „ ...	40	2,858	43	2,903	34	2,332	35	2,425
101 and upwards...	42	8,327	63	18,487	59	16,742	53	14,238
Total ...	2,529	31,032	2,314	40,459	3,167	39,313	3,110	35,602
NEW SOUTH WALES.								
Under 4 employees	776	1,829	1,006	2,256	2,466	4,997	2,603	5,210
4 employees ...	550	2,200	500	2,000	782	3,128	753	3,012
5 to 10 employees	1,736	12,153	1,936	13,462	2,387	16,556	2,235	15,495
11 „ 20 „ ...	901	13,224	1,064	15,469	1,221	17,729	1,104	16,023
21 „ 50 „ ...	641	19,529	820	26,006	963	30,631	953	30,214
51 „ 100 „ ...	242	17,218	265	18,061	355	24,331	297	20,388
101 and upwards...	193	42,471	246	67,757	291	87,770	263	77,348
Total ...	5,039	108,624	5,837	145,011	8,465	185,142	8,208	167,690

† Including working proprietors.

The data for the metropolitan district in 1928-29 and 1929-30 include particulars of factories in Auburn, Granville, Lidcombe and Parramatta, formerly classified as extra-metropolitan.

The establishments employing 10 hands or less represent 59 per cent. of the total number, the factories in the Metropolitan area being generally larger than those in other parts of the State. The average number of employees per establishment is 25.9 in the Metropolis, 11 in the remainder of the State, and 20 in the whole State; in 1901 the averages were 30, 12, and 20 respectively.

The increase in the number of small factories in recent years occurred for the most part in boot-repairing establishments and garages where motor

repairs are effected. There were 88 boot-repairing establishments with 336 employees in 1920-21 and 613 with 1,138 employees in 1929-30, and the works for motor vehicles and accessories increased during the period from 283 with 3,090 employees to 967 with 6,865 employees. The establishments with less than 4 employees in 1929-30 included 563, with 851 persons engaged in boot repairs and 544 motor vehicle works with 1,098 employees.

Establishments employing on the average--	Proportion of each Group to Total.							
	Metropolitan District.				Remainder of State.			
	1911.	1920-21.	1928-29.	1929-30.	1911.	1920-21.	1928-29.	1929-30.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Under 4 employees ...	9.5	14.0	23.4	25.4	21.3	22.2	38.7	42.0
4 employees...	7.1	6.5	7.4	7.1	14.7	11.7	12.3	12.6
5 to 10 employees...	29.6	30.4	26.9	26.7	39.2	37.3	30.4	28.1
11 ,, 20 ,, ...	20.7	19.4	16.6	16.0	15.1	16.4	10.7	9.4
21 ,, 50 ,, ...	19.0	18.2	15.2	15.6	6.5	7.8	4.9	5.1
51 ,, 100 ,, ...	8.1	6.3	6.1	5.1	1.6	1.9	1.1	1.1
101 and upwards ..	6.0	5.2	4.4	4.1	1.6	2.7	1.9	1.7
Total ...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In the Metropolitan district the proportion of establishments employing less than five hands was 32.5 per cent. in 1929-30. In the country districts the proportion of such factories was 54.6 per cent.

MOTIVE POWER.

The power used for driving machinery in factories is derived mainly from steam. There are electric engines of considerable voltage, but the generation of their power depends upon some other class of engine. Gas is used only to a limited extent.

The following table shows the distribution of motive power through the various agencies of steam, gas, electricity, water and oil, expressed in units of horse-power:—

Year.	Establishments using Manual labour only.	Establishments using Machinery.	Horse-power of Machinery (Average used).					
			Steam.	Gas.	Electricity.	Water.	Oil.	Total.
1901	1,398	1,969	42,555	1,577	330	97	36	44,595
1911	1,489	3,550	113,939	12,201	20,671	222	1,185	148,218
1920-21	835	5,002	192,816	13,242	103,846	24	2,381	312,309
1925-26	920	7,276	299,538	15,618	181,890	1,585	5,308	503,939
1926-27	827	7,395	331,036	13,896	204,094	1,041	8,778	558,845
1927-28	885	7,477	384,711	14,545	223,190	1,190	12,495	636,131
1928-29	805	7,660	376,737	14,531	236,255	5,869	15,058	648,450
1929-30	620	7,588	490,116	11,919	249,606	11,351	19,534	782,526

The proportion of factories in which machinery is used increased from 70 per cent. in 1911 to 92 per cent. in 1929-30, and the power actually used in operating the machines from 148,218 horse-power to 782,526 horse-power. The greatest development occurred in electrical power, which has

increased twelve-fold since 1911. The proportions of each kind of power in 1929-30 were:—Steam 62 per cent., gas 2 per cent., electricity 32 per cent., and oil and water 4 per cent.; the corresponding proportions in 1911 being steam 77 per cent., gas 8 per cent., electricity 14 per cent., and oil and water 1 per cent. The increase in water power during the last two years was due to the operations of the hydro-electric power station at Burrinjuck.

The full capacity of the factory machinery in 1929-30 was 1,304,964 horse-power, viz.: Steam 868,526, gas 15,400, electricity 373,893, water 19,218, oil 27,927.

CAPITAL VALUE OF PREMISES.

With regard to capital permanently invested in manufacturing industries, particulars are available only of the value of the land, buildings, and fixtures which are the property of the occupier. If they are not the property of the occupier the rental value is recorded. In the following table, the capital value of the rented premises is computed by capitalising the rent paid at fifteen years' purchase.

The following statement shows the extent to which the capital value of the premises used for manufacturing purposes has increased since 1901, also the advance in the value of plant and machinery installed:—

Year.	No. of Establishments.	Capital Value of Premises (owned and rented),	Value of Machinery, Tools, and Plant,	Average per Establishment.	
				Value of Premises,	Value of Machinery, Tools and Plant.
		£	£	£	£
1901*	3,367	7,838,628	5,860,725	2,328	1,740
1911	5,039	13,140,207	12,510,600	2,608	2,483
1920-21	5,837	28,428,917	31,115,444	4,870	5,331
1925-26	8,196	43,954,312	45,994,534	5,363	5,610
1926-27	8,222	46,950,706	48,659,375	5,710	5,918
1927-28	8,362	49,414,310	50,489,674	5,909	6,038
1928-29	8,465	51,375,003	51,365,710	6,069	6,068
1929-30	8,208	53,785,319	53,515,368	6,512	6,520

* Excluding a number of small country establishments.

The premises owned by the occupiers in 1929-30 were valued at £37,159,169 and rented premises on the basis described above at £16,626,150, the corresponding values in 1920-21 being £19,111,772 for premises owned by occupiers and £9,317,145 for rented premises. Investigations made in 1928 disclosed the fact that many firms had been stating the value of their land, buildings and plant at the original cost. The values shown for the last three years are those appearing in the firms' books after allowing for depreciation.

A marked improvement in the class of buildings used as factories has been a feature of the progress of the industries. In the construction of new factory buildings provision has been made for ventilation and good lighting, in accordance with the requirements of the Factories and Shops Acts, and for the general comfort and welfare of the employees, as well as for the expeditious handling of materials and products.

SALARIES AND WAGES.

The amount of salaries and wages quoted throughout this chapter is exclusive of amounts drawn by working proprietors.

The salaries and wages paid to employees in factories amounted in 1929-30 to £34,875,995. Male workers, including juveniles, received

£30,228,967, equal to £252 13s. per head; and female workers, including juveniles, £4,647,028, or £111 16s. 7d. per head.

A comparison of the total amount of salaries and wages paid since 1901 is given in the next table, together with the average amount received per employee and the average time worked in all factories. Similar information regarding each class of industry is published in Part "Factories and Mines" of the Statistical Register.

Year.	Salaries and Wages (exclusive of drawings by Working Proprietors).				Level of Average Wages per Employee. 1911 = 1000.			Weighted Average time Worked. per Factory.
	Total.	Average per Employee including Juveniles.			Males.	Females.	Total.	
		Males.	Females.	Total.				
	£	£ s. d.	£ s. d.	£ s. d.	*	*		months.
1901	4,952,000	* *	* *	81 0 0	*	*	839	11·32
1911	10,047,662	114 4 9	43 2 1	96 7 1	1000	1000	1000	11·55
1920-21	25,618,591	210 19 10	87 12 2	182 7 10	1847	2032	1893	11·52
1925-26	33,566,546	233 19 5	101 5 11	201 0 11	2048	2350	2086	11·70
1926-27	37,092,196	245 8 10	107 6 2	210 10 10	2148	2483	2185	11·75
1927-28	37,818,141	250 13 8	110 4 7	215 4 9	2194	2557	2234	11·67
1928-29	38,544,687	252 11 1	110 7 10	216 4 7	2211	2561	2244	11·72
1929-30	34,875,995	252 13 0	111 16 7	216 7 0	2212	2594	2245	11·66

* Not available.

Between 1911 and 1929-30 the average of the wages paid to males, including juveniles, increased by over 121 per cent., the proportion of boys under 16 showing little alteration. The average amount paid to women and girls increased by 159 per cent., and the proportion of girls under 16 increased from 8.5 per cent. of the female employees to 10.2 per cent.

The average earnings of males were highest in paper and printing factories and in arms and explosives works, the average amounts paid per male worker, including the management staff, in 1929-30 being £285 4s. 3d. and £281 17s. 5d. respectively.

Of the female workers, those employed in the clothing industries, and in the printing and bookbinding trades received in 1929-30 an average wage of £110 15s. 3d. and £112 6s. 1d. respectively.

VALUE OF MATERIALS AND OUTPUT.

The following statement shows the value of materials and fuel used, the value of production, and the amount paid in wages in factories in various years since 1901:—

Year.	Value of—					Salaries and Wages paid, exclusive of Drawings of Working Proprietors.	Balance (Output, less Materials and Wages).
	Materials Used.	Fuel Consumed, including Motive-power Rented.	Goods Manufactured or Work Done.	Production, being Value added to Raw Materials.	Production per Employee.		
	£(000)	£(000)	£(000)	£(000)	£(000)	£(000)	£(000)
1901	15,141	496	25,648	10,011	151·2	4,952	5,059
1911	33,671	1,243	54,346	19,432	178·9	10,048	9,384
1920-21	91,104	3,609	137,841	43,128	297·4	25,619	17,509
1925-26	99,303	5,822	169,963	64,838	372·5	33,566	31,272
1926-27	102,983	6,470	179,302	69,849	381·3	37,092	32,757
1927-28	103,265	6,333	181,403	71,805	393·2	37,818	33,987
1928-29	105,357	6,314	185,298	73,627	397·8	38,544	35,083
1929-30	94,365	6,038	167,251	66,848	398·6	34,876	31,972

The value of the output has grown from £25,648,471 in 1901 to £167,250,618 in 1929-30, and the value of production from £10,010,860 to £66,847,610. The cost of materials used and fuel consumed in the latter year amounted to £100,403,008, and salaries and wages to £34,875,995.

Thus on the average, out of every hundred pounds worth of goods produced in manufactories in 1929-30, the materials and the fuel cost £60, while the employees received £20 16s., leaving a balance of £19 4s. for the payment of overhead charges and other expenses, and for profits. The corresponding amounts for the first year shown in the table were £61, £19 6s., and £19 14s. respectively.

There are, of course, numerous items to be considered before profits accrue. The cost of these cannot be determined accurately, but from the information available it is possible to make a rough estimate with regard to such items as depreciation and interest on capital invested in factories other than Government establishments.

Excluding Government workshops and factories from consideration, the capital value of land, buildings and fixtures in 1929-30 amounted to £30,819,000. Municipal valuations indicate that the unimproved value of property is about 35 per cent. of the improved value, and on this basis the value of the buildings and fixtures would be about £19,724,000.

Factory buildings probably depreciate in value more quickly than any other class of buildings, and therefore 4 per cent. may be regarded as a very moderate rate to be allowed yearly on that account. Depreciation of plant is more rapid, and varies considerably in different industries. As a result of inquiries made by proprietors of some of the largest factories in various industries and of the managers of State undertakings, it is estimated that $6\frac{1}{2}$ per cent. is a fair average allowance for depreciation of plant and machinery. The allowance to be made for depreciation of buildings and fixtures would therefore be about £789,000, and on plant and machinery £2,879,000, or a total of £3,668,000.

In addition to the allowance for depreciation, an allowance should be made for interest on invested capital. Excluding Government workshops and factories the capital value of machinery and plant is £44,297,000, and in land and buildings, £30,819,000, to this must be added the capital represented by materials awaiting treatment and by manufactured goods awaiting disposal. Assuming that the average value of materials on hand awaiting treatment represents generally about 21.5 per cent. (equal to about two and a half months' supply) of the value of all material used during the year, approximately £20,647,000 would have been invested in this way during 1929-30. The value of unsold stocks on hand is taken to be about 5 per cent. of the total value of the output, and this would represent an investment of capital to the extent of £7,806,000. The total capital invested in 1929-30, therefore, may be set down at about £103,569,000. Interest on this amount at 6 per cent., which could have been obtained by investment in Government loans, would be £6,214,000. The allowance to be made for depreciation and interest is estimated, on this basis, to be £9,894,000, to which must be added cost of rented premises, £1,108,000, so that £11,002,000 should be deducted in respect of charges which must be taken into account before profits can be estimated. This would reduce the balance remaining after payment of wages, material and fuel to £19,172,000, equal to 12.1 per cent. of the total output, and such items of expense as insurance, rates and taxes, etc., would still have to be paid.

The proportions of the items which made up the total value of output of the manufacturing industries in various years since 1901 are shown below:—

Year.	Proportion per cent. of Total Value of Output absorbed by—				Total.
	Materials.	Fuel.	Salaries and Wages.	Overhead Charges, Profit, etc.	
1901	59.0	2.0	19.3	19.7	100
1911	61.9	2.3	18.6	17.2	100
1920-21	66.1	2.6	18.6	12.7	100
1925-26	58.4	3.4	19.7	18.5	100
1926-27	57.4	3.6	20.7	18.3	100
1927-28	56.9	3.5	20.8	18.8	100
1928-29	56.9	3.4	20.8	18.9	100
1929-30	56.4	3.6	20.8	19.2	100

Between 1920-21 and 1925-26 the proportion absorbed by materials fell from 66.1 per cent. to 58.4 per cent., then it declined slowly to 56.4 per cent. in 1929-30. Meanwhile the proportion for expenses and profits rose from 12.7 per cent. to 18.5 per cent. in 1925-26 and to 19.2 per cent. in 1929-30.

The ratio of salaries and wages has been constant in recent years at 20.8 per cent. as compared with 18.6 per cent. in 1911 and 1921 and 19.7 per cent. in 1925-26. The proportion of value of output absorbed by fuel was 2.3 per cent. in 1911, and about 3.5 in recent years, the increase of practically 50 per cent. being due partly to the greater use of power-driven machinery and largely to increase in prices.

The following table shows, in each class of industry, the proportions which the value of goods manufactured and of work done, the cost of materials used and of fuel consumed, the amount paid in wages and salaries, bore to the total output in 1929-30:—

Class of Industry.	Proportionate Value of Manufactured Goods represented by—			
	Materials used.	Fuel, etc.	Salaries and Wages.	Balance.
	per cent.	per cent.	per cent.	per cent.
Treating Raw Materials, etc.	74.5	2.5	13.9	9.1
Oils and Fats, etc.	63.8	2.0	11.2	23.0
Stone, Clay, Glass, etc.	29.8	11.6	33.5	25.1
Working in Wood	60.2	0.9	24.7	14.2
Metal Works, Machinery, etc.	56.3	4.4	26.1	13.2
Food and Drink, etc.	72.9	1.4	9.0	16.7
Clothing and Textile Fabrics, etc.	50.2	1.1	29.3	19.4
Books, Paper, Printing, etc.	40.5	1.8	33.2	24.5
Musical Instruments, etc.	41.6	1.3	33.4	23.7
Arms and Explosives	12.8	2.7	65.7	18.8
Vehicles, Saddlery, Harness, etc.	34.8	1.5	40.7	23.0
Ship and Boat-building, etc.	29.9	3.1	62.3	4.7
Furniture, Bedding, etc.	53.2	1.1	28.5	17.2
Drugs and Chemicals	50.8	1.5	13.7	34.0
Surgical and other Scientific Instruments	30.4	1.3	40.6	27.7
Jewellery, Timepieces and Plated-ware	33.4	1.7	40.1	24.8
Heat, Light and Power	24.5	18.6	12.7	44.2
Rubber Goods and Leatherware, N.E.I.	48.7	3.0	25.0	23.3
Minor wares, N.E.I.	47.5	0.8	23.3	28.4
Total	56.4	3.6	20.8	19.2

The ratio of the total amount of wages to the value of production, that is, the value added to raw materials remained practically constant for the industries as a whole, though it varied considerably in different industries, as well be seen in the following table relating to the last six years.

Class of Industry.	Ratio of Amount of Wages Paid to Value of Production.					
	1921-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	per cent	per cent.	per cent.	per cent	per cent	per cent.
Treating Raw Materials, etc.	59.8	54.0	51.4	57.4	59.0	60.3
Oils, Fats, etc.	32.9	28.9	32.4	35.5	33.7	32.6
Stone, Clay, Glass, etc.	56.9	55.4	54.5	55.3	54.6	57.1
Working in Wood	65.5	64.6	62.6	61.7	62.0	63.5
Metal Works, Machinery, etc.	63.0	60.9	64.1	64.7	62.3	66.3
Food, Drink, etc.	35.3	34.9	34.0	34.1	35.1	34.9
Clothing, Textile Fabrics, etc.	58.1	57.9	58.9	58.4	59.3	60.2
Books, Paper, Printing, etc.	59.2	57.4	57.7	56.5	57.1	57.4
Musical Instruments, etc.	61.1	61.9	53.0	54.8	57.5	58.5
Arms and Explosives*	40.1	41.5	37.1	37.7	37.5	44.3
Vehicles, Saddlery, Harness, etc.	71.2	69.1	67.8	69.0	69.1	63.9
Ship and Boat-building, etc.	93.0	90.5	95.5	86.5	91.6	93.0
Furniture, Bedding, etc.	63.2	64.3	60.2	63.7	65.3	62.5
Drugs and Chemicals	27.8	27.1	27.6	29.0	30.2	28.8
Surgical and other Scientific Instruments	58.9	66.2	60.7	63.4	55.2	59.4
Jewellery, Timepieces, and Plated-ware	64.2	61.6	59.7	57.4	61.5	61.8
Heat, Light, and Power ...	27.2	23.5	27.7	25.3	25.0	22.4
Rubber Goods and Leatherware, N.E.I.	58.9	55.0	57.4	55.7	47.1	51.8
Minor Wares, N.E.I.	59.0	51.4	64.7	50.3	49.5	45.0
Total*	53.4	51.9	53.1	52.6	52.3	52.2

*Excluding Commonwealth Small Arms Factory.

FUEL CONSUMED.

The value of the coal, coke, and wood consumed in factories in 1929-30 was £3,666,809. The value of oil, gas, etc., and of electricity used was £2,371,541, so that the value of all fuel consumed, including motive power rented, amounted to £6,038,350. Coal is used extensively in all large industries with the exception of smelting, where coke is used. The quantity and value of each kind of fuel used in the various industries in 1929-30 were as follows:—

Industry.	Coal.		Coke.		Wood.		Total Value of Fuel Consumed including Motive Power Rented.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	tons.	£.	tons.	£.	tons.	£.	£.
Treating Raw Materials, etc...	48,185	73,555	149	320	2,763	2,034	115,372
Oils and Fats, etc.	16,788	29,665	622	1,046	57	50	47,791
Stone, Clay, Glass, etc.	393,950	423,751	3,904	6,415	39,954	31,876	722,422
Working in Wood	4,203	6,288	249	402	8,618	4,273	61,304
Metal Works, Machinery, etc.	448,514	397,037	382,877	734,135	2,379	3,059	1,777,581
Food, Drink, etc.	193,432	274,196	22,829	37,867	68,083	75,457	741,121
Clothing, Textile Fabrics, etc.	21,929	32,734	2,485	4,217	938	1,084	180,430
Books, Paper, Printing, etc...	7,106	11,670	495	827	211	249	159,085
Musical Instruments, etc.	2,075	3,398	68	141	...	...	10,221
Arms and Explosives	1,921	1,185	...	...	...	...	3,274
Vehicles, Saddlery, etc.	1,336	2,510	638	1,201	678	760	57,426
Shipbuilding and Repairing...	12,687	18,016	2,613	5,193	14	13	59,151
Furniture, Bedding, etc.	5,599	8,546	171	274	21	26	42,705
Drugs and Chemicals	14,792	22,281	8,603	10,361	1,638	1,313	38,985
Surgical and Scientific Instruments.	3	8	10	15	...	...	1,992
Jewellery, Timepieces, and Plated-ware.	7	13	151	263	...	...	5,503
Heat, Light, and Power ...	924,492	1,192,612	212,447	208,982	12,995	10,632	1,869,313
Rubber Goods, Leatherware, N.E.I.	17,571	23,979	512	959	559	630	96,302
Minor Wares, N.E.I.	291	393	60	145	1,004	753	3,371
Total ...	2,114,881	2,521,837	638,873	1,012,763	139,912	132,209	6,038,350

NOTE.—These figures do not include 605,729 tons of coal used for making coke, or 653,149 tons used for making gas.

The fuel used in factories during the year 1921-22 consisted of coal, 1,654,262 tons, coke 548,418 tons, and wood 134,121 tons. Since that year the quantity of coal has increased by 28 per cent., coke by 16 per cent., and wood by 4 per cent.

The coke used in smelting works is specially prepared for the purpose and is much more costly than the coke obtained as a by-product in making gas and used by the gas companies at the place of production.

EMPLOYMENT IN FACTORIES.

The number of factory employees as stated in this chapter is the sum of the average numbers employed in each factory during the year specified. In the case of any factory which was not in operation during the whole of the year, the number included is the average number engaged during the time when work was in progress. The total number of employees on this basis as shown in the following table was 167,690. By weighting the numbers in each industry by the average time worked per factory in that industry it is calculated that the equivalent number of employees working for a full year would be 162,939.

A comparative statement of number of persons engaged in the various classes of manufacturing industries is shown below:—

Class of Industry.	Persons engaged, including Working Proprietors.			
	1911.	1920-21.	1928-29.	1929-30.
Treating Raw Materials, etc.	3,890	3,840	2,894	2,866
Oils and Fats, etc.	889	1,584	1,417	1,305
Stone, Clay, Glass, etc.	5,695	8,829	10,329	9,342
Working in Wood	8,181	9,157	9,414	8,059
Metal Works, Machinery, etc.	22,862	36,860	47,961	43,077
Food, Drink, etc.	14,050	17,874	23,207	22,555
Clothing, Textile Fabrics, etc.	26,504	28,298	38,370	34,120
Books, Paper, Printing, etc.	9,134	10,527	13,994	13,437
Musical Instruments, etc.	387	642	1,257	1,145
Arms and Explosives	33	850	394	279
Vehicles, Saddlery, Harness, etc.	4,416	5,267	9,533	7,749
Ship and Boat Building, etc.	2,429	5,175	5,450	4,364
Furniture, Bedding, etc.	3,534	4,312	6,823	5,757
Drugs and Chemicals	1,460	2,659	3,564	3,607
Surgical and other Scientific Instruments	96	206	287	286
Jewellery, Timepieces, and Plated-ware	753	828	786	660
Heat, Light, and Power	2,795	5,038	4,903	4,688
Leatherware, N.E.I.	461	919	3,931	3,777
Minor Wares, N.E.I.	1,055	2,146	628	617
Total	108,624	145,011	185,142	167,690

Owing to an amendment in the classification, the figures relating to some of the classes for the last two years are not strictly comparable with those for earlier years. Certain establishments formerly included in the class, musical instruments, etc., or with heat and power works are now in the metal and machinery group; others previously with minor wares have been transferred to the rubber goods and leatherware group, and bakeries were included for the first time in 1927-28.

Of the industries which give employment to the greatest number of workers, the increase in employment has been most marked in the metal and machinery group.

Between 1901 and 1929 the number of employees in factories increased at a much faster rate than the total population. The growth of factories

was most rapid between 1906 and 1911, and there was steady progress, and between 1916 and 1926. Owing to the decrease of 9.4 per cent. in 1929-30 the number of employees dropped below the level of year 1925-26.

Period.	Increase in Factory Employees.		Increase in Population— Average Annual Rate.
	Number.	Average Annual Rate.	
1901-06 (5 years)...	11,592	per cent. 3.3	per cent. 1.7
1906-11 (5 years)...	30,802	6.9	2.6
1911-16 (4½ years)...	7,777	1.5	2.4
1916-21 (5 years)...	28,610	4.5	2.1
1921-26 (5 years)...	29,090	3.7	2.0
1926-30 (4 years)...	(—) 6,411	(—) 0.9	1.8

(—) Denotes decrease.

Weighted Average Time Worked per Factory.

The average time worked in the different classes of factories during various years since 1911 is shown below. The figures have been calculated on the basis of the average number of employees engaged in each factory during the period it was in operation in the year specified.

Class of Industry.	1911.	1920-21.	1925-26.	1927-28.	1928-29.	1929-30.
	Months.	Months.	Months.	Months.	Months.	Months.
Treating Raw Materials, etc. ...	10.11	10.83	10.71	11.31	11.23	11.13
Oils and Fats, etc. ...	11.38	11.78	11.85	11.74	12.00	11.96
Stone, Clay, Glass, etc. ...	11.56	11.48	11.68	11.72	11.59	10.94
Working in Wood ...	10.82	11.00	11.09	11.03	10.98	10.77
Metal Works, Machinery, etc.	11.70	11.49	11.91	11.82	11.86	11.86
Food, Drink, etc. ...	11.10	11.07	11.34	11.20	11.44	11.36
Clothing, Textile Fabrics, etc.	11.64	11.70	11.76	11.70	11.76	11.73
Books, Paper, Printing, etc. ...	11.89	11.87	11.91	11.91	11.95	11.96
Musical Instruments, etc. ...	12.00	11.77	11.08	11.99	12.00	11.60
Arms and Explosives ...	8.21	12.00	12.00	12.00	12.00	12.00
Vehicles, Saddlery, Harness, &c.	11.83	11.60	11.77	11.69	11.68	11.87
Ship Building, etc. ...	11.98	11.98	11.98	11.99	11.99	11.92
Furniture, Bedding, etc. ...	11.58	11.73	11.85	11.79	11.74	11.82
Drugs and Chemicals ...	11.77	11.78	11.88	11.82	11.91	11.76
Surgical Instruments, etc. ...	12.00	12.00	12.00	12.00	12.00	12.00
Jewellery, etc. ...	11.98	11.65	11.94	11.90	11.83	11.89
Heat, Light, and Power ...	11.81	11.75	11.57	11.79	11.93	11.87
Leatherware, N.E.I. ...	11.91	11.90	11.90	11.46	11.89	11.87
Minor Wares, N.E.I. ...	11.51	11.82	11.83	11.74	11.45	11.71
Mean of all Industries ...	11.55	11.52	11.70	11.67	11.72	11.66

In some industries, *e.g.*, those engaged in treating raw pastoral products, the work is seasonal, and factories may be closed during certain periods of each year. In other industries operations are continuous throughout the whole year, and periods of slackness, due to seasonal and other conditions, result in a reduction of the number of employees, but not in the average time as shown in the table. Therefore these figures do not reflect the regularity or intermittency of employment in relation to factory employees; but they may be used, in combination with the average number of employees, to measure roughly the working time spent in producing each year's output.

Nature of Employment.

Of all the persons engaged in manufacturing industries during the year 1929-30 approximately 83 per cent. were actually employed in the different processes of manufacture, or in the sorting and packing of finished articles. The following statement shows the number and the nature of employment of the persons engaged in each class of industry in that year:—

Class of Industry.	Working Proprietors, Managers, and Overseers.	Clerks, etc.	Engine-drivers, etc.	Workers in Factory, Mill, etc.	Carters, Messengers, and others.	Persons regularly employed at their own homes.	Total.
Treating Raw Materials, etc. ...	273	118	81	2,286	100	8	2,866
Oils, Fats, etc. ...	87	210	28	940	40	...	1,305
Stone, Clay, Glass, etc. ...	705	462	182	7,871	122	...	9,342
Working in Wood ...	1,107	483	286	5,957	226	...	8,059
Metal Works, Machinery, etc. ...	2,340	2,198	474	37,864	201	...	43,077
Food, Drink, etc. ...	1,750	2,063	722	17,481	537	2	22,555
Clothing, Textile Fabrics, etc. ...	2,511	902	59	30,186	268	194	34,120
Books, Paper, Printing, etc. ...	1,159	1,235	28	10,822	187	6	13,437
Musical Instruments ...	52	136	7	945	5	...	1,145
Arms and Explosives ...	18	17	4	232	8	...	279
Vehicles, Saddlery, Harness, etc....	1,106	611	6	5,936	88	2	7,749
Ship and Boat Building, etc. ...	195	304	64	3,759	42	...	4,364
Furniture, Bedding, etc. ...	629	228	14	4,832	51	3	5,757
Drugs and Chemicals ...	323	462	50	2,722	50	...	3,607
Surgical and other Scientific Instruments.	29	34	1	210	12	...	286
Jewellery, Timepieces, and Plated ware.	102	40	...	500	16	2	660
Heat, Light, and Power ...	415	218	739	3,276	38	2	4,688
Rubber Goods and Leatherware, N.E.I.	246	264	15	3,215	37	...	3,777
Minor Wares, N.E.I. ...	54	31	...	521	10	1	617
Total ...	13,101	10,016	2,760	139,555	2,038	220	167,690
Males ...	12,273	5,916	2,760	102,802	1,948	70	125,769
Females ...	828	4,100	...	36,753	90	150	41,921

The status of workers employed varied greatly in the nineteen standard classes of manufacturing industry. The average proportion of working

proprietors, managers, and overseers was 7.8 per cent. for all classes, but it varied from 4.5 per cent. in ship and boat building to 15.5 per cent. in those making jewellery, time-pieces, and plated ware.

Amongst the males the proportion of working proprietors, etc., was 4.9 per cent., and of workers in the factories 81.0 per cent. The corresponding proportions amongst the females were 2.0 per cent. and 87.7 per cent. respectively.

Only 6.0 per cent. of the employees were clerical workers, and of these 40.9 per cent. were females. The practice of giving out work at piece rates is very limited. Workers employed in their own homes represented under 2 per thousand of the total number employed, and nearly all were engaged by clothing manufacturers.

Sex Distribution of Employees.

The following table shows the number of males and of females employed in factories, and the ratio to the male and female population respectively during various years since 1901:—

Year.	Males.		Females.		Total.	
	Average Number.	Average per 1,000 of Male Population.	Average Number.	Average per 1,000 of Female Population.	Average Number.	Average per 1,000 of Mean Population.
1901	54,556	76.2	11,674	17.9	66,230	48.5
1911	82,083	94.5	26,541	33.3	108,624	65.2
1920-21	112,187	105.2	32,824	32.1	145,011	69.4
1925-26	132,239	112.9	41,862	37.1	174,101	75.8
1926-27	138,309	115.6	44,884	39.0	183,193	78.0
1927-28	137,936	112.7	44,724	38.0	182,660	76.1
1928-29	139,104	111.5	46,038	38.4	185,142	75.6
1929-30	125,769	99.7	41,921	34.5	167,690	67.7

In 1929-30 the manufacturing industries provided employment for 6.8 per cent. of the total population, viz., about 10 per cent. of males, but less than 3½ per cent. of females. The proportion of males was highest in 1926-27 at a point 22 per cent. above the level in 1911, and it has declined since by 14 per cent. There has been less variation in the proportion of females, and in 1929-30 it was only 3 per cent. greater than in 1911.

The Factories and Shops Act imposes certain restrictions on the employment of women and of young persons, and the Minister for Labour and Industry may prohibit the employment of boys under 16 or of females in connection with dangerous machinery or in any work in which he considers it undesirable that they should be employed.

The following table shows, for the years 1911, 1920-21, and 1929-30, the industries in which women and girls have been employed in greatest numbers, and the ratio to every 100 males employed in the same industries.

Only workers in the factory have been included, and managers, overseers, clerks, messengers, etc., have been excluded.

Industry.	Average Number of Women and Girls employed in Factory.			Number of Women and Girls per 100 Males employed in Factory.		
	1911.	1920-21.	1929-30.	1911.	1920-21.	1929-30.
Food, etc.—						
Biscuits	690	822	908	121	102	136
Confectionery	442	1,190	1,449	70	113	129
Jam and fruit canning, pickles, etc....	610	951	883	150	122	136
Condiments, etc.	209	545	605	122	125	169
Tobacco	746	1,262	1,403	128	131	153
Other food, etc.	459	325	680	8	6	9
Clothing, etc.—						
Woollen mills	561	793	2,018	172	101	202
Hosiery and knitting factories	1,186	3,005	663	372		
Boots and shoes	1,499	1,612	1,885	61	61	73
Clothing, dressmaking, and millinery	12,475	11,080	9,522	488	620	632
Hats and caps	995	815	1,095	227	160	207
Shirts, underclothing, etc.	1,599	2,719	3,951	1,859	2,124	1,555
Other clothing	281	521	999	73	76	98
Paper, paper bags and boxes	727	827	1,358	201	119	132
Printing and bookbinding	1,387	1,711	1,606	29	34	51
Leatherware	56	279	474	16	57	103
Rubber goods	59	344	649	28	57	40
Other industries	1,592	2,620	4,263	3	4	6
Total	24,387	29,602	36,753	36	32	35

The table shows that women workers predominate in industries relating to the preparation of food and clothing, and the "lighter" manufactures.

Child Labour.

The Factories and Shops Act prescribes that no child under 13 years may be employed in a factory, and that a child between the ages of 13 and 14 years may not be employed unless by special permission of the Minister for Labour and Industry. Moreover, the Public Instruction Act prescribes that children must attend school until they reach the age of 14 years, but exemptions from attendance may be granted in special cases, *e.g.*, if the Minister for Education is satisfied that exemption is necessary or desirable, or in the case of children aged 13 years, if they have attained a certain standard of education.

In regard to children under 16 years of age the Factories and Shops Act authorises the issue of regulations prohibiting the employment of children under 16 years of age in specified classes of factories unless the occupier of the factory has obtained a certificate by a legally qualified medical practitioner that the child is fit for employment in that factory.

Special permits to children between the ages of 13 and 14 years numbered 151 in 1930, *viz.*, to 78 boys and 73 girls, all but one being in the metropolitan district.

During the same year 4,931 certificates of fitness were issued to children under 16 years of age, *viz.*, 2,152 to boys and 2,779 to girls.

Ages of Employees.

The age distribution of the male employees in factories in 1929-30 was as follows:—Boys under 16 years numbered 3,366, or 2.7 per cent.; 21,210, or

16.9 per cent., were between 16 and 21 years; and 101,193, or 80.4 per cent., were adults. Of the females, the number and proportion in the respective groups were 4,264, or 10.2 per cent.; 16,223, or 38.7 per cent.; and 21,434, or 51.1 per cent.

The following table shows the average number of persons under and over the age of 16 years engaged in the factories in various years since 1907, the first year for which statistics respecting the employment of children are available:—

Year.	Persons Employed in Factories, including Working Proprietors.								
	Aged 16 years and over.			Children under 16 years of age.			Total.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1907	63,547	18,634	82,181	2,406	1,880	4,286	65,953	20,514	86,467
1911	79,809	24,274	103,883	2,474	2,267	4,741	82,083	26,541	108,624
1920-21	108,514	29,214	137,728	3,673	3,610	7,283	112,187	32,824	145,011
1925-26	127,712	37,174	164,886	4,527	4,688	9,215	132,239	41,862	174,101
1926-27	133,715	39,883	173,598	4,594	5,001	9,595	138,309	44,884	183,193
1927-28	133,920	39,977	173,897	4,016	4,747	8,763	137,936	44,724	182,660
1928-29	135,049	40,865	175,914	4,055	5,173	9,228	139,104	46,038	185,142
1929-30	122,403	37,657	160,060	3,366	4,264	7,630	125,769	41,921	167,690

During the year 1929-30 there was a decrease of 13,335 in the number of male employees and of 4,117 in the number of females. Of those aged 16 years and over there was a decrease of 12,646 males and 3,208 females; and there were 1,598 less children in the factories than in the previous year, the number of boys having decreased by 689, the number of girls by 909.

Of 7,630 juveniles engaged in manufacturing, 6,887 were employed within the metropolitan area. Up to the year 1914 the boys outnumbered the girls, but in more recent years the number of girls was the greater. About 93 per cent. of the girls and 86 per cent. of the boys were working in Sydney and suburbs.

The following statement shows the proportion of boys and girls amongst the factory employees in various years since 1907, also the proportion of children aged 13 and under 16 years who were employed in factories:—

Year.	Children employed in Factories.			
	Boys per 1,000 Male Employees.	Girls per 1,000 Female Employees.	Children per 1,000 Employees.	Children per 1,000 of all Children aged 13 and under 16.
1907 ...	36.5	91.6	49.6	45.9
1911 ...	25.2	76.4	37.4	49.9
1920-21 ...	32.7	110.0	50.1	62.8
1925-26 ...	34.2	112.0	52.9	72.5
1926-27 ...	33.2	111.4	52.4	73.7
1927-28 ...	29.1	106.1	50.0	66.6
1928-29 ...	29.1	112.4	49.8	68.0
1929-30 ...	26.8	101.7	45.5	55.4

The proportion of boys to men has been lower in recent years than in 1907, but the proportion of girls amongst the female employees has been higher. The number of children employed in factories in 1920-21 represented about 6½ per cent. of the children between 13 and 16 years of age in the State. The ratio increased in later years, then declined to about 5½ per cent.

INDIVIDUAL INDUSTRIES.

PRINCIPAL PRODUCTS.

The foregoing information relating to the manufacturing industry as a whole or to groups of industries serves to show the general industrial development, but it does not furnish particulars relating to individual industries. It is desirable that detailed information should be available regarding all the important industries, but the output of many of them, e.g., engineering works, cannot be classified readily. Therefore the following statement of principal products includes only those for which particulars of quantity and value are available.

Commodities.	1927-28.		1928-29.		1929-30.	
	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
Wool, Scoured ... ..lb.	24,672,168	£ 3 318,819	19,649,577	£ 2,106,873	18,616,900	£ 1,360,933
" Tops and Noils ...lb.	1,975,115	348,530	2,274,959	301,886	2,469,421	276,515
Leather ... ..lb.	18,435,774	1,551,283	19,396,619	1,660,787	*	1,503,167
Soap ... ..cwt.	460,482	1,059,784	433,581	1,152,735	410,248	1,002,605
Candles ... ..lb.	3,200,942	110,502	2,896,276	104,297	1,469,808	53,511
Tallow, Raw ... ..cwt.	287,348	484,547	354,566	604,165	276,365	421,055
Bricks ... ..1,000	439,670	1,042,475	437,158	1,625,464	307,054	1,094,325
Cement ... ..ton	432,359	1,823,075	414,913	1,744,792	423,258	1,642,067
Timber, Sawn ... ..cub. ft.	12,455,178	1,877,255	11,627,475	1,750,408	10,413,449	1,521,589
Steel, Ingots ... ..ton	405,590	...	432,773	...	314,917	...
Pig Iron ... ..ton	428,404	...	461,110	...	308,369	...
Bacon and Ham† ... ..lb.	24,523,873	1,213,190	22,340,106	1,163,507	20,984,249	1,047,625
Butter† ... ..lb.	96,706,342	7,273,229	91,733,572	7,173,369	100,814,354	7,405,007
Cheese† ... ..lb.	7,080,992	303,621	6,203,409	282,755	6,163,205	279,929
Margarine ... ..lb.	16,376,131	526,346	16,627,959	551,014	17,615,391	554,028
Biscuits ... ..lb.	43,161,976	1,441,716	43,289,522	1,462,757	40,820,175	1,351,068
Ice ... ..ton	214,328	438,889	258,833	503,605	216,513	410,734
Aerated Waters, etc. ...doz.	6,689,700	931,623	6,980,873	1,071,387	17,110,981	914,437
Jams and Preserves ...lb.	33,042,170	782,153	30,579,055	755,268	32,930,466	728,155
Pickles and Sauces ...pint	10,073,346	477,741	10,410,549	528,713	7,549,486	367,323
Flour ... ..ton	400,363	4,895,024	449,011	4,977,770	432,472	4,612,248
Bran ... ..ton	82,596	554,158	87,250	559,012	82,263	502,239
Pollard ... ..ton	84,440	608,997	95,641	645,294	94,277	702,226
Meat, Preserved in Tins ...lb.	3,919,866	167,815	4,251,040	172,627	4,185,438	102,408
Sugar, Raw ... ..cwt.	466,980	532,451	330,078	361,175	391,366	471,920
Beer and Stout ... ..gal.	28,130,066	3,083,499	29,420,920	3,176,035	26,113,448	2,827,267
Tobacco ... ..lb.	9,478,476	2,044,900	10,134,242	3,064,680	10,386,232	3,414,110
Cigarettes and Cigars ...lb.	5,288,908	1,850,969	5,203,558	1,790,623	5,229,362	1,986,144
Tweed and Cloth ... ..yds.	2,686,341	1,098,641	2,822,663	1,190,526	3,118,673	1,225,372
Socks and Stockings ...doz. prs.	767,214	1,010,534	1,142,192	1,343,890	1,021,040	1,140,988
Knitted Goods—Woolen ...No.	1,416,734	513,611	1,397,172	538,395	1,170,046	445,140
" Cotton ...No.	2,859,194	200,459	5,609,330	297,073	5,026,527	252,229
Boots, Shoes and Slippers...prs.	4,794,048	2,541,813	5,108,946	2,627,023	4,445,064	2,095,001
Hats and Caps ... ..No.	2,859,432	950,647	2,860,332	948,292	2,808,396	848,111
Gramophone Records ...No.	5,277,995	450,762	5,905,619	450,173	4,238,225	310,251
Gas ... ..1,000 cub. ft.	10,700,870	2,208,011	10,683,530	2,139,694	10,991,730	2,190,737
Coke ... ..ton	1,013,389	1,508,030	1,003,628	1,441,321	821,257	1,131,455
Electricity ... ..1,000 units	918,194	4,762,974	959,855	4,930,839	996,116	5,319,891
Motor Bodies ... ..No.	11,442	640,776	13,321	845,727	6,834	607,866

* Dressed and upper leather, 14,768,638 square feet; other, 10,085,177 lb. † Gallons. ‡ Exclusive of quantity made on farms.

The list of commodities shown above represents less than one-third of the total value of the factory production. It is exclusive of most of the products of the following important groups, viz., metal and machinery works, which in 1929-30 contributed £40,498,532, or 24 per cent. of the total value; the printing and furniture trades, vehicles, etc., ship-building, and drug and chemical factories, of which the collective output was valued at £24,309,259.

or 15 per cent. of the total. The largest items shown in the statement are butter and flour—of which the output is liable to fluctuation on account of seasonal conditions affecting rural production—electricity and tobacco.

TANNERIES.

Skins and hides are available in large quantities, and the tanning industry provides nearly all the raw material needed for local requirements, and a fairly extensive oversea trade in leather. The oversea exports of sole leather amounted to 23,521 cwt., valued at £135,050, in 1929-30, and 23,699 cwt., valued at £109,942, in 1930-31. The value of other leather (excluding re-exports) sent overseas in these years was £153,321 and £125,408 respectively. Supplies of fancy leather are obtained partly by importation. The quantity of glace kid imported annually is about 250,000 square feet. Even larger quantities of patent and enamelled leather used to be imported, but with an expansion of local manufacture oversea imports declined from 1,244,533 square feet in 1925-26 to 5,893 square feet in 1930-31.

The following table gives particulars of the industry for the year 1911 and at intervals thereafter:—

Items.	1911.	1920-21.	192 -29.	1929-30.
Number of Establishments ...	76	80	69	69
Average Number of Employees ...	1,039	1,242	1,175	1,164
Average Horse-power used ...	1,044	2,688	2,962	2,901
Value of Land and Buildings† £	105,990	265,166	253,423	262,937
Value of Plant and Machinery £	82,241	172,132	164,981	170,091
Salaries and Wages paid ... £	104,695	262,724	267,453	269,828
Value of Fuel and Power used £	7,160	17,855	22,816	22,759
Value of Materials used ... £	786,817	1,684,791	1,587,055	1,234,541
Value of Output ... £	982,023	2,103,525	2,089,373	1,701,895
Value of Production ... £	188,046	400,879	479,502	444,595
Materials Treated—				
Hides—				
Cattle No.	531,706	793,164	975,535	395,502
Calf No.				369,802
Other No.				13,128
Sheep Pelts No.	4,768,441	4,098,250	3,008,387	1,762,392
Sheep Skins No.				988,577
Other Skins No.				518,754
Bark tons.	11,706	11,570	9,078	9,191
Articles Produced—				
Leather—				
Dressed and Upper from				
Hides lb.	13,945,005	17,707,065	19,396,619	4,652,250*
Dressed, from Skins ... lb.				10,116,388*
Sole and Harness ... lb.				9,772,903
Other lb.				312,274
Basils lb.	4,324,139	2,730,162	1,990,712	2,025,747
Other... .. £	26,885	296,113	148,594	115,825

* Sq. feet.

† Includes rented premises.

WOOL-SCOURING AND FELLMONGERING.

Only a very small proportion of the wool clip of New South Wales is scoured locally, as oversea manufacturers generally prefer to buy wool in the grease and to treat it in accordance with the purpose for which they require it. The exports in 1929-30 of greasy wool were 308,265,801 lb.,

scoured wool 16,669,157 lb., and wool tops 353,766 lb. The corresponding figures for 1930-31 were greasy 334,602,517 lb., scoured 17,371,983 lb., and tops, noils, etc., 1,302,118 lb.

Items.		1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	...	59	42	31	29
Average Number of Employees ...	...	1,603	1,461	674	663
Average Horse-power used ...	...	2,009	3,623	2,076	2,162
Value of Land and Buildings†	£	169,418	276,320	174,034	178,547
Value of Plant and Machinery	£	160,200	373,442	156,767	140,085
Salaries and Wages paid ...	£	126,215	280,731	150,594	142,286
Value of Fuel and Power used	£	16,277	39,542	25,716	26,467
Value of Materials used ...	£	2,151,713	2,991,868	1,972,092	1,202,767
Value of Output ...	£	2,393,883	3,677,014	2,175,240	1,460,421
Value of Production ...	£	225,893	645,604	177,432	231,187
Materials Treated—					
Greasy Wool ...	lb.	34,023,054	24,960,202	28,547,411	22,862,351
Scoured Wool ...	lb.	*	5,738,701	...	...
Skins ...	No.	5,180,335	4,088,690	2,040,259	2,555,776
Articles Produced—					
Scoured Wool ...	lb.	33,283,378	26,994,551	19,649,577	18,616,990
Pelts ...	No.	4,655,524	3,235,429	1,647,472	2,295,823

* Not available.

† Includes rented premises.

The fellmongering establishments treated 2,555,776 skins and produced 8,711,045 lb. of scoured wool, the balance being the output of the scouring works.

The figures for the last two years are not comparable with those for earlier years, which included woolcombing establishments now shown under woollen and tweed mills.

SOAP AND CANDLE FACTORIES.

The soap and candle factories supply practically the whole of the local requirements and there is also a small export trade with the islands of the Pacific. The following table shows particulars relating to the industry:—

Items.		1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	...	37	26	27	25
Average Number of Employees ...	...	658	946	1,080	999
Average Horse-power used ...	...	785	964	1,196	1,040
Value of Land and Buildings†	£	165,218	223,423	352,700	330,964
Value of Plant and Machinery	£	150,453	287,714	304,446	274,106
Salaries and Wages paid ...	£	49,555	141,135	218,551	194,109
Value of Fuel and Power used	£	12,205	40,160	35,441	32,547
Value of Materials used ...	£	359,096	859,555	913,071	761,932
Value of Output ...	£	597,544	1,177,511	1,613,066	1,389,285
Value of Production ...	£	226,243	277,796	664,554	594,806
Materials Treated—					
Tallow ...	cwt.	117,428	139,153	212,568	177,082
Alkali ...	lb.	6,370,007‡	4,516,054	10,476,170	9,998,643
Wax ...	lb.	£180,697	2,481,854	2,102,789	1,533,996
Resin ...	cwt.		22,327	38,638	31,674
Copra Oil ...	cwt.		15,560	37,311	37,677
Sand ...	cwt.		3,595	21,180	19,888
Principal Products—					
Soap ...	cwt.	277,449	280,620	483,531	409,464
Soap Extract, etc. ...	lb.	965,807	4,051,251	6,022,338	5,476,466
Candles (including wax) ...	lb.	5,388,848	4,191,534	2,896,276	1,459,808
Glycerine ...	lb.	*	1,882,423	2,442,745	2,080,669
Soda Crystals ...	lb.	*	681,024	3,430,067	1,076,112

* Not available.

† Includes rented premises.

‡ All factories.

BRICK AND TILE WORKS.

Owing to the abundance of clay, brickworks have been established in many parts of the State. In the metropolitan brickworks 1,777 persons are employed, and the output of the kilns is much greater and more varied than in the country, where the employees number 879. In a number of cases the industry is associated with tile-making, so the figures for the two industries have been combined in the following table:—

Items.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	222	159	178	163
Average Number of Employees ...	3,017	3,716	3,913	3,414
Average Horse-power used ...	4,865	9,181	13,013	12,395
Value of Land and Buildings †	£ 391,875	865,182	1,113,623	1,060,562
Value of Plant and Machinery	£ 449,100	1,114,500	1,440,659	1,389,079
Salaries and Wages paid ...	£ 322,781	777,536	944,390	706,340
Value of Fuel and Power used	£ 101,267	276,402	376,130	281,135
Value of Materials used ...	£ 70,881	189,150	370,699	277,430
Value of Output ...	£ 726,620	1,640,743	2,216,401	1,574,401
Value of Production ...	£ 554,472	1,175,191	1,469,572	1,015,836
Articles Produced—				
Bricks No.	327,864,000	360,092,005	437,157,614	307,054,500
Tiles	£ 24,857	286,862	373,180	276,206
Fire Bricks, etc. ...	£ *	72,225	153,375	111,217
Pipes and Pottery ...	£ 104,004	6,754	36,641	67,407

* Not available.

† Includes rented premises.

In addition to the bricks made in the brick and tile works, a small number are manufactured in other establishments, but are not included in the figures shown above.

The local factories supply practically all the bricks and tiles required for use in New South Wales.

State Brickworks, Homebush.

In the latter part of 1911 the Government established State Brickworks at Homebush, near Sydney, and the undertaking has proved very profitable. The requirements of the different Government Departments are supplied and bricks are sold to the public at prices below those ruling in private brick-yards.

The following table gives particulars of the operations of the State Brickworks at Homebush Bay during each of the last five years. The sale prices as stated in the table were for bricks loaded into trucks at the yard, Homebush Bay:—

Particulars.	1924-25.	1925-26	1926-27.	1927-28.	1928-29.	1929-30.
Bricks manufactured ...	47,385,915	49,116,786	58,063,139	60,663,064	62,276,611	51,888,568
Used for Public Works ...	14,684,270	22,740,727	23,169,934	11,389,203	10,281,720	9,043,980
Sold to Private Purchasers ...	30,593,923	24,666,518	35,153,800	47,795,617	50,800,410	39,902,077
Used at Works ...	1,930,388	1,231,798	104,237	1,127,923	626,484	154,237
Stocks at 30th June ...	600,799	1,078,542	713,701	1,034,122	1,652,119	4,440,393
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cost of Manufacture per 1,000 ...	2 6 3	2 7 10	2 8 9	2 11 3	2 14 2	2 14 3
Sale price per 1,000—						
Seconds	2 10 6	2 12 6	2 13 0	2 13 6	2 13 6	*2 9 0
Commons	2 13 0	2 15 0	2 15 6	2 15 6	2 13 6	*2 14 0
Face... ..	4 10 0	4 15 0	4 16 0	5 2 0	5 2 0	*5 0 0

* At 30th June, 1931.

The sale prices of bricks—seconds and commons—were reduced by 4s. 6d. per 1,000 on 13th March, 1930; the price of face bricks was raised from £5 2s. to £5 4s. 6d. on 1st February, 1930, and reduced to £5 on 13th March.

A system of profit-sharing by the employees is in operation, and, apart from the amounts distributed under this scheme, the undistributed surplus amounted at 30th June, 1930, to £145,299.

SAWMILLS.

Sawmilling is an important industry in many parts of the State, the majority of the mills being situated in the forest areas. Moulding and planing are undertaken at some mills, also the cutting of wood-paving blocks. In the metropolitan district sawmills are conducted in connection with yards where imported timbers are treated and joinery work is done.

Details concerning the sawmilling industry at intervals since 1911 are as follow:—

Items.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	452	496	477	433
Average Number of Employees ...	5,205	5,645	4,639	3,892
Average Horse-power used ...	10,280	14,597	17,695	16,696
Value of Land and Buildings * £	465,548	811,830	986,290	933,092
Value of Plant and Machinery £	526,909	908,192	813,170	754,574
Salaries and Wages Paid ... £	456,520	926,276	888,891	734,300
Value of Fuel and Power used £	6,503	24,405	35,123	32,133
Value of Materials used ... £	1,309,549	2,732,656	3,295,133	2,507,300
Value of Output ... £	2,057,807	4,103,924	4,891,185	3,754,782
Value of Production ... £	741,755	1,346,863	1,560,929	1,215,349
Logs Treated—				
Hardwood cub. ft. ...	12,309,000	14,844,000	12,299,271	10,622,745
Softwood " ...	5,442,000	5,652,000	5,893,421	5,453,123
Sawn Timber Produced—				
Hardwood sup. ft. ...	100,079,000	117,781,837	94,696,465	81,556,393
Softwood " ...	51,392,000	45,628,945	44,833,240	43,405,003

* Includes rented premises.

The native timbers treated during 1929-30 consisted of 10,622,745 cubic feet of hardwoods and 4,874,220 cubic feet of softwoods; the quantities of sawn timber produced therefrom being 81,556,393 super. feet, and 37,464,403 super. feet respectively. The output of the sawmills during the last two years was affected by slackness in the building trades.

METAL AND MACHINERY WORKS, ETC.

This group is the most important of the manufacturing industries in the State, because it provides employment for nearly one-third of the adult males engaged in factories and workshops.

The output of these works constitutes a considerable proportion of the total value of local manufactures, though they supply only a portion of the local requirements of manufactured metals and machinery. Details of the products are not available, but in view of their importance the following particulars relating to the operations in 1929-30 are shown:—

Items.	Engineer- ing Works.	Ironworks and Foundries.	Railway and Tramway Workshops.	Metal Extraction and Ore Reduction.	Other.	Total.
Number of Establishments ...	282	167	39	17	457	962
Average Number of Employees ...	6,423	7,163	12,743	2,206	14,542	49,077
Average Horse-power used ...	8,835	36,050	14,398	19,701	19,833	98,817
Value of Land and Buildings* £	1,470,102	1,568,620	2,800,177	528,943	3,262,409	9,625,251
Value of Plant and Machinery £	1,274,968	2,800,008	2,852,521	2,827,123	2,551,627	12,313,047
Salaries and Wages paid ... £	1,570,639	1,798,199	3,373,271	714,355	3,101,810	10,558,274
Value of Fuel and Power used ...	67,245	349,008	88,746	1,047,110	224,372	1,777,681
Value of Materials used ... £	1,087,780	7,116,390	2,278,334	5,773,959	5,933,102	22,794,574
Value of Output ... £	3,939,666	10,213,855	6,588,256	8,632,665	11,174,090	40,498,582
Value of Production ... £	2,184,641	2,747,848	4,171,176	1,811,596	5,011,116	15,926,377

* Includes rented premises

The number of persons employed in metal and machinery workshops reached the highest point in 1928-29, when the number was 47,961 as compared with 36,860 in 1920-21, and the value of production increased from £10,625,877 in 1920-21 to £18,799,257 in 1928-29.

The expansion of these industries was stimulated in recent years by reason of large projects undertaken in the State, *e.g.*, the Sydney Harbour Bridge, the City Railway, and the electrification of the suburban railways and the construction of water conservation works.

Various classes of engineering are undertaken at the dockyards, of which particulars are published in the chapter of this volume entitled "Shipping."

Iron and Steel Works.

In New South Wales there are large supplies of iron ore and of coal, both of excellent quality, and in close proximity to each other and to the seaboard.

Iron and steel works are in operation at Newcastle, Lithgow and Port Kembla. The works at Newcastle were opened in 1915. The products include iron and steel of various grades, pipes and boilers, steel sleepers, rails, and such by-products as sulphate of ammonia, tar, benzol and solvent naphtha. The ore treated at Newcastle is imported from South Australia.

Local iron ores were treated at Lithgow, where the oldest of the existing iron and steel works had been remodelled and extended into a large establishment with modern furnaces, coke ovens, rolling mills, etc. In 1927 the owners of the Lithgow works entered into an agreement with the Government of New South Wales, by which the Government agreed to construct a railway from Moss Vale, on the main southern line, to Port Kembla, and the company agreed to construct and equip iron and steel works at Port Kembla. In 1928 the company's business was merged into a new organisation, known as Australian Iron and Steel Limited, with which are associated two English engineering firms and an Australian firm of ship-owners and colliery proprietors. The purpose of the enterprise is the development of the iron and steel industry at Port Kembla. The first unit of the Port Kembla works—a blast furnace with a capacity of 800 tons of pig-iron a day—was brought into operation in August, 1928, and a large portion of the Lithgow plant has been transferred to this site.

The following table shows the production of steel and pig-iron in New South Wales since 1921 :—

Year ended 30th June.	Pig Iron.	Steel Ingots.	Steel Rails, Bars and Sections.	Year ended 30th June.	Pig Iron.	Steel Ingots.	Steel Rails, Bars and Sections.
	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.
1921	366,549	259,608	145,507	1926	430,597	385,231	339,463
1922	301,307	250,982	164,119	1927	468,899	410,728	360,212
1923*	138,114	87,814	70,481	1928	428,404	405,580	350,941
1924	367,099	336,150	279,317	1929	461,110	432,773	353,921
1925	460,154	388,156	320,693	1930	308,369	314,917	256,696

*The Newcastle works were operating for three months only during this period.

The quantity of iron ore used in 1929-30 for the production of pig-iron was 472,044 tons, of which 4,936 tons were mined in New South Wales.

Factories have been established in proximity to the iron and steel works for the production of all kinds of steel wire, wire netting, barbed wire, wire nails, wire ropes, black and galvanised steel sheets, steel castings, railway and tramway tyres, axles and centres, structural steel for bridges, and other steel products, also copper wire, copper and brass cable and tubes and insulated telephone cables.

Metal Extraction and Ore Reduction.

The treatment of ores, as a distinct industry, is conducted at Broken Hill, Newcastle and Port Kembla, and there were seventeen establishments in 1929-30.

The following statement shows the operations of the smelting companies in connection with both local and imported ores during 1929-30:—

Metals.	Quantities of Metals extracted from Ores, Concentrates, etc., the produce of—								
	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	N. Territory.	New Guinea.	New Zealand.
Silver ... ..oz.	4,024	16,005	14,082	853	1,002	194,935	...	31	6,558
Copper ... ..tons	...	...	...	...	...	8,995	...	...	...
Tin"	888	32	521	...	53	249	8	...	...
Iron—pig"	3,066	...	...	305,303	...	...	...	...	...

BUTTER FACTORIES.

Butter-making is one of the chief industries connected with the preparation of articles of food. More than 1,000 persons were employed in butter factories in 1929-30, and the output was valued at over £7,666,600. The butter factories are organised for the most part on a co-operative basis, and each dairy-farmer who supplies cream is paid according to the amount of butter obtained from it. The factories are under the supervision of Government officials, who are trained for the purpose of instructing the dairy-farmers and factory managers. By this means the quality of the butter produced in New South Wales factories is maintained at a high standard. Butter is an important item of the export trade, and 96 per cent. of local production is made in factories.

Details concerning butter factories and their operations in various years since 1911 are as follow:—

Items.	1911.	1920-21.	1928-29.‡	1929-30.‡
Number of Establishments ...	150	126	108	106
Average Number of Employees...	968	1,022	1,022	1,003
Average Horse-power used ...	2,161	3,843	7,597	8,272
Value of Land and Buildings † £	186,893	308,189	627,717	605,225
Value of Plant and Machinery £	230,485	395,668	663,756	669,992
Salaries and Wages paid £	110,617	225,392	284,729	282,036
Value of Fuel and Power used £	23,599	61,655	69,169	69,655
Value of Materials used ... £	3,205,863	8,017,379	6,925,551	6,930,802
Value of Output£	3,475,890	8,974,967	7,557,363	7,666,293
Value of Production£	246,428	895,933	562,643	665,836
Cream used for butter ... lb.	177,401,000‡	174,837,000‡	192,150,314	210,191,798
Butter Produced ... ..lb.	78,421,512‡	79,864,745‡	91,733,572	100,814,354

† Includes rented premises.

‡ Excludes small quantities in farm factories worked by farm employees.
§ Includes 4 creameries.

The cream used included interstate imports, 1,849,388 lb., from which 906,990 lb. of butter were made during 1928-29, and 1,708,462 lb., which yielded 847,044 lb. of butter, in 1929-30.

The annual production of butter depends largely on seasonal conditions in the dairy-farming districts, but the general trend has been towards an

increased output, and the increase in quantity has been accompanied by a marked improvement in quality. About 96 per cent. of the butter made in factories is graded as choicest by official graders.

The 106 butter factories mentioned in the foregoing table include four creameries and six factories, in which cheese is made, as well as butter. There were also 55 other establishments engaged in the treatment of dairy produce, viz., 30 cheese factories, 23 bacon and ham factories, and 2 factories manufacturing condensed milk. Particulars of the operations of these factories for the year 1929-30 were:—

Number of employees	..	...	...	...	581
Value of land and buildings	...	...	...	...	£252,296
Value of plant and machinery	...	...	...	...	£205,399
Salaries and wages paid	...	...	...	...	£149,880
Value of output	...	...	...	...	£1,697,763
Value of production	...	...	...	...	£304,848

In addition there was one factory in which cheese was treated after manufacture.

Bacon, hams, butter, and cheese are made on farms as well as in factories, and information as to the total production is shown in the chapter of this Year Book relating to the dairying industry, also details as to supervision of factories, marketing of the products, etc.

MEAT-PRESERVING AND REFRIGERATING.

The demand for preserved meat has become comparatively small; the output has fallen by about 75 per cent. during the last decade. The operations of the refrigerating works are affected by a number of factors, most important being the seasons and the condition of world markets.

The following table shows the production of establishments treating meat by canning and chilling during the last five years:—

Products.		1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
Preserving Works—						
Tinned Meat	... lb.	4,988,265	6,673,406	3,919,866	4,251,040	4,185,438
Other Products	... £	74,586	138,653	42,619	70,524	70,238
Refrigerating Works—						
Carcases Frozen for Export*—						
Cattle	... No.	27,792	12,499	6,451	36,411	30,021
Sheep	... No.	321,834	480,879	186,018	319,995	481,294
Lambs	... No.	456,136	685,154	365,329	358,582	610,295
Pigs	... No.	2,662	7,449	22,628	3,474	3,344
Carcases Chilled—						
Cattle	... No.	23,090	17,748	23,751	14,999	18,400
Sheep	... No.	23,502	41,018	76,702	13,732	26,237
Lambs	... No.	3,385	9,441	8,909	10,495	14,726
Pigs	... No.	8,393	6,512	13,211	14,533	11,353

*Exclusive of meat for export as ship's stores.

In 1929-30 there was a marked increase in the number of sheep and lambs frozen for export.

BISCUIT FACTORIES.

There are in the State ten establishments engaged in the manufacture of biscuits, of which nine are within the Metropolitan area. The output of biscuits was 40,820,175 lb., with a value of £1,351,068 in 1929-30. An

export trade in biscuits is maintained with the islands of the Pacific; the total exports in 1929-30 amounted to 2,335,929 lb. A small quantity—241,951 lb.—was imported from abroad. Details for 1911 and other years, including 1929-30, are given below:—

Items.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	6	10	11	10
Average Number of Employees ...	1,360	1,860	1,837	1,799
Average Horse-power used ...	556	1,115	515	£08
Value of Land and Buildings† ... £	94,050	164,081	226,962	228,704
Value of Plant and Machinery ... £	86,192	135,285	132,521	128,805
Salaries and Wages paid ... £	70,055	221,791	273,660	264,525
Value of Fuel and Power used ... £	7,104	23,614	37,172	36,220
Value of Materials used ... £	332,341	936,747	786,824	709,593
Value of Output ... £	529,108	1,358,266	1,510,415	1,397,348
Value of Production ... £	189,663	397,905	686,419	651,535
Materials Treated—				
Flour tons	8,755	12,210	13,868	12,875
Sugar "	*	3,024	3,455	3,140
Biscuits produced lb.	22,029,000	38,308,360	43,289,522	40,820,175

* Not available.

† Includes rented premises.

FLOUR MILLS.

The amount of mill-power for grinding and dressing grain is ample for manufacturing the flour consumed in the State, and there is a considerable export trade.

Details concerning flour-milling at intervals since 1911 are as follow:—

Items.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	73	60	56	53
Average Number of Employees ...	967	1,023	1,146	1,116
Average Horse-power used ...	4,670	6,284	7,893	7,331
Value of Land and Buildings† ... £	357,356	561,688	804,901	810,602
Value of Plant and Machinery ... £	340,316	572,456	884,194	864,462
Salaries and Wages paid ... £	123,491	219,964	312,880	301,866
Value of Fuel and Power used ... £	24,648	37,746	70,282	64,820
Value of Materials used ... £	2,211,263	4,951,650	5,498,861	5,096,618
Value of Output £	2,538,331	5,590,405	6,276,317	5,976,447
Value of Production £	302,420	601,609	707,174	815,609
Wheat Treated bus.	12,616,111	11,595,807	21,478,082	20,572,332
Articles Produced—				
Flour tons	253,556	244,818	449,011	432,472
Bran, Pollard, Sharps, etc. ..	112,766	100,545	185,993	179,219
Wheat Meal, etc. ... cwt.	21,840	21,863	75,289	71,062

† Includes rented premises.

The average annual production of flour during the three years ended June, 1930, was about 427,282 tons, and the annual export—oversea and interstate—was approximately 184,250 tons, or 43 per cent. of the output.

SUGAR MILLS.

Sugar cane is cultivated in the lower valleys of the northern coastal rivers of New South Wales, and the cane is crushed at three large mills situated respectively at Harwood Island, on the Clarence River, at Broadwater, on the Richmond, and at Condong, on the Tweed.

The raw sugar manufactured in 1929-30 was valued at £471,920, and the molasses at £4,435.

Items.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	4	3	3	3
Average Number of Employees ...	469	437	375	466
Average Horse-power used ...	3,000	1,279	2,114	2,114
Value of Land and Buildings £	52,480	106,070	132,870	135,042
Value of Plant and Machinery £	467,976	425,283	538,046	540,679
Salaries and Wages paid ...	£ 38,004	63,003	77,995	75,135
Value of Fuel and Power used £	8,102	8,636	7,749	13,550
Value of Materials used ...	£ 107,600	303,651	259,355	329,885
Value of Output ...	£ 206,277	476,405	367,983	476,355
Value of Production ...	£ 90,575	164,118	160,879	132,920
Cane crushed ... tons	147,799	131,313	147,412	174,110
Articles produced—				
Raw Sugar ... cwt.	345,978	302,480	339,078	391,366
Molasses ... gals.	796,440	649,800	914,000	1,064,405

The industry has been assisted by the provision of bounties and other measures. Since July, 1915, there has been an embargo on the importation of foreign sugar, except with the permission of the Minister for Trade and Customs, and it was renewed recently for five years from 1st September, 1931. The Government of Queensland, in terms of an agreement with the Commonwealth Government, purchases the raw sugar produced in New South Wales and makes arrangements for its refining and distribution at prices fixed by the agreement.

Sugar Refinery.

There is but one sugar refinery in the State. It is situated at Pyrmont, Sydney, and it treats raw sugar from the North Coast and Queensland mills. During the year 1929-30 the quantity of raw sugar treated was 2,949,800 cwt., and it gave an output of 2,900,480 cwt. of the refined article, valued at £5,162,150.

The three mills and the refinery provided employment for 1,057 persons during the year 1929-30.

BREWERIES.

In 1929-30 there were in the State eight establishments classed as breweries, of which the three largest were within the Metropolitan boundaries. The number has decreased since 1911, when there were 37, but the output has increased considerably.

Items.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	37	17	8	8
Average Number of Employees ...	912	1,122	1,276	1,159
Average Horse-power used ...	1,035	3,289	4,124	4,609
Value of Land and Buildings* £	305,287	714,155	843,365	847,108
Value of Plant and Machinery £	281,316	924,181	1,038,768	1,003,849
Salaries and Wages paid ...	£ 120,340	286,685	387,017	350,178
Value of Fuel and Power used £	17,794	66,848	78,000	69,288
Value of Materials used ...	£ 494,219	1,316,561	1,381,494	1,015,261
Value of Output ...	£ 1,140,151	2,515,224	3,215,957	2,856,464
Value of Production ...	£ 628,138	1,131,815	1,756,463	1,771,915
Materials Treated—				
Malt ... bus.	667,457	832,850	992,385	850,707
Hops ... lb.	790,866	831,656	935,889	809,098
Sugar ... tons	4,421	5,477	5,505	4,765
Articles produced—				
Ale, Beer, Stout ... gals.	19,804,540	25,470,404	29,420,620	26,113,448

* Includes rented premises.

Nearly all the beer consumed by New South Wales is brewed in the local factories.

TOBACCO FACTORIES.

Eight tobacco factories were in operation during the year 1929-30, all within the Metropolitan area. The industry is highly organised, all but a small proportion of the output being produced in four large establishments. Conditions of employment in the tobacco factories are maintained at a high standard.

Most of the tobacco treated is imported from the United States of America. Only a small quantity is produced in New South Wales, where tobacco was grown on 446 acres in 1929-30, and the crop was 1,934 cwt., valued at £17,460.

The following table shows details of the operations of tobacco factories in New South Wales at intervals since 1911:—

Items.		1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	...	26	16	8	8
Average Number of Employees ...	...	1,462	2,394	2,494	2,507
Average Horse-power used ...	...	630	657	1,199	1,221
Value of Land and Buildings*	£	182,569	291,604	527,350	587,033
Value of Plant and Machinery	£	92,138	226,043	363,150	382,545
Salaries and Wages paid ...	£	131,323	356,781	468,904	481,679
Value of Fuel and Power used ...	...	1,067	11,697	12,598	13,440
Value of Materials used ...	£	776,302	3,403,517	3,345,369	3,895,042
Value of Output ...	£	1,250,748	4,240,746	4,863,300	5,406,662
Value of Production ...	£	473,379	825,532	1,504,833	1,498,180
Materials Treated—					
Australian Leaf ...	lb.	745,405	876,007	504,633	650,790
Imported Leaf ...	„	4,617,756	9,546,861	13,362,076	13,445,890
Articles produced—					
Tobacco ...	lb.	3,996,471	6,622,540	10,134,242	10,386,232
Cigars ...	„	87,818	146,433	86,057	77,596
Cigarettes ...	„	1,899,462	5,072,903	5,117,501	3,151,766

* Includes rented premises.

Large quantities of tobacco and cigarettes are exported, mainly to other Australian States. The annual consumption in New South Wales of Australian-made tobacco during the three years ended June, 1931, was estimated as follows:—Tobacco, 5,381,300 lb.; cigars, 137,400 lb.; cigarettes, 1,927,800 lb.

WOOLLEN AND TWEED MILLS.

The woollen goods required in the State, with the exception of a small proportion imported overseas, are manufactured locally, and the yarn used in knitting mills is supplied by New South Wales or Victorian factories. Signs of progress are apparent in the woollen and tweed mills, in contrast to the general retrogression in other manufacturing industries. In 1929-30 there were increases in the number of factory employees and materials treated and in the quantity of tweed, cloth, and yarn made.

Details of employment, output, and other items, at intervals since 1911, are shown in the following table:—

Items.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	5	9	14	15
Average Number of Employees ...	738	1,650	2,993	3,197
Average Horse-power used ...	937	2,795	6,704	7,933
Value of Land and Buildings†	£ 96,821	224,474	540,680	601,207
Value of Plant and Machinery	£ 122,927	384,662	1,023,692	1,048,301
Salaries and Wages paid ...	£ 66,536	235,668	469,019	493,085
Value of Fuel and Power used	£ 4,632	23,517	57,941	61,151
Value of Materials used ...	£ 143,915	745,848	1,311,049	1,183,899
Value of Output ...	£ 271,465	1,437,647	2,144,234	2,082,499
Value of Production ...	£ 122,918	668,282	775,244	837,449
Materials Treated—				
Scoured Wool ... lb.	1,225,470	3,603,448	5,748,343	6,223,018
Cotton	†	332,501	272,005	286,210
Tops	†	†	1,567,122	1,714,243
Yarn	†	†	253,996	235,034
Articles Produced—				
Tweed and Cloth ... yds.	1,054,845	2,494,417	2,822,663	3,118,673
Flannel and Blankets ...	£ 95,313	198,504	227,738	188,199
Rugs and Shawls... ..	£ } 95,313	23,000	12,726	8,780
Tops and Noils	£ †	69,672	301,886	276,515
Yarn	£ †	278,072	301,530	355,959

† Not available.

‡ Includes rented premises.

Woollen mills have been established in Sydney, Goulburn, Albury, and Orange. The customs duties on imported goods have been increased during the last five years with a view to assisting the local industries.

Hosiery and Knitting Factories.

Marked progress has been made in the production of hosiery and knitted goods. In 1920-21 there were 33 establishments with 1,477 employees, the value of materials and fuel used amounted to £573,128, and the output was valued at £872,476. In 1929-30 there were 62 establishments employing 4,142 persons, and the value of materials and fuel was £1,223,967, and the value of the output was £2,379,961.

The following statement shows a comparative review of the operations of the hosiery and knitting factories during the four years ended 30th June, 1930:—

Particulars.	1926-27.	1927-28.	1928-29.	1929-30.
Number of Establishments ...	66	61	67	62
Average Number of Employees ...	3,549	3,642	4,542	4,142
Average Horse-power used ...	1,471	1,586	1,736	1,938
Value of Land and Buildings†	£ 604,385	551,934	665,628	639,064
Value of Plant and Machinery	£ 559,399	490,975	541,795	558,292
Salaries and Wages paid ...	£ 487,134	501,640	619,780	628,824
Value of Fuel and Power used	£ 21,276	18,176	26,920	27,847
Value of Materials used ...	£ 991,662	1,048,208	1,413,195	1,196,120
Value of Output	£ 2,029,142	2,034,159	2,732,950	2,379,961
Value of Production	£ 1,016,204	967,775	1,292,835	1,155,994
Materials used—				
Yarn lb.	1,075,958	980,557	1,273,522	1,289,393
Cotton	1,378,968	1,387,098	1,942,479	2,235,544
Silk	88,628	103,631	102,653	126,213
Artificial Silk	698,648	1,024,225	2,282,590	1,381,520
Other	£ 56,589	68,680	90,907	88,229
Articles Produced—				
Socks and Stockings doz. pairs	737,437	767,214	1,142,192	1,021,696
Other Garments	£ 794,603	1,105,020	1,297,679	1,110,746

† Includes rented premises.

The quantities of yarn, cotton and silk used increased during the last two years, but the quantity of artificial silk which, in 1928-29, was treble the quantity in 1926-27, showed a noticeable decline in 1929-30.

BOOT AND SHOE FACTORIES.

Many varieties of footwear are made in the local factories. The bulk of the output is used in the State, and small quantities are exported, principally to New Guinea, Papua, and Fiji.

Particulars of the operation of these factories since 1911 are shown in the following table:—

Items.		1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	...	106	101	103	97
Average Number of Employees ...	...	4,417	4,459	5,201	4,417
Average Horse-power used ...	...	855	1,379	1,798	1,702
Value of Land and Buildings†	£	222,983	371,985	538,339	502,900
Value of Plant and Machinery	£	156,643	184,549	255,323	238,604
Salaries and Wages paid ...	£	367,605	628,541	888,314	733,898
Value of Fuel and Power used	£	5,298	10,365	13,226	12,945
Value of Materials used ...	£	709,818	1,496,028	1,424,791	1,049,072
Value of Output ...	£	1,221,748	2,540,222	2,665,943	2,146,083
Value of Production ...	£	506,632	1,033,789	1,227,926	1,084,066
Leather Used—					
Sole ...	lb.	5,189,000	4,822,678	4,873,665	4,283,615
Upper ...	sq. ft.	8,010,600	7,262,176	7,773,595	7,193,136
Articles Produced—					
Boots and Shoes ...	pairs	3,730,760	3,232,413	3,816,515	3,516,871
Slippers, etc. ...	„	439,428	609,398	1,292,431	923,069
Uppers, N.E.I. ...	„	71,138	41,925	62,244	51,713

† Includes rented premises.

The figures are exclusive of particulars of boot repairing establishments, which numbered 613 in 1929-30; 1,138 persons were employed, and their wages amounted to £100,831. Materials to the value of £142,754 were used, including 823,694 lb. of sole leather and 15,655 square feet of upper leather; the output was valued at £487,628.

The number of factories for the manufacture of boots and shoes was 97, of which 91 were situated within the metropolitan area and 6 in the remainder of the State.

HAT AND CAP FACTORIES.

There has been considerable expansion in the industry organised for the manufacture of hats and caps. The Australian products have gained an important place in local markets and some are exported to New Zealand. In 1929-30 the employees numbered 1,819, of whom 65 per cent. were females.

There were 30 establishments listed under this classification in 1929-30, and 29 were situated in the metropolitan area. Particulars of the operations in various years since 1911 are as follow:—

Items.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	32	28	31	30
Average Number of Employees ...	1,566	1,456	1,896	1,819
Average Horse-power used ...	433	764	716	726
Value of Land and Buildings* £	108,936	174,315	412,694	312,107
Value of Plant and Machinery £	60,807	88,817	147,103	141,842
Salaries and Wages paid ... £	96,498	185,394	314,616	296,846
Value of Fuel and Power used £	4,376	7,574	11,416	12,245
Value of Materials used ... £	127,494	393,372	509,393	439,596
Value of Output ... £	293,591	747,545	1,058,126	954,984
Value of Production ... £	161,721	346,599	537,317	503,143
Hats and Caps made ... No.	2,692,778	2,284,572	2,860,322	2,808,366

* Includes rented premises.

ELECTRIC LIGHT AND POWER WORKS.

The industries connected with the production and supply of electric light and power are making steady progress. The establishments include a number of Governmental undertakings.

The Railway Commissioners control large works in Sydney and Newcastle to supply electricity for transport and for the railway and tramway workshops. A Government undertaking is maintained at Port Kembla, whence power is supplied for harbour works, etc., and current is transmitted to constructional works in the vicinity and to a number of townships along the South Coast and in the Southern Highlands. Another scheme is operated by means of power available from the waters discharged through the Burrinjuck Dam for irrigation purposes. The current is supplied in bulk and by retail over a wide area which embraces Wagga, Cootamundra, Junee, Cowra and the Federal Capital.

There are many municipal electricity works, the largest being the City of Sydney undertaking. Two hydro-electric schemes, viz., the Dorrigo and Nymboida, have been established by local governing bodies in the north eastern areas.

The development in electric light and power works since 1901 is shown by the details given in the following table:—

Items.	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	104	117	126	127
Average Number of Employees ...	929	1,353	2,196	2,192
Average Horse-power used ...	54,734	111,591	334,294	465,645
Value of Land and Buildings† £	448,972	1,381,092	2,938,924	4,610,165
Value of Plant and Machinery £	1,257,173	2,531,358	8,354,176	10,680,578
Salaries and Wages paid ... £	134,884	327,157	676,195	675,336
Value of Fuel and Power used £	183,248	590,373	1,431,186	1,593,937
Value of Materials used ... £	69,484	54,995	238,422	245,804
Value of Output ... £	896,607	1,697,763	4,956,461	5,398,470
Value of Production ... £	643,875	1,052,395	3,286,853	3,588,729
Coal used ... tons	259,239	510,088	882,355	907,461
Electricity generated—				
Light ... units	20,727,000	53,691,324	959,984,800	996,116,500
Power ... „	114,610,000	288,844,906		

† Includes rented premises.

GAS WORKS.

Despite the substantial progress that has been made in the installation of electric plants for purposes of illumination, power, and cooking, the use of gas is extending also, as will be seen in the following table:—

Items,	1911.	1920-21.	1928-29.	1929-30.
Number of Establishments ...	47	46	48	46
Average Number of Employees ...	1,053	1,642	1,671	1,659
Average Horse-power used ...	1,394	3,125	4,018	4,329
Value of Land and Buildings†	£ 564,387	1,066,074	874,702	862,529
Value of Plant and Machinery	£ 888,711	1,892,835	2,907,445	2,995,379
Salaries and Wages paid ...	£ 154,426	437,318	373,412	372,444
Value of Fuel and Power used	£ 57,372	112,995	247,331	235,589
Value of Materials used ...	£ 277,861	829,906	1,130,072	1,161,964
Value of Output ...	£ 910,972	2,264,644	2,867,142	2,850,931
Value of Production ...	£ 575,739	1,321,743	1,489,739	1,453,378
Materials Treated—				
Coal tons	323,910	564,122	661,878	653,440
Shale tons	55,621	27,298	...	...
Oil gals	*	3,700,462	1,851,132	4,185,102
Articles Produced—				
Gas ... 1,000 cub. feet	4,275,859	8,131,712	10,683,530	10,991,780
Coke tons	176,728	346,380	435,816	421,093
Tar gals.	3,650,000	9,861,830	13,244,818	10,335,587
Ammoniacal Liquor ... gals.	3,365,000	4,216,929	4,885,155	5,571,941
Sulphate of Ammonia ... tons	*	1,061	6,546	5,273

* Not available.

† Includes rented premises.

In addition to the coke and sulphate of ammonia made in gas works, considerable quantities are made in other establishments in which coal is treated. The total quantity of coke produced by all plants in 1929-30 was 821,257 tons, and of sulphate of ammonia 7,096 tons.

NEW INDUSTRIES.

Far-reaching expansion in the industries producing metal goods, machinery, etc., followed the development of iron and steel works. The products of factories in this group include various grades of iron and steel, rails, pipes, structural shapes, billets, tyres and axles, galvanised iron and black iron sheets; various classes of steel wire, steel fencing posts, and steel castings, wire-netting, wire nails, automatic couplings for railways, and many kinds of machinery, brass and copper wire and rods and bars, cable for telephones, and aluminium ware. All the steel carriages for the electric railways were built in the local workshops.

Factories have been established for the manufacture of new kinds of products for the building and allied industries, e.g., asbestos and fibro-cement roofing, reinforced concrete ware, and conduits for electric wires. The production of cement expanded with the increased demand for use in concrete buildings and civil engineering projects, steel for reinforcement being manufactured locally. There are factories also for the production of white lead, paints and varnishes, linseed oil, sheet glass, incandescent electric lamps, and lead-pencils, and many commodities formerly supplied by importation are being made in the State.

In the clothing and textile group new industries include the weaving of cotton, the manufacture of cotton garments, and other goods. The establishment of woollen mills in various country centres has been a feature of industrial progress, and there has been considerable advance in the

manufacture of silk, cotton, and woollen hosiery and knitted goods. Factories for making sewing cotton, buttons, and leather and kid gloves have been opened in recent years.

Large modern factories have been established for food products, many being branches of oversea establishments. The range of commodities produced in establishments for making soap, gelatine, rubber goods and leatherware has been extended widely. The manufacture of linoleum and coir matting has been commenced and a factory has been equipped for preserving fish in tins. Many kinds of musical and scientific instruments are made, including apparatus for wireless telegraphy, gramophone records and rolls for piano players.

MINING INDUSTRY.

NEW SOUTH WALES contains extensive mineral deposits of great value and variety. Coal was discovered as early as 1796, though under the industrial conditions prevailing at that time its importance was not fully realised. World-wide interest, however, was excited by the announcement in 1851 that gold had been discovered in New South Wales. It attracted a rapid flow of immigration to the country and promoted the development of its resources. In later years copper, tin, and silver-lead deposits were opened up.

With the exhaustion of the known alluvial deposits, where valuable minerals were recoverable without the expenditure of much capital, the organisation of the mining industry has become to a great extent the province of companies and syndicates with the necessary financial resources to instal machinery and to conduct operations on a large scale. Coal and silver-lead have proved to be the richest sources of mineral production.

SUPERVISION OF MINING.

The general supervision of the mining industry in the State and the administration of the enactments relating to mining are functions of the Department of Mines under the control of a responsible Minister of the Crown. In the mining districts Wardens' Courts, each under the sole jurisdiction of a Warden, determine suits relating to the right of occupation of land for mining and other matters in regard to mining operations.

The occupation of land for the purpose of mining is subject to the Mining Act of 1906 and its amendments. Any person may obtain a miner's right which entitles the holder, under prescribed conditions, to occupy Crown land for mining purposes and to mine therein, and to occupy as a residence area land not exceeding a quarter of an acre within the boundaries of a town or village, or 2 acres elsewhere. A holder of a miner's right may apply also for an authority to prospect on Crown lands, and, in the event of the discovery of any mineral, he may be required to apply for a lease of the land or to continue prospecting operations. Another form of occupation of Crown land in connection with mining is under the right conferred by a business license which entitles the holder to occupy a limited area within a gold or mineral field for the purpose of carrying on any business except mining.

A business license confers the right to only one holding at a time. Holders of miners' rights may take possession of more than one tenement, but are required to hold an additional miner's right in respect of each tenement after the first of the same class. The term of a miner's right or business license is not less than six months and not more than twenty years. It may be renewed upon application, and is transferable by endorsement and registration. The fee for a miner's right is at the rate of 5s. per annum, and for a business license £1 per annum.

The number of miners' rights issued during 1930 was 15,516, the largest number in any year since 1913, when 17,766 were issued. The number of business licenses issued was 261, as against 292 in 1928-29. The number has declined in each year since 1906.

Crown lands may be granted as mining leases, which authorise mining on the land, or as leases for mining purposes which authorise the use of the land for conserving water, constructing drains, etc., and railways, erecting buildings and machinery and dwellings for miners, generating electricity, dumping residues, and for other works in connection with mining, but do

not allow mining or the removal of minerals from the land. Except in the case of special leases, which may be granted in certain cases, the maximum area of a mining lease varies according to the mineral sought, viz., opal, $\frac{1}{2}$ acre; gold, 25 acres; coal, shale, mineral oils, petroleum, or natural gas, 640 acres; other minerals, 80 acres.

Private lands are open to mining subject to the payment of rent and compensation and to other conditions as prescribed. The mining wardens may grant to the holders of miners' rights authority to enter private lands, but, except with the consent of the owner, the authority does not extend to land on which certain improvements have been effected, *e.g.*, cultivation, or the erection of substantial buildings. An authority may be granted for a period up to two years, and during its currency the holder may apply for a mining lease of the land. Leases of private lands for mining purposes may be granted also. The maximum areas of private lands that may be leased are:—Gold, 25 acres; opal, 150 ft. square; coal and shale, 640 acres; and other minerals, 80 acres. The owners of private lands, with the concurrence of the Minister for Mines, may lease areas under agreement to holders of miners' rights.

Dredging leases may be granted in respect of Crown and private lands, including the beds of rivers, lakes, etc., and land under tidal waters.

Land occupied for Mining.

The area under mining occupation in New South Wales at 31st December, 1930, was approximately 583,390 acres, as shown below, as against 566,614 acres in 1929. The area is not stated definitely, as the area held under miners' rights is estimated by the mining registrars in some cases, where the holders are not required to register the areas they occupy.

Nature of Holding.	Crown Lands.	Private Lands.	Total.
	acres.	acres.	acres.
Leases—			
Mining	277,893	115,722	393,615
Mining Purposes	7,701	1,998	9,699
Agreements ... ..	...	44,767	44,767
Authority to Enter ... ..	...	51,285	51,285
Authority to Prospect	19,243	...	19,243
Miners' Rights and Business Licenses	10,173	...	10,173
Applications for Leases—			
Mining	21,228	6,010	27,238
Mining Purposes	2,387	53	2,440
Dredging	2,398*	...	2,398
Applications for Authority to Prospect	21,385	...	21,385
Other Mining Titles	1,147	...	1,147
Total	363,555	219,835	583,390

* Includes Private Lands.

The annual rent for mining leases of Crown lands is 2s. per acre, and of private lands 20s. per acre in respect of the surface actually occupied. The rent for dredging leases is 2s. 6d per acre in respect of Crown lands, and it is assessed by the wardens in open court in respect of private lands.

Royalties are payable to the Crown in respect of the minerals won, except in certain cases where they have been obtained from private lands held without reservation of minerals to the Crown. The royalty on coal and shale is charged at the rate of 6d. per ton, and on other minerals at the rate of 1 per cent. of the value.

In regard to mining on private lands held without reservation of minerals to the Crown, royalty is collected by the Department of Mines on behalf of the owner at the rate of 6d. per ton of coal and shale, and $1\frac{1}{2}$ per cent. of the gross value of other minerals, except gold. The Department retains one-sixth and one-ninth respectively of these amounts, and pays the balance to the owner of the minerals. The royalty on gold is payable to the Crown in all cases.

Royalty may be remitted under certain conditions as prescribed by the Mining Acts, *e.g.*, if the gross annual output of minerals, other than coal and shale, won from Crown land under mining lease does not exceed £500. In many cases rents may be deducted from the royalties.

The amount of royalty received during the year 1930 was £139,460, of which £637 was in respect of land held under permits, and the balance from land under lease.

ENCOURAGEMENT OF PROSPECTING.

The State Legislature votes a certain sum each year to encourage prospecting for minerals and to assist miners to open up new fields. The vote is administered by the Prospecting Board, which consists of the Under-Secretary for Mines as Chairman, the Government Geologist, the Chief Inspector of Mines, an inspector, the Chief Mining Surveyor, and a geological surveyor. Miners desiring a grant must satisfy the Board that the locality to be prospected is likely to yield the mineral sought, and that the mode of operation is suitable for its discovery. The amount advanced must be refunded in the event of the discovery of payable mineral by means of the aid.

The following statement shows a summary of the amounts allotted from the Prospecting Vote to prospectors for the various minerals:—

Period (years ended 30th June).	Amounts allotted to Prospectors for—						Total.
	Gold.	Silver and Lead.	Copper.	Tin.	Coal.	Other Minerals.	
	£	£	£	£	£	£	£
1887-1900	245,791	13,026	9,267	4,684	4,090	7,587	284,445
1901-1905	80,636	5,108	10,136	7,828	40	1,430	105,178
1906-1910	38,822	7,986	20,765	3,146	310	871	71,900
1911-1915	50,209	7,557	8,939	5,870	...	4,837	77,412
1916-1920	32,976	4,325	10,057	3,978	90	5,829	57,255
1921-1925	44,926	8,009	3,709	8,478	1,713	4,578	71,413
1926	9,163	1,756	1,237	2,288	30	1,153	15,627
1927	7,003	3,423	1,550	3,391	625	1,922	17,919
1928	9,063	3,783	179	3,050	400	1,752	18,227
1929	5,735	1,002	...	1,260	...	904	8,901
1930	5,816	2,058	616	2,304	...	664	11,458
Total ...	530,140	58,038	66,455	46,277	7,298	31,527	739,735

In each year some of the prospectors fail to complete the works for which aid has been granted, and the amounts allotted are not paid in full. The total amount expended to the end of 1930 in encouraging prospecting was £622,461.

In addition to assistance afforded by means of the Prospecting Vote, steps were taken in 1930 to encourage prospecting as a measure of unemployment relief. Arrangements were made to assist (a) organised parties to prospect under the supervision of officers of the Department of Mines; (b) syndicates prepared to organise prospecting parties; and (c) individual prospectors. During the year about 3,685 persons received assistance and the expenditure amounted to £29,418.

The Government of New South Wales has promised a bonus of £10,000 for the production of 100,000 gallons of petroleum in the State, and has offered for the discovery of a new mineral field rewards ranging up to £1,000 according to the output and to the number of miners employed by the discovery.

In 1926 the Commonwealth Government appropriated from public revenue the sum of £60,000, which was increased subsequently to £178,800 for the encouragement of prospecting for petroleum oil in Australia, New Guinea, and Papua. Up to the 30th June, 1930, the sum of £178,439 had been expended, including £29,191 in 1929-30. Another appropriation, £40,000, was made in 1926, and placed in a Trust Fund for the assistance of persons engaged in prospecting for precious metals in Australia. Of this sum £2,851 was disbursed in 1929-30, making £13,031 to the 30th June, 1930. Information relating to a grant by the Commonwealth, which is being expended in developing shale oil deposits, is shown later in this chapter.

The Government of the Commonwealth has made provision for the payment of a bounty on gold during the period of ten years 1931 to 1940 in terms of the Gold Bounty Act, which are shown on page 91.

In terms of an arrangement between the Government of the Commonwealth and the Empire Marketing Board, as representing the Imperial Government, geophysical methods of prospecting were tested in Australia during 1928 and 1929, in connection with coal and underground water reserves, and the Broken Hill lead-zinc deposits. To defray the cost a sum amounting to £20,000 was appropriated by the Commonwealth, and the Empire Marketing Board agreed to distribute up to £16,000 on a £ for £ basis. In New South Wales certain areas were prospected under this arrangement, and the surveys showed generally that geophysical methods may be applied successfully.

PRICES OF METALS.

The prices of the principal metals depend on market conditions in oversea countries, the local demand being small. The quotations in the following table for silver, lead, copper, and tin are the average spot prices on the London Exchange.

Year.	Silver.	Lead.	Zinc.	Copper.	Tin.
	per oz.	per ton.	per ton.	per ton.	per ton.
	s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1901	2 3·2	12 10 5	17 0 7	66 19 8	118 12 8
1911	2 0·6	13 19 3	25 3 2	56 1 9	182 13 5
1921	3 0·9	22 14 4	26 4 1	69 8 7	165 6 7
1926	2 4·7	31 2 3	34 2 8	58 0 8	291 3 0
1927	2 2·1	24 8 1	28 9 11	55 12 3	289 1 5
1928	2 2·8	21 3 4	25 5 5	63 14 8	227 4 8
1929	2 0·5	23 4 11	24 17 8	75 9 7	203 18 10
1930	1 5·7	18 1 5	16 16 9	54 13 7	141 19 1
1931—Mar.	1 1·5	13 4 10	12 8 8	44 17 2	121 18 5
1931—June.	1 0·7	11 15 4	11 10 2	35 17 6	105 0 8
1931—Sept.	1 2·1	11 19 7	11 16 4	31 11 1	117 17 10
1931—Oct.	1 5·1	13 5 0	12 19 7	35 0 1	127 0 10

There was an almost continuous fall in the average prices of silver, zinc, and tin during the five years 1926 to 1930. In the case of lead the downward movement was interrupted for a short period during 1929 and prices of copper increased considerably in 1928 and 1929. In 1930 the average price of silver, 17.7d., was lower than any annual average during the past ninety-seven years, and in February, 1931, it fell below 12½d. per oz. The

prices of lead, zinc, copper, and tin dropped below pre-war level in 1930, and the fall continued until 21st September, 1931, when an embargo was placed on the export of gold from Great Britain, and with the devaluation of sterling prices began to rise. During the ensuing month silver rose from 12½d. to 17½d., lead from £10 13s. 9d. to £13 3s. 9d., and zinc from £10 7s. 6d. to £12 8s. 9d.

PRICES OF COAL.

Prices of coal depend to a great extent upon local factors. The western coal, being of lower calorific value than the northern or southern, is the cheapest. The movement in prices since 1916 is illustrated by the following comparison, which was published in the report of the Royal Commission which investigated the coal industry in 1929-30. The quotations refer to the best large coal per ton in each district in the years in which the prices were varied between 1916 and 1930.

Year.	Northern— f.o.b., Newcastle.	Southern— f.o.b., Jetty.	Western— f.o.r., Lithgow.
	s. d.	s. d.	s. d.
1916	12 0	12 0	7 3
1917	15 0	15 0	10 3
1919	17 9	17 6	12 9
1920	21 9	21 6	16 9
1927	26 1	25 6	15 6
1930 (June) ...	22 10	22 3	13 9

The prices quoted above were observed generally throughout the trade up to June, 1930. Subsequently greater competition prevailed and contracts for large supplies were undertaken at lower rates—the reductions ranging from 2s. to 5s. per ton as compared with those stated in the table.

STATISTICS OF MINES.

The statistics relating to the mining industry as published in this chapter are obtained from two sources: (1) the records of the Department of Mines, which, until the year 1921, were the only data available; and (2) returns for 1921 and later years collected from owners by the Government Statistician under the authority of the Census Act, 1901. The principal distinction between the data obtained from these two sources lies in the statistics of the metalliferous mines. The particulars recorded by the Department of Mines relate to metals won during each year, including in many instances those won from minerals brought to grass in past years, whereas the Statistician collects returns of the minerals actually mined during the year.

Moreover, the statistics collected by the Department of Mines sometimes include particulars of ore-dressing operations, and the use of the Department's figures for years prior to 1921 involved duplication in regard to the mining and manufacturing industries. In order to obviate this difficulty, the mine owners were asked to supply special returns to the Government Statistician, showing therein information relating to mining operations only, and excluding all particulars regarding the treatment of ores. It is found, however, that it is almost impossible to give separate details regarding the actual operations of mining, especially when the same company undertakes both mining and ore-dressing, and it is under such conditions that the most important branch of metalliferous mining in New South Wales—viz., silver, lead, and zinc—is usually conducted.

Further difficulty arises in regard to the value of the annual output of the metalliferous mines. The value at the mines and before treatment cannot

be determined until the minerals have been subjected to the final process for the extraction of the metallic contents, and such operations extend over a long period and in some cases are conducted in localities outside the State. In view of these difficulties the value of the production of metalliferous mines can be calculated only approximately; and attention is directed to the fact that the values as stated in this Year Book are to be regarded as estimates.

The statistics of mines, other than metalliferous, as recorded for years prior to 1926, include particulars of quarries held under mining title. In the compilation of the returns collected for 1926 and later years, these have been excluded from the statistics of the mining industry; therefore, the figures are not strictly comparable with those for the earlier years.

LABOUR AND MACHINERY.

Mining leases and permits contain conditions as to the minimum number of men to be employed. The usual labour conditions in respect of mining leases of Crown lands and of leases or agreements to mine on private lands are as follows:—For coal, shale, mineral oils, petroleum, or natural gas, for first twelve months of term granted, 2 men to 320 acres, thereafter 4 men; for gold, 1 man to 5 acres during the first year, and thereafter 1 man to 2 acres; for other minerals, 1 man to 20 acres during the first year, thereafter 1 man to 10 acres. For dredging leases the prescribed labour is in the proportion of 7 men to 100 acres. The labour conditions may be suspended in cases where low prices for the products or other adverse circumstances affect the working of a mine.

The extent to which the mining industry has provided employment is indicated in the following statement of the approximate number of men employed in the year 1921 and in the last five years. The number of miners is the sum of the average number employed at each mine in operation during the year, and the number of "fossickers" represents the number engaged, as reported by the wardens in the various mining districts.

Particulars.	1921.	1926.	1927.	1928.	1929.	1930.
Miners—						
Coal	20,973*	24,125	24,483	21,743	22,470†	21,343†
Metals—						
Gold	900	378	325	245	194	252
Silver, Lead, Zinc	2,035	3,272	3,305	2,638	3,094	2,996
Tin	826	671	710	592	533	255
Copper	68	62	25	4	25	4
Other Metals	810†	419	408	229	108	59
Other Minerals		259	117	100	138	101
Total, Metalliferous, etc.	4,639†	5,061	4,890	3,808	4,092	3,667
Total, Miners	25,612†	29,186	29,373	25,551	26,562	25,010
Fossickers—						
Gold	52	464	480	487	507	3,706
Tin	343	551	526	461	361	438
Other	55	228	170	234	253	600
Total, Fossickers	450	1,243	1,176	1,182	1,121	4,744

* Includes 189 shale miners. † Overstated—see context below. ‡ Includes workers in quarries held under mining title, excluded in later years.

There is some overstatement in regard to the number of coal miners as shown above for the years 1929 and 1930, owing to duplication arising

from the movement of miners during the period March, 1929, to June, 1930, when the majority of, northern collieries were closed. No shale miners were included in the figures for the years 1926 to 1930.

There was increased activity in gold mining in 1930, when widespread unemployment led to a revival of prospecting, and Government assistance was granted to a large number of unemployed workers for this purpose. Mining for other metals was restricted owing to the low prices of the products.

Additional information regarding miners is shown in the following statement:—

Year.	Coal and Shale Mines.				Other Mines.			
	Working Pro- priators.	Employees above ground.	Employees below ground.	Total.	Working Pro- priators.	Employees above ground.	Employees below ground.	Total.
1921	5,385		15,588	20,973	2,353*		2,286*	4,639*
1926	73	6,130	17,922	24,125	292	1,654	3,115	5,061
1927	69	6,203	18,211	24,483	273	1,554	3,063	4,890
1928	72	5,598	16,073	21,743	212	1,157	2,439	3,808
1929	137	5,522	16,811	22,470	222	981	2,889	4,092
1930†	198	5,020	14,872	20,090	227	807	2,758	3,792

* Including workers in quarries held under mining title, excluded in later years. † Number employed on last full working day.

Of the coal miners over 70 per cent. are employed below ground. In other mines the proportion is somewhat lower.

The employment of boys under 14 years of age and of women and girls in or about a mine is prohibited, and restrictions are placed upon the employment of youths. In 1930 the number of employees under 21 years of age employed on the last full working day in coal mines was 1,592, of whom 1,079 worked below ground, and 513 on the surface. At other mines the employees under 21 years of age numbered 12 of whom all worked above ground.

The value of the machinery used in connection with mining in New South Wales during the year 1930 was £7,608,630; viz., coal mines, £6,932,874; metalliferous mines, £659,033; and other mines, £16,723. The value in 1921 and in each of the last five years is shown below:—

Year.	Coal and Shale Mines.	Metalliferous Mines.	Other Mines.	Total.
	£	£	£	£
1921	6,636,857	1,481,966	*	8,118,823†
1926	7,747,139	947,911	41,858	8,736,908
1927	8,000,373	957,673	16,083	8,974,129
1928	6,989,492	791,530	17,523	7,798,545
1929	7,127,140	790,761	21,123	7,939,024
1930	6,932,874	659,033	16,723	7,608,630

* Included with metalliferous mines. † Including machinery in quarries held under mining title, excluded in later years.

The value of the machinery used in mining for the various metals during 1930 was as follows:—Gold, £18,421; silver, lead and zinc, £515,805; tin, £119,113; other metals, £5,694.

The following statement shows separately the value of the plant used in actual mining operations, that is, in winning and weighing the minerals, hauling them to the surface, ventilating the mines, etc.; and the value of the conveyance plant for transporting the minerals from the surface to wharf or railway:—

Year.	Coal and Shale Mines.			Other Mines.			Total Value of Mining Machinery.
	Mining Operations.	Transporting Minerals to Wharf or Railway.	Other Machinery.	Mining Operations.	Transporting Minerals to Wharf or Railway.	Other Machinery.	
	£	£	£	£	£	£	£
1921	3,614,955	2,561,172	460,730	924,870*	122,481*	434,615*	8,118,823*
1926	4,524,850	2,889,051	342,238	796,461	110,820	82,483	8,736,908
1927	4,703,423	2,922,499	374,451	801,396	103,942	68,418	8,974,129
1928	4,142,718	2,596,756	250,018	681,578	78,605	48,870	7,798,545
1929	4,231,639	2,601,774	293,727	734,977	29,655	47,252	7,939,024
1930	4,044,939	2,612,395	275,540	619,968	14,276	41,512	7,608,630

* Including particulars of quarries held under mining title which were excluded in later years.

In the coal mines, the value of the machinery employed in mining operations during 1930 represented 58 per cent. of the total value; 37 per cent. was used for transporting the minerals from the surface of the mine to a wharf or railway station. In other mines the proportions were as follows:—Mining operations, 92 per cent.; transporting minerals, 3 per cent. In some cases mine owners have constructed railway lines for the purpose of connecting the mines with the State railway system or with wharves.

Particulars of the power used for operating mining machinery during the last five years are shown below:—

Year.	Horse power of Machinery—Average used.						Total, all Mines.
	Coal and Shale Mines.			Other Mines.			
	Steam.	Elec- tricity.	Other.	Steam.	Elec- tricity.	Other.	
1921	47,321	16,138	113	12,136*	1,931*	593*	78,232*
1926	62,691	23,008	511	13,847	2,632	533	103,222
1927	58,177	23,931	154	11,460	2,631	751	97,104
1928	54,322	27,724	129	7,692	3,041	779	93,687
1929	54,608	25,914	238	8,010	2,851	630	92,251
1930	53,617	23,448	169	7,056	2,901	1,777	88,968

* Including particulars of quarries held under mining title, excluded in later years.

Steam is the principal agency used for operating the machinery. In coal mines the average motive force actually used in 1930 amounted to 77,234 horse-power, of which nearly 69 per cent. was steam and 30 per cent. electricity. Machinery is used extensively for mining coal. The quantity cut by machines during 1930 was 1,159,798 tons, or 16 per cent. of the total output, the proportion being lower than usual because some of the northern mines where machinery has been installed were closed down the first six months of the year. Of 229 machines in use, 114 were operated by electricity and 115 by compressed air.

In mines other than coal and shale mines, steam power represented 60 per cent. in 1930, electricity 25 per cent., and oil 15 per cent. of the power used. The use of oil increased as a result of the installation of oil-burning machinery in metalliferous mining at Broken Hill.

The full capacity of mining machinery in 1930 amounted to 160,802 horse-power, viz., 136,541 h.p. in coal mines and 24,261 h.p. in other mines.

The value of the fuel used during 1930 was £442,066, including 310,298 tons of coal valued at £296,757, and electricity to the value of £131,995.

MINES IN OPERATION.

The following statement is a summary of the particulars furnished by mine owners in returns under the Census Act regarding the mines in operation and the minerals mined during 1921 and each year from 1926 to 1930. The figures are not a complete record of either the income or expenditure of the undertakings concerned and are not intended to show their financial position collectively or individually:—

Year.	Mines in Operation.	Persons Employed (excluding Fossickers).	Value of:—				
			Salaries and Wages.	Land, Buildings, etc.	Machinery and Plant.	Materials and Fuel Used, etc.	Output.
	No.	No.	£	£	£	£	£
1921*	493	25,612	6,430,988	3,428,735	8,118,823	1,770,320	10,191,975
1926	427	29,186	7,511,862	4,224,676	8,736,908	2,266,410	12,084,083
1927	378	29,373	7,878,842	4,305,777	8,974,129	2,452,014	12,351,521
1928	357	25,551	6,464,788	4,081,725	7,798,545	1,718,760	10,435,522
1929	369	26,562	5,242,393	3,981,000	7,939,024	1,346,519	8,832,874
1930	377	25,010	4,856,579	3,991,091	7,608,630	1,280,654	7,498,565

*Including particulars (subsequently excluded) of quarries held under mining title.

The figures in the table include the value of minerals won by fossickers, who numbered 4,744 in 1930, and obtained an output valued at £43,838. The corresponding figures for the preceding year were 1,121 fossickers and output, £31,601. The cost of replacing tools worn out each year and of repairing plant, machinery, etc., is included with the value of materials and fuel used, but many other costs and overhead charges are not included.

Coal mining is the main factor of the progress of the mineral industry, as it supplies about three-fourths of the output. Coal mining in New South Wales, as in other countries, is liable to intermittency owing to various causes, and in recent years the industry has been affected by reason of the more extensive use of oil as a substitute. Particulars of interruptions to work in the principal collieries over a series of years are shown in the chapter of this volume relating to employment.

In 1927 the value of coal raised was exceptionally high. In 1928 serious depression was apparent in the coal trade, due mainly to diminished demand for export, and practically all the northern collieries were idle on account of an industrial dispute from 1st March, 1929, to 2nd June, 1930. The value of the output was reduced also by reason of a fall in price.

Apart from coal mining the output of the Broken Hill silver-lead fields is the most important. In 1921 conditions were unfavourable as prices of metals were low. Moreover, operations at some of the mines were suspended for the greater part of the year in consequence of the partial destruction by fire of the smelting works in South Australia where the products are treated. Between 1921 and 1926 there was a rise in metal prices and a steady increase in the value of the output of the metalliferous mines. A drop in the prices which commenced during 1926 led to a decrease in output in 1927 and later years.

Summaries relating to the coal and shale mines, and to the metalliferous and other mines are shown below:—

Year.	Mines in Opera- tion.	Persons Employed (excluding Posslekters).	Salaries and Wages.	Value of—				Output.
				Land, Buildings, etc.	Machinery and Plant.	Materials and Fuel Used, etc.		
Coal and Shale Mines.								
			£	£	£	£	£	
1921	143	20,973	5,703,999	3,222,721	6,636,857	1,469,578	9,036,474	
1926	141	24,125	6,058,270	3,999,836	7,747,139	1,496,436	9,096,611	
1927	135	24,483	6,515,487	4,089,139	8,000,373	1,667,034	9,586,693	
1928	153	21,743	5,317,243	3,883,349	6,989,492	1,221,027	8,113,600	
1929	180	22,470+	4,053,746	3,778,955	7,127,140	824,940	6,294,870	
1930	216	21,343+	3,731,380	3,804,875	6,932,874	797,689	5,493,150	
Other Mines.								
			£	£	£	£	£	
1921*	350	4,639	726,989	206,014	1,481,966	300,742	1,155,501	
1926	286	5,061	1,453,592	224,840	989,769	769,974	2,987,472	
1927	243	4,890	1,363,355	216,638	973,756	784,980	2,764,828	
1928	204	3,808	1,147,545	198,376	809,053	497,733	2,321,922	
1929	189	4,092	1,188,647	202,045	811,884	521,579	2,538,004	
1930	161	3,667	1,125,199	187,116	675,756	482,965	2,005,415	

* Including particulars of quarries held under mining title, excluded in later years. † See page 83.

The materials used in coal mines in 1930 consisted of timber, £129,499, and other materials, £386,339. The value of fuel used was £281,851.

In other mines the value of timber used in 1930 was £191,250, other materials £131,500, fuel consumed £160,215.

MINERALS WON—AS RECORDED BY DEPARTMENT OF MINES.

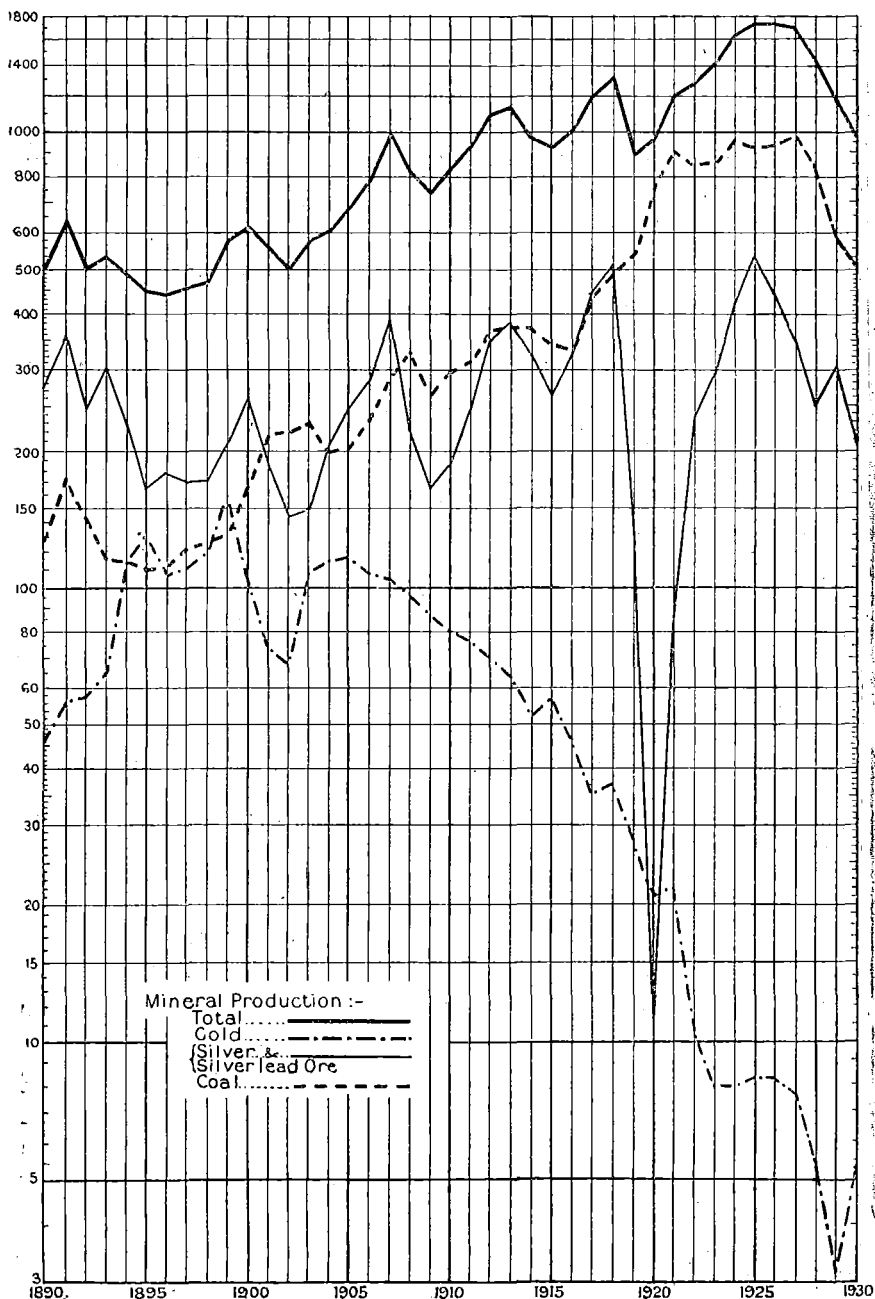
The particulars relating to the minerals won, as shown in the following pages of this chapter, have been obtained from the records of the Department of Mines. For reasons stated on page 82 they differ from those in the preceding tables, and the figures relating to production include, in many cases, the value of the ores after treatment at the mines. From the particulars shown in the annual reports of the Department those regarding the output of iron made from scrap, Portland cement and lime have been deducted, as they are included in the statistics of factories in the preceding chapter of this volume.

The average annual value of the minerals won in each quinquennial period from 1901-1925, the annual production since 1926, and the total production to the end of each period are shown below:—

Period.	Value of Minerals Won.		Year.	Value of Minerals Won.	
	Average per annum.	Total to end of period.		During year.	To end of year.
	£	£		£	£
To end of 1900	...	132,535,358	1926	17,509,718	399,134,680
1901-05	5,873,176	161,901,240	1927	17,048,370	416,183,050
1906-10	8,330,883	203,555,656	1928	14,363,569	430,546,619
1911-15	10,169,752	254,404,418	1929	11,923,515	442,470,134
1916-20	10,821,478	308,511,806	1930	9,781,606	452,251,740
1921-25	14,622,631	381,624,962			

VALUE OF MINERAL PRODUCTION, 1890 to 1930.

Ratio Graph.



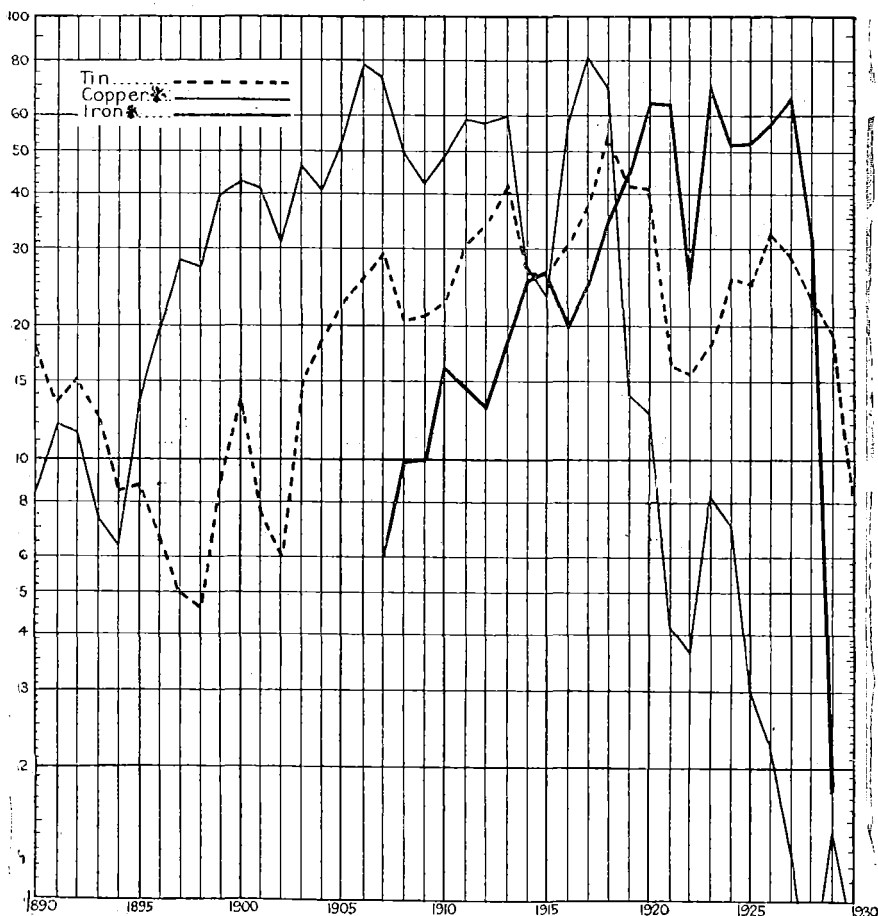
The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the rate of increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

The value in 1926 was the highest yet recorded. There was a decline of £461,000 in 1927, which may be attributed to a fall in the prices of lead and zinc. In the following years, the value declined as a result of depression in the coal-mining industry, and a fall in the prices of the principal metalliferous products.

At the end of the year 1900 the value of the gold won, £48,422,000, exceeded that of any other mineral, but with the subsequent decline in gold mining and the development of the coal and silver-lead fields, coal advanced rapidly to the head of the list, and the value of the silver and lead surpassed the output of gold. At the end of 1930 the value of the coal production represented 42 per cent. of the total value, silver and lead 24 per cent., and gold 14 per cent.

VALUE OF PRODUCTION—TIN, COPPER, AND IRON, 1890 to 1930.

Ratio Graph.



*The value of the copper produced in 1928 and 1930 was below the limit of the graph; no iron was produced in 1930.

The numbers at the side of the graph represent £10,000. The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the rate of increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

The values of the ores are estimated after assay. Many of the metals are associated in the same mineral matter and it is very difficult to make a reliable estimate of the quantity and value, especially in cases where the ores are exported before final treatment.

The following statement shows the quantity and value of the various minerals won as estimated for the years 1929 and 1930, also the total yield to the end of 1930:—

Minerals.	Annual Output.				Total Output to end of 1930.	
	1929.		1930.			
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		£		£		£
Gold oz. fine	7,496	31,842	12,493	53,066	15,001,166	63,720,865
Silver	4,471	392	5,290	267	45,474,566	6,103,933
Silver-lead ore, etc. ... tons	285,031	3,032,349	279,513	2,088,523	11,710,257	107,478,717
Lead—Pig, etc. ... ..	...	...	...	...	326,621	6,442,697
Zinc—Spelter and concentrates	231,237	802,093	297,762	986,087	7,268,652	23,850,717
Copper	176	14,183	242	8,347	266,319	15,578,981
Tin ingots and ore	934	191,199	590	84,800	134,310	14,473,519
Iron—Pig (from local ores) ...	3,911	17,600	...	...	1,409,728	7,493,435
Iron oxide	4,753	2,757	2,800	2,600	80,597	83,170
Ironstone flux ... ..	...	...	...	...	132,855	108,791
Chrome iron ore	129	598	168	420	39,062	122,478
Wolfram	14	1,402	10	637	2,302	270,034
Scheelite	9	813	5	220	1,704	193,408
Platinum oz.	128	1,352	155	1,073	19,083	119,795
Molybdenite tons	1	46	3	435	833	212,671
Antimony	25	1,877	65	3,178	19,346	360,011
Manganese ore	233	940	125	375	36,952	80,617
Bismuth	3	2,013	2	508	826	236,373
Coal	7,617,736	5,952,720	7,093,055	5,193,032	357,320,848	189,581,912
Shale ... ..	...	...	846	125	1,920,031	2,690,835
Alumite ... ..	...	...	...	...	58,189	208,795
Limestone flux	69,243	25,966	28,556	10,708	2,653,035	1,213,058
Diamonds carats	119	148	667	714	203,245	145,678
Opal ... ..	...	6,071	...	5,500	...	1,597,333
Clays tons	1,944,222	400,947	744,730	153,705	}	*0,984,217
Building material	792,838	294,366	619,850	207,921		
Road material ... ..	...	1,031,957	...	892,783		
Other ... ..	...	109,278	...	86,582	...	...
Total ... ..	...	11,923,515	...	9,781,606	...	452,251,740*

* Includes output of quarries under mining title prior to 1925, and of all quarries in later years.

The production of gold, copper, and zinc in 1930 was greater than in 1929, but there were decreases in respect of coal, silver-lead ore, and tin.

GOLD.

Though gold had been found in New South Wales in earlier years, the history of gold-mining in the State dates from 1851, when its existence in payable quantities was proved by E. H. Hargraves, and the principal gold-fields were discovered. The deposits which have been mined include various types, *e.g.*, alluvial gold, auriferous reefs or lodes, impregnations in stratified deposits and igneous rocks, and irregular deposits, as in auriferous ironstone.

Many rich alluvial deposits in which gold was easily accessible were exploited during the twenty years 1851-1870; then it became necessary to introduce expensive methods of mining, and the production declined. During the period of general depression which followed the financial crisis of 1893 greater attention was paid to prospecting for minerals, and with the

development of new processes the output of gold showed considerable improvement. During recent years, however, there was a steady decline, and the yield in 1929, viz., 7,496 oz. fine, was the lowest recorded in any year since 1851. In 1930, when economic stress directed greater attention to prospecting, the yield increased to 12,493 oz. fine, of which 3,620 oz. were obtained from the treatment of silver-lead ores from Broken Hill.

In terms of the Gold Bounty Act, 1930-31, the Commonwealth Government has undertaken to pay bounty in respect of gold produced in Australia in each of the ten years 1931 to 1940, in which the production exceeds the average annual production during the three years 1928 to 1930 (approximately 486,000 oz. fine). The rate of bounty in respect of gold produced during the six months, January to June, 1931, is £1 (Australian currency) per ounce of fine gold in excess of half the average annual production, 1928 to 1930. The rate of bounty in respect of subsequent production is to be calculated on the basis of 10s. (Australian currency) per oz. fine, and is to be increased as the average rate of exchange for telegraphic transfers from Australia to London falls below 30 per cent., viz., by 1s. for each decrease of 3 per cent. in the rate of exchange, but the bounty may not exceed £1 (Australian currency). The bounty payable on each year's production of gold is to be distributed amongst the producers in proportion to the quantity produced.

The following table shows the quantity and value of the gold won in New South Wales to the end of 1930.

Period.	Quantity.	Value.	Period.	Quantity.	Value.
	oz. fine.	£		oz. fine.	£
1851-1900	11,399,508	48,422,001	1926	19,435	82,551
1901-1910	2,252,851	9,569,492	1927	18,032	76,595
1911-1920	1,145,185	4,864,440	1928	12,831	54,503
1921	51,173	217,370	1929	7,496	31,842
1922	25,222	107,139	1930	12,493	53,066
1923	18,833	79,998			
1924	18,685	79,370	Total	15,001,166	63,720,865
1925	19,422	82,498			

Towards the end of the nineteenth century a system of dredging was introduced for the purpose of recovering alluvial gold from the beds of the rivers which drain auriferous country, and in 1900 the quantity obtained by the dredges was 7,924 oz. of fine gold, valued at £33,660. During the following decade the quantity amounted to 298,416 oz. fine, valued at £1,267,593. Subsequently the output of the dredges declined, until in 1929 it was only 91 oz. fine. The output in 1930 was 145 oz. fine. Dredges are employed also for the recovery of stream tin; particulars are shown on page 95.

SILVER, LEAD, AND ZINC.

The production of lead and zinc in New South Wales is associated closely with the mining of silver, the Broken Hill silver-lead deposits being the main source of the output.

The Broken Hill field was discovered in 1883, and it has become one of the principal mining centres of the world. The lode, varying in width from 10 feet to 400 feet, may be traced for several miles. Mining leases held by companies and syndicates extend along its entire length, but operations are confined to an extent of $3\frac{1}{2}$ miles in the centre. Underneath an outcrop of manganiferous ironstone were found rich oxidised ores, consisting of carbonate of lead and kaolin with silver, and, below these ores, mixed sulphides of lead and zinc with a high silver content. As the depth increased the proportions of silver, lead, and zinc became smaller, and the gangue was found to consist of rhodonite which causes difficulty in the extraction of the metals.

For some years operations were directed towards the recovery of silver in the ores which contained the metal in payable quantities. The other metals were not recovered because the current price for lead was comparatively low and a method had not been devised by which the lead and zinc in the complex sulphide ores could be separated profitably. Consequently huge dumps of residue and low-grade ores accumulated at the mines until the development of new processes for the separation of the sulphides by means of flotation led to their treatment.

Lead and zinc concentrates have been produced in large quantities at Broken Hill. The former contain lead amounting to 60 or 65 per cent., silver 20 to 25 oz. per ton, zinc 7 to 8 per cent., and sulphur 15 per cent. The zinc concentrates contain zinc, about 45 per cent., lead 6 per cent., silver 10 oz. per ton, and sulphur 30 per cent. The lead concentrates are treated at Port Pirie in South Australia. The greater part of the zinc concentrates is exported to the United Kingdom and other European countries or to Japan, but large quantities are treated in Australia at Risdon, Tasmania.

During 1930 the output of ore from the Broken Hill mines amounted to 1,308,035 tons, valued at £2,529,505.

Another silver field of importance, known as Yerranderie, is situated in the Burragorang Valley. The lodes are small, varying in width from mere threads to 8 feet, but they are exceptionally rich. The bulk of the silver is associated with galena, which contains up to 160 oz. per ton. Second-grade ores contain from 40 to 80 oz. per ton. The Yerranderie field is handicapped by the high cost of haulage along a steeply-graded road to the nearest railway, therefore only first-grade ore is despatched from the mines, the lower grades being stacked for concentration or future treatment.

Smaller silver fields are situated in various parts of the State, and extensive developmental work is in progress at Captain's Flat. An Act was passed in 1930 to authorise the construction of a railway to link Captain's Flat with Bungendore on the Sydney to Cooma railway.

In assessing the quantity and value of the metals won from the silver-lead ores mined in New South Wales, the Department of Mines estimates the total value on the basis of the metal produced within the State and the value of the ore, concentrates, etc., not smelted within the State, as declared by the several companies at the date of export from the State. The following table is a summary of the Department's records of the quantity and value

of the silver and lead produced in New South Wales from local ores, and the quantity and value of silver-lead and zinc concentrates produced in the State and despatched elsewhere for treatment:—

Period.	Silver.	Silver-lead Concentrates, Carbonate ore, etc.	Lead-Pig, in Matte, etc.	Zinc Concentrates.
Quantity.				
	oz.	tons.	tons.	tons.
To 1900	9,572,829	3,020,611	14,680	138,901
1901-1905	4,154,020	1,985,868	17,550	183,782
1906-1910	8,310,962	1,751,751	71,435	1,460,138*
1911-1915	12,460,553	1,694,834	114,375	2,093,783
1916-1920	7,982,192	866,654	80,115	553,628
1921-1925	2,960,993	1,013,376	28,466	1,449,599
1926	9,342	274,513	...	267,533
1927	5,341	290,259	...	277,425
1928	8,573	247,847	...	314,864
1929	4,471	285,031	...	231,237
1930	5,290	279,513	...	297,762
Total ..	45,474,566	11,710,257	326,621	7,268,652
Value.				
	£	£	£	£
To 1900	1,562,501	28,924,613	274,585	157,066
1901-1905	445,051	8,910,586	255,366	440,402
1906-1910	892,414	11,561,794	996,646	3,761,223
1911-1915	1,302,510	14,302,570	1,899,601	6,861,489
1916-1920	1,426,886	12,920,076	2,358,625	2,195,599
1921-1925	471,312	15,360,784	657,574	5,171,152
1926	1,130	4,398,823	...	1,359,588
1927	534	3,437,446	...	996,877
1928	936	2,491,153	...	1,118,541
1929	392	3,032,349	...	802,693
1930	267	2,088,523	...	986,087
Total ...	6,103,933	107,478,717	6,442,337	23,850,717

* Includes 2,758 tons of spelter.

The total value of the production, as shown above, amounted to £3,074,877 in 1930, as compared with £3,835,434 in the preceding year. The decrease was due to a fall in the prices of metals.

As stated previously, the bulk of the ores produced in the silver-lead mines is exported for treatment to other parts of Australia or despatched in the form of concentrates to overseas countries; therefore the figures shown in the preceding table do not indicate fully the importance of the mines of New South Wales in respect of the production of the various metals. The Department of Mines has collected records from the various mining and smelting companies and ore-buyers with the object of ascertaining the actual value accruing to the Commonwealth from the silver-lead mines of this State. Thus particulars have been obtained regarding the quantity and value of the silver, lead, and zinc extracted within the Commonwealth, and the gross metallic contents of concentrates exported oversea have been

estimated on the basis of average assays as follows. In the case of the lead and zinc contents, the quantities have been estimated only when payment was made for them.

Year.	Metal obtained within Commonwealth from ores raised in New South Wales.				Quantity.	Concentrates exported oversea.				Assessed Value.	Total Value of Production from Silver-lead Ores of New South Wales.
	Silver.	Lead.	Zinc.	Aggregate Value.		Contents by average assay.					
						Silver.	Lead.	Zinc.			
1921	oz. fine. 3,624,413	tons. 47,426	tons. 1,425	£ 1,723,864	tons. 47,127	oz. fine. 617,477	tons. 6,539	tons. 19,272	£ 261,238	£ 1,985,102	
1926	7,338,477	142,654	39,277	6,730,689	251,294	2,371,264	23,242	96,167	1,591,673	8,322,362	
1927	7,901,861	156,306	42,757	5,955,009	259,989	2,339,382	26,709	115,123	1,467,235	7,422,244	
1928	7,068,064	151,475	44,004	5,256,649	178,714	1,250,931	11,732	94,987	836,620	6,093,269	
1929	7,619,384	165,364	46,163	5,918,014	156,532	835,697	7,009	76,619	734,261	6,652,275	
1930	7,876,894	162,703	53,958	4,579,412	187,228	844,188	14,044	87,913	911,724	5,491,136	

The silver-lead ores mined in New South Wales contain, in addition to silver, lead, and zinc, a number of other metals, *e.g.*, cadmium, copper, gold, and antimony, but unless these metals are extracted within New South Wales they are not represented in statistics of the mineral production of the State, except by inclusion as zinc concentrates.

Cadmium is recovered at Risdon, Tasmania, as a by-product in the treatment of zinc ores mined at Broken Hill. The quantity extracted during 1930 was 224 tons, valued at £76,275.

COPPER.

The ores of copper are distributed widely throughout New South Wales. Deposits of commercial value have been mined in the central portion of the State, but the industry has been handicapped severely in many places by the high cost of transport to market, and, as the price fluctuates considerably, operations have been intermittent. Large quantities of low-grade ores are available, and when the market is favourable they may be treated profitably.

The quantity and value of the copper won in New South Wales, as estimated by the Department of Mines, are shown below:—

Period.	Ingots, Matte, and Regulus.		Ore.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	tons.	£	tons.	£	£
1858-1900	95,501	5,474,309	6,101	92,651	5,566,960
1901-1905	33,989	2,011,609	8,578	104,533	2,116,142
1906-1910	41,898	2,869,101	6,872	62,006	2,931,107
1911-1915	36,305	2,169,508	9,870	108,226	2,277,734
1916-1920	21,453	2,355,248	554	8,887	2,364,135
1921-1925	3,868	259,926	129	1,822	261,748
1926	357	22,473	...	...	22,473
1927	186	11,290	190	1,365	12,655
1928	55	3,497	...	...	3,497
1929	176	14,183	...	...	14,183
1930	242	8,347	...	...	8,347
Total ...	234,025	15,199,491	32,294	379,490	15,578,981

The marked decrease in the output of copper during recent years was not due to a decline in the productive capacity of the mines, but to decreases in price, which precluded profitable working under existing costs.

TIN.

Tin, unlike copper, is restricted in its geographical and petrological range, and is the rarest of the common metals of commerce. The lodes discovered in New South Wales are numerous, but they are on a small scale. The maximum depth attained is about 360 feet.

Tin ore occurs in the northern, southern, and western divisions. The areas in which workable quantities have been located are on the western fall of the New England Tableland, with Emmaville and Tingha as the chief centres, and at Ardlethan in the southern district. Alluvial deposits of stream tin in the northern rivers are exploited by means of dredging.

Tin has contributed in a very considerable degree to the total production of the mineral wealth of the State, although its aggregate yield, in point of value, is below that of coal, silver, gold, copper, and zinc.

Particulars of the output and the value of production of tin are shown below:—

Period.	Ingots.		Ore.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	tons.	£	tons.	£	£
1872-1900	67,055	5,879,803	13,581	908,130	6,787,933
1901-1905	4,319	557,855	1,994	142,977	700,832
1906-1910	5,244	816,061	3,947	377,620	1,193,681
1911-1915	4,268	793,550	7,262	806,815	1,600,365
1916-1920	4,346	1,053,645	6,953	1,005,841	2,059,486
1921-1925	3,628	805,294	2,005	204,073	1,009,367
1926	1,134	326,474	...	...	326,474
1927	976	285,806	54	1,733	287,539
1928	1,020	231,843	...	...	231,843
1929	934	191,199	...	...	191,199
1930	590	84,800	...	...	84,800
Total ...	93,514	11,026,330	40,796	3,447,189	14,473,519

Owing to a persistent decline in the price of tin the output declined in 1929 and 1930.

There are a number of dredges for the recovery of tin in the northern districts but very few were continuously in operation during 1930. The quantity of tin so obtained was 294 tons, valued at £25,266 in 1930, as compared with 531 tons, valued at £68,345 in the previous year. The total yield by dredging since 1901 has been 28,568 tons, valued at £3,672,245.

IRON AND IRON ORES.

Iron ore of good quality occurs in many parts of New South Wales. The most extensive deposits are at Cadia, where 10,000,000 tons may be recovered economically; at Carcoar, where a large quantity has been produced; and at Goulburn and Queanbeyan, each containing about 1,000,000 tons; at Wingello there are about 3,000,000 tons of aluminous iron ores of low grade. It has been estimated that in the known deposits, excluding Wingello ores, there are 15,000,000 tons which may be recovered by quarrying, and that a much greater quantity may be obtained by more costly methods of mining.

Prior to 1907 iron ore was mined principally for use as flux in smelting other ores, although in 1884, at Mittagong, and in later years at Lithgow, the production of pig-iron from local ores had been attempted without permanent success. Following a reorganisation and remodelling of the Eskbank Ironworks, Lithgow, iron ore was produced on a more extensive scale, mainly from the Cadia and Carcoar deposits. In 1928 new iron and steelworks were opened at Port Kembla, and arrangements were made to transfer the Lithgow works to the new site. The iron ore used at the Port Kembla and Newcastle iron and steelworks is imported interstate and with the restriction of operations at Lithgow the production of local iron ore was suspended.

The production of pig-iron from local ores since 1907, and the materials used therein, are shown in the following table. The output prior to that year was principally from scrap iron:—

Year.	Principal Minerals Used.			Pig-iron.	
	Iron Ore.	Coke.	Limestone.	Production.	Value.
	tons.	tons.	tons.	tons.	£
1907-10	205,271	146,411	89,439	116,273	421,632
1911-15	454,953	350,674	158,888	267,062	983,633
1916-20	502,768	448,377	214,103	332,690	1,885,617
1921-25	758,143	594,269	307,950	408,864	2,639,850
1926	178,746	157,990	72,636	105,201	578,605
1927	*	*	*	118,951	654,230
1928	*	*	*	56,776	312,268
1929	*	*	*	3,911	17,600
1930	...	...	...	...	...
Total ...	...	...	...	1,409,728	7,493,435

* Not available for publication.

Further details relating to the operations of ironworks are shown in the chapter relating to factories.

Iron Oxide.

Iron oxide is obtained in the Port Macquarie, Moss Vale, Newcastle, Milton, and Goulburn districts for use in purifying gas or as a pigment. The output during 1930 was 3,800 tons valued at £2,600, mined in Port Macquarie district. The total output to the end of that year was 80,597 tons, valued at £83,170.

OTHER METALS.

Platinum.—Platinum occurs in several districts of New South Wales, but platinum mining is comparatively unimportant. The quantity produced to the end of 1930 amounted to 19,083 oz., valued at £119,795, of which 155 oz., valued at £1,073, were obtained during 1930.

Chromite.—Chromite, or chromic iron ore, is the only commercially important ore of chromium. It is found usually in association with serpentine. The chromite mined in New South Wales is used as a refractory material. The principal deposits are in the Gundagai and Tumut districts, and there are smaller quantities in the northern portion of the State. The quantity produced during 1930 was 168 tons, valued at £420, making a total output of 39,062 tons, valued at £122,478.

Tungsten ores.—The tungsten ores, wolfram and scheelite, occur in many localities in New South Wales generally in association with tinstone (cassiterite) bismuth, and molybdenite. These ores are used mainly in the manufacture of special steels for which the demand increased during the war period and declined upon the cessation of hostilities. Owing to the low price offered for the products, there was no production of scheelite between 1920 and 1928 and no wolfram was won between 1925 and 1928. In 1929 a small demand set in for both ores, and 9 tons of scheelite valued at £813, and 14 tons of wolfram valued at £1,402 were produced. In 1930, five tons of scheelite, £220, and 10 tons of wolfram, £637, were won, making a total production to the end of 1930 of 1,704 tons of scheelite, valued at £193,408, and 2,302 tons of wolfram, valued at £270,034.

Molybdenum.—Supplies of molybdenite, the principal ore of molybdenum, exist in New South Wales. Its main use, however, is for the manufacture of molybdenum steel, and, as in the case of tungsten ores, the demand has become almost negligible.

Antimony.—This mineral may be obtained in a number of districts, in the north-east of the State. Owing to fluctuations in the price of the metal, mining is spasmodic. The total output of antimony to the end of the year 1930 was 19,346 tons, valued at £360,011 of which 65 tons, valued at £3,178, were produced in 1930.

Manganese.—Manganese ores have been discovered in various places but generally in localities which lack facilities for transport. During the year 1930 the quantity obtained was 125 tons, valued at £375.

Bismuth.—Bismuth has been obtained chiefly in the neighbourhood of Glen Innes, and at Whipstick in the South Coast division. In other districts bismuth is associated with molybdenite and wolfram ores. The quantity of bismuth produced in 1930 was about 2 tons, valued at £508, the quantity produced to the end of 1930 being 826 tons of ore, valued at £236,373.

Mercury.—Cinnabar, the most important ore of mercury, occurs in numerous localities, but it has not been discovered in a sufficiently concentrated form to enable it to be mined profitably. No production of quick-silver has been recorded since 1916.

COAL.

The main coal basin extends along the coast from Port Stephens on the north to Ulladulla on the south, and this seaboard of nearly 200 miles enhances the value of the deposits by facilitating shipment and the development of oversea trade. From Ulladulla the basin trends inland to the west and north-west as far as Rylstone, whence the boundary line extends northward beyond Gunnedah, and then runs in a south-easterly direction to Port Stephens. The widest part of the area is between Dubbo and Newcastle, 150 miles, and the basin is deepest in the neighbourhood of Sydney, where the uppermost seam is nearly 3,000 feet below the surface.

From Sydney the measures rise gradually in all directions. They emerge to the surface at Newcastle on the north, at Bulli in the Illawarra district to the south, and at Lithgow, in the Blue Mountain region, to the west, and these three districts contain the important coal mining centres.

The Upper or Newcastle coal measures show the greatest surface development. In the northern field they are known to contain twelve seams, six being worked; in the southern, seven distinct seams are known, and three have been worked; of the seven seams traced in the western field, only three are of commercial value. After many unsuccessful boring operations, the uppermost seam of the Newcastle measures was located under Sydney Harbour in 1891, and it has been worked to a depth of nearly 3,000 feet.

The coal obtained at Newcastle is suitable for gas making and for household use. The coal from Bulli and Lithgow is essentially steam coal. The southern coal produces a strong coke, specially suitable for smelting purposes by reason of its capacity for sustaining the weight of the ore burden in a blast furnace, and it contains less ash than the western. The coal obtained at the Sydney Harbour Colliery can be loaded into oversea steamers from a wharf near the pit's mouth.

An isolated basin of upper coal measures has been discovered at Coorabin in the Riverina district, 400 miles from Sydney.

In the western and southern fields the upper coal measures contain deposits of shale suitable for the manufacture of kerosene oil and for the production of gas. Deposits of kerosene shale, though much less extensive, occur in the upper and Greta measures of the northern coal-field.

The middle coal measures outcrop near East Maitland, but do not appear in the western field. Their occurrence in the southern field has not been proved definitely.

The lower or Greta measures outcrop over an irregular area in the neighbourhood of Maitland, and have been traced with intervening breaks as far north as Wingen. They occur as an isolated belt to the north of Inverell, and extend through Ashford, almost to the Queensland border. These measures have been located in the Clyde Valley, in the extreme southern portion of the Illawarra field, but do not occur in the western. The coal of the Greta measures is contained in two seams, and is the purest and generally the most useful obtained in the State, being of a good quality, hard, and economical as regards working. The Greta seams are worked extensively between West Maitland and Cessnock, in the most important coal-mining district in Australia, and at Muswellbrook.

State Coal Mine.

The State Coal Mines Act, 1912, empowers the Government to purchase or resume coal-bearing lands or coal mines and to open and work coal mines upon Crown land or upon private land containing coal reserved to the Crown or acquired for the purpose of a State coal mine. The coal obtained from a State mine is to be used only by the State Departments or undertakings.

A State coal mine was opened at Lithgow, in the Western district, in September, 1916. The area of the land containing coal reserved for the Crown amounts to about 40,200 acres, and the available supply of coal has been estimated at 240,000,000 tons. The mine, which was closed in July, 1917, was taken over by the Railway Commissioners in the early part of 1921. The output from the mine was 527,293 tons in 1929-30 and 552,320 tons in 1930-31.

Production of Coal.

The following table shows the quantity and value of coal raised in New South Wales to the close of 1930, the total production being 357,320,848 tons, valued at £189,581,912:—

Period.	Coal Raised.	Value at Pit's Mouth.	Average value per ton.
	tons.	£	s. d.
To 1900	91,476,633	37,315,915	8 1
1901-05	30,917,230	10,703,600	6 11
1906-10	40,624,698	14,240,992	7 0
1911-15	48,831,214	17,759,946	7 3
1916-20	44,830,757	25,847,168	11 6
1921-25	54,469,448	45,086,283	16 7
1926	10,885,766	9,436,520	17 4
1927	11,126,114	9,782,902	17 7
1928	9,448,197	8,263,729	17 6
1929	7,617,736	5,952,720	15 8
1930	7,093,055	5,193,032	14 8
Total ...	357,320,848	189,581,912	10 7

The production of coal exceeded 10,000,000 tons in each year from 1920 to 1927, reaching the maximum in 1924 when the production was 11,618,216 tons. In 1928 there was a marked decline in the demand for coal, and in 1929 and 1930 operations were affected also by a prolonged cessation of work in the northern mines.

The bulk of the coal is obtained from the northern coal-fields. The output of each district during 1930 was:—Northern, 3,715,805 tons, valued

at £2,851,560; Southern, 1,529,674 tons, £1,199,185; Western, 1,847,576 tons, £1,142,287. With the resumption of work in the northern mines, in June, 1930, the trade reverted to its normal distribution amongst the various districts. The output of the northern mines increased by 696,112 tons, as compared with the output in 1929, and the production of the southern and western decreased by 810,163 tons and 410,630 tons respectively.

A comparative statement of prices of coal is shown on page 52.

The following statement shows the quantity of coal retained for local consumption, and the interstate and oversea exports in the last five years. The bunker coal loaded in Sydney Harbour into interstate steamers in 1921 and in the years 1926 to 1928 inclusive is included in the table under the heading "domestic consumption," because it was not distinguished in the records from the coal taken in that port by intrastate vessels. In this group is included also coal used in the coal mines, miners' coal, dirt, etc., which amounted to 387,000 tons in 1929 and 400,000 tons in 1930:—

Year.	Retained for Domestic Consumption	Sent to other Australian States.	Total quantity consumed in Australia.	Exported to Oversea Countries.	Total Production.
	tons.	tons.	tons.	tons.	tons.
1921	5,268,628	2,752,810	8,021,438	2,771,949	10,793,387
1926	6,347,939	2,740,570	9,088,509	1,797,257	10,885,766
1927	6,786,906	2,651,492	9,438,398	1,687,716	11,126,114
1928	6,102,644	2,209,981	8,312,625	1,135,572	9,448,197
1929	5,436,114	1,486,902	6,923,016	694,720	7,617,736
1930	4,994,552	1,451,594	6,446,146	646,909	7,093,055
Per cent. of Total.					
1921	48·8	25·5	74·3	25·7	100
1926	58·3	25·2	83·5	16·5	100
1927	61·0	23·8	84·8	15·2	100
1928	64·6	23·4	88·0	12·0	100
1929	71·4	19·5	90·9	9·1	100
1930	70·4	20·5	90·9	9·1	100

The greatest decline, absolutely and relatively, occurred in the oversea exports, which now represent 9 per cent. of the output as compared with 25 per cent. in 1921 and 16 per cent. in 1926. There has been a diminution in interstate exports also—relatively greater than the foregoing figures indicate, as those for the earlier years do not include Sydney bunker trade. Some of the coal sent to South Australia was re-exported to Broken Hill.

Full particulars are not available as to the purposes for which coal is used locally, but statistics of factories and railways with those of the export trade contain information which covers a large proportion of the total production. The following statement shows these details for the last six

years, though they differ from those shown in other tables in so far as they refer to periods of twelve months ending June, and not to calendar years:—

Coal Used.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
In Factories—	tons.	tons.	tons.	tons.	tons.	tons.
Fuel in Electricity Works ...	782,409	856,997	916,344	882,355	907,461	}
„ Other Factories ...	1,333,387	1,396,090	1,324,477	1,318,880	1,207,420	
	2,115,796	2,253,087	2,240,821	2,201,235	2,114,881	
Raw Material in Gas Works	805,488	820,640	637,646	661,878	653,449	}
„ Coke Works	890,444	1,060,368	896,877	869,257	605,729	
	1,495,932	1,881,008	1,534,523	1,531,135	1,259,178	
Total in Factories ...	3,611,728	3,934,095	3,775,344	3,732,370	3,374,059	
On Railways for Locomotive Purposes ...	1,342,280	1,342,034	1,267,823	1,212,272	1,097,049	956,216
Total, Factories and Railways...	4,954,008	5,276,129	5,043,167	4,944,642	4,471,108	†
Exports—						
Interstate*—Cargo ...	2,132,173	2,505,174	2,268,048	1,541,788	895,321	1,322,273
„ Bunker ...	405,223†	410,062†	300,830†	488,200	281,122	308,074
Total, Interstate ...	2,537,396	2,915,236	2,568,878	2,029,988	1,176,443	1,630,347
Oversea—Cargo ...	792,144	803,254	546,075	311,008	153,344	357,367
„ Bunker ...	882,446	899,413	841,227	645,266	393,196	445,714
Total, Oversea ...	1,674,590	1,702,667	1,387,302	956,274	546,540	803,081
Total Exports ...	4,211,986†	4,617,903†	3,956,180†	2,986,262	1,722,983	2,433,428
Total, Factories, Railways and Exports ...	9,165,994†	9,894,032†	8,999,347†	7,931,504	6,194,091	†

* Approximate.

† Excluding bunker coal shipped on interstate vessels in Sydney Harbour.

‡ Not yet available.

The quantity of coal used as fuel in factories rose and fell with the general movement in the secondary industries, the requirements of the electric light and power works being an important factor. The demand for coal as raw material in gas works has been fairly steady, but the quantity used in coke works has fluctuated. The quantity consumed by railway locomotives has declined on account of the electrification of some of the railway services, economy in the use of coal for steam engines, and a reduction in traffic. The export trade declined by reason of a diminution in the demand due to such causes as the substitution of oil.

On the average it appears that local factories absorb about 45 per cent. of the output, the railways approximately 15 per cent., and the export trade about 30 per cent.

In 1928 when there was a marked decline in the local demand as well as in the export trade, the State Government formulated proposals whereby the price of coal would be produced and the demand stimulated. Stated concisely, the proposals were that, by agreement between the parties, the freight on coal by rail would be reduced by 2s. per ton, the margin of profit accruing to the mine-owners by 1s. per ton, and the employees' wages by 8 per cent. The plan was rejected by the miners, and at the end of May, 1929, the Governments of the Commonwealth and of the State of New South Wales, acting in conjunction, appointed a Royal Commission to investigate the position of the coal industry and the causes which had led to that position. The report of the Commission issued in March, 1930, contains a comprehensive review of the industry. The Commission recommended that coalmining be placed under the control of a commission with

far-reaching powers to regulate all phases of the industry including conditions of employment; also that advisory committees of experts be appointed to assist the board. Further particulars relating to the recommendations and details regarding the working of the mines are shown in the previous issue of the Year Book.

A bill for the control of the coal industry has been introduced into the State Parliament.

OIL SHALE.

Oil-bearing mineral, which is a variety of torbanite or cannel coal, known locally as kerosene shale, has been found in many localities in New South Wales, the most important deposits being in the Capertee and Wolgan Valleys.

The production of oil shale, from the opening of the mines in 1865 to the end of 1924 amounted to 1,919,685 tons, valued at £2,690,710. There was no commercial production between 1925 and 1929, but 346 tons valued at £125 were produced in 1930.

In 1931 activity in shale mining was revived as an outcome of a grant of £100,000 made available by the Commonwealth Government for the employment of surplus coal miners. The Shale Oil Development Committee was formed to administer the grant, and arrangements were made to subsidise holders of shale oil leases to enable them to provide work, but as this policy resulted in the employment of only a few of the miners, the Committee was incorporated as a limited company and commenced mining operations at Newnes, in the Wolgan Valley, in August, 1931. About two months later a quantity of shale was despatched abroad, and the retorts at Newnes were brought into operation for the extraction of oil at the mine.

DIAMONDS.

Diamonds and other gem-stones are distributed widely in New South Wales, but an extensive field has not been discovered. The finest of the New South Wales diamonds are harder and whiter than the South African, and are equal to the best Brazilian gems.

The following table shows the output of diamonds as recorded, but it is probable that the actual output was much greater. The majority of the diamonds have been obtained from the mines in the Bingara and Copeton districts:—

Period.	Carats.	Value.	Period.	Carats.	Value.
		£			£
1867-1900	100,103	55,535	1926	64	77
1901-1905	54,206	46,434	1927	199	227
1906-1910	16,651	12,374	1928	28	60
1911-1915	16,003	13,353	1929	119	148
1916-1920	11,973	12,573	1930	667	714
1921-1925	3,232	4,183	Total ...	203,245	145,678

OPAL.

Precious opal occurs in two geological formations in New South Wales, viz., in tertiary vesicular basalt and in the upper cretaceous sediments. The most important deposits are in the upper cretaceous rocks at White Cliffs and Lightning Ridge. Gems from the latter field are remarkable for colour, fire, and brilliancy. The opals from vesicles in the tertiary basalt at Tintenbar in the North Coast division resemble the Mexican gems.

The following table shows the estimated value of precious opal won in New South Wales to the end of 1930:—

Period.	Value.	Period.	Value.
	£		£
1890-1900	456,599	1926	11,485
1901-1905	476,000	1927	13,353
1906-1910	305,300	1928	11,000
1911-1915	154,738	1929	6,071
1916-1920	105,547	1930	5,500
1921-1925	51,740	Total ...	1,597,333

The output of opal was greatest during the five years ended 1903, and since that period the annual average has declined from £115,000 to less than £6,000.

ALUNITE.

Alunite, or alumstone, occurs at Bullahdelah, about 35 miles from Port Stephens, in a narrow mountain range which for more than a mile is composed mainly of alunite, of greater or less purity. Owing to the nature of the occurrences, it has not been possible to estimate the ore reserves of commercial value. Four varieties of alunite are recognised at the mines, but operations were confined mainly to the light-pink ore, the average yield being about 80 per cent. of alum.

In 1926 the production of alunite was 580 tons, valued at £2,320, and the quantity exported since 1890 was 58,189 tons, valued at £208,795. No alunite was produced during the last four years.

OTHER MINERALS.

Marble.—Beds of marble of great variety of colouring and with highly ornamental markings, are located in many districts of New South Wales. Much of the marble is eminently suitable for decorative work.

Limestone.—Immense supplies of limestone are distributed widely throughout the State. The commercial value of the deposits depends mainly on their accessibility and proximity to market. The bulk of the limestone is raised for the manufacture of cement in localities where coal and shale are readily available.

Fireclays.—Fireclays of good quality are found in the permo-carboniferous coal measures, and excellent clays for brick-making, pottery, etc., may be obtained in the State, chiefly in Sydney and Wollongong districts.

Magnesite.—Magnesite is distributed widely, but few deposits are of commercial value. Large quantities have been mined at Fifield, Attunga, and Barraba. The output during 1930 was 8,655 tons, valued at £17,310.

Diatomaceous earth occurs in several localities. The principal deposits are situated at Cooma, Barraba, Coonabarabran, and Wyrallah.

Other Mineral Deposits.—Other mineral deposits known to exist but not worked extensively include asbestos, barytes, fluorspar, Fuller's earth, ochre, graphite, gypsum, slate, and mica. Quartzite for the manufacture of silica bricks is obtainable in large quantities.

QUARRIES.

The Hawkesbury formation in the Metropolitan district provides excellent sandstone for architectural use. The supply is very extensive, and the stone is finely grained, durable, and easily worked. In the north-western portion of the State and in the northern coal districts good building stone is obtainable.

Syenite, commonly called trachyte, is found at Bowral. For building purposes it is solid, and takes a beautiful polish. Granite occurs at many places in the State, and it has been quarried generally in places near the coast, whence transport is cheaper than from less accessible localities.

Basalt or blue metal, suitable for ballasting roads and railway lines and for making concrete, is obtained at Kiama and other localities.

The following statement shows the output of the quarries and clay, gravel and sand pits during the years 1929 and 1930, as recorded in returns collected from the owners by the Statistician under the Census Act of 1901:—

Stone, etc.	1929.		1930.	
	Quantity.	Value.	Quantity.	Value.
Building Stone—	tons.	£	tons.	£
Sandstone	47,620	52,601	32,318	45,142
Granite	8,245	31,129	7,106	26,529
Basalt	24,016	10,793	115,771	29,009
Trachyte, etc.	4,139	6,367	3,730	3,200
Limestone	2,644	1,494	...	...
Marble	528	3,004	671	4,983
Slate	109	970	...	...
Other... ..	226	247	69	133
Macadam, Ballast, etc.—				
Sandstone	502,369	138,463	429,870	131,177
Granite	29,388	8,152	27,980	9,406
Bluestone, Basalt, etc. ...	1,567,731	424,940	1,139,947	307,837
Quartzite	40,927	13,633	16,444	6,025
Trachyte ... ..	...	...	19,615	3,697
Limestone	19,329	4,938	5,018	1,632
Gravel	831,494	139,336	590,368	103,425
Sand	361,947	53,518	339,391	46,215
Shale	26,798	3,690	25,637	2,111
Chert	24,527	4,793	...	...
Slate	1,382	69	750	85
Ironstone ... ..	...	...	2,774	348
Andesite	59,278	16,802	...	...
Other... ..	5,025	2,154	19,134	8,913
Limestone—				
For Cement	546,856	125,822	341,840	63,449
For Burning	82,112	22,610	36,303	17,164
For Flux	70,519	16,161	34,341	7,340
Shale for Cement... ..	167,285	99,214	73,341	9,308
Clays—				
Brick	1,724,102	212,456	440,553	90,020
Pottery and Earthenware ...	114,134	30,206	41,722	10,339
Pigment	154	213	15	23
Kaolin	3,558	6,032	2,151	2,880
Fire Clay	35,654	9,949	24,299	6,254
Silica	10,954	4,099	7,716	4,016
Other... ..	...	...	138	176
Total	6,313,050	£1,373,855	3,779,012	£940,836

INSPECTION OF MINES.

The inspection of mines with a view to safeguarding the miners from accident and disease is conducted by salaried officers of the Department of Mines in terms of the Coal Mines Regulation Acts, which apply to coal and shale mines, and the Mines Inspection Acts, which apply to other mines.

The Coal Mines Regulation Acts prescribe that every coal mine must be under the control and direction of a qualified manager, and daily personal supervision must be exercised by him or by a qualified under-manager. In mines where safety-lamps are used a competent person must be appointed

as deputy to carry out duties for the safety of the mine, especially in regard to the presence of gas, the sufficiency of ventilation, the state of the roof and sides, and the supervision of shot-firers.

The Acts contain general rules for the working of coal mines in regard to such matters as ventilation, sanitation, the inspection and safeguarding of machinery, safety lamps, explosives, security of shafts, etc. It is provided that a person may not be employed in getting coal or shale in the face of the workings of a mine unless he has had two years experience or works in company with an experienced miner. Special rules are established in each mine for the safety, convenience, and discipline of the employees.

A Royal Commission, appointed in July, 1925, conducted an inquiry into conditions operating in the coal mines of New South Wales, with special reference to ventilation, the presence of gas, and the use of safety lamps. As a result of its recommendations the Coal Mines Regulation Act was amended with the object of minimising the risks attached to this class of mining, and Courts of Coal Mines Regulations may be constituted to determine matters relating to the safe working of the coal mines. The Governor may appoint a District Court judge, a stipendiary or police magistrate, or a mining warden to sit as a Court. Courts have been proclaimed at East Maitland, Newcastle, Muswellbrook, Gunnedah, Sydney, Wollongong, Lithgow, and Mudgee.

The Mines Rescue Act, 1925, makes provision for rescue operations in coal and shale mines by the establishment of rescue stations, rescue corps, and rescue brigades. In four districts, viz., the Western, Southern, Newcastle, and Maitland, central rescue stations have been established, and the mine owners in each district are required to contribute to a fund for their upkeep. The rates of contribution for the year 1930, were as follows:—Western 5d.; Southern 0.66d.; Newcastle 0.887d.; and Maitland 0.815d. per ton of coal raised during the preceding year. The amount contributed during 1930 was £21,133.

In the mines, to which the Mines Inspection Acts relate, a qualified manager, exercising daily personal supervision, must be appointed if more than ten persons are employed below ground, and the machinery must be in charge of a competent engine-driver. General rules are contained in the Act, and the inspectors may require special rules to be constituted for certain mines.

Certificates of competency to act in mines as managers, under-managers, deputies, engine-drivers, and electricians are issued in accordance with the Acts relating to inspection.

Particulars regarding the persons killed or seriously injured in mining accidents during the last ten years are shown below:—

Year.	Accidents.				Per 1,000 Employed.			
	Coal and Shale Miners.		Other Miners.		Coal and Shale Miners.		Other Miners.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1921	19	113	4	22	·89	5·31	·47	2·61
1922	12	86	5	25	·55	3·97	·54	2·70
1923	31	101	6	48	1·35	4·39	·62	4·94
1924	27	80	10	53	1·17	3·47	·98	5·22
1925	27	115	10	65	1·12	4·78	·76	4·93
1926	25	102	20	60	1·01	4·12	1·27	3·82
1927	24	107	11	58	·98	4·37	·81	4·26
1928	14	103	12	60	·65	4·80	·99	4·94
1929	12	89	10	55	·53	3·96	·82	4·51
1930	16	73	14	63	·77	3·53	1·04	4·69

The accident rates are not based on the number of employees as shown on page 83. They relate to the total number of persons who are subject to the provisions of the Mining Acts, including persons engaged in connection with treatment plant at the mines, and in quarries held under mining titles. The particulars relating to all quarries are included in the figures for the years 1925 to 1930 inclusive.

Allowances paid during 1930 to beneficiaries under the provisions of the Miners' Accident Relief Act amounted to £19,972. The beneficiaries at the end of the year were: widows, 251; mothers, 25; sisters, 5; permanently disabled persons, 223; and children, 80.

In the chapter relating to Industrial Arbitration, particulars are given regarding industrial diseases in mines and the compensation provided in cases of accident or illness.

COMMERCE.

POWER to make laws with respect to trade and commerce with other countries and between the States of Australia is vested in the Commonwealth Parliament, and in the year 1901 control of the Customs and Excise Department of New South Wales was transferred to the Commonwealth.

The first Federal Act relating to customs came into operation by proclamation on 4th October, 1901. The Act, with amendments, provides administrative machinery in relation to customs, prescribes the manner in which duties are to be computed and paid, and authorises the inspection of imports and exports.

Prior to federation a different tariff was in operation in each State, and interstate trade was subject to the same duties as oversea trade. On 8th October, 1901, when the Customs Tariff Act of 1902 was introduced in the Federal Parliament, a uniform tariff for all the States was imposed, trade and commerce between the States became free, and the power of the Commonwealth to impose duties of customs and excise became exclusive, except that the State of Western Australia was given the right to levy duty on interstate imports for a period of five years.

By the Customs Act certain imports are prohibited, and the prohibition may be extended by proclamation to other commodities. The conditions under which goods for export are prepared may be prescribed by regulation, and the exportation of goods which do not conform to the required standards may be prohibited. In terms of the Commerce (Trade Descriptions) Act, 1905-1930, the importation or exportation of any goods may be prohibited by regulation unless they bear a prescribed trade description.

In the administration of matters relating to trade and customs, the Department of Trade and Customs, under the direction of a Minister of the Crown, is assisted by the Tariff Board appointed under an Act which commenced in March, 1922. The Board consists of four members, including an administrative officer of the Department of Trade and Customs, who is chairman. The Act prescribes that the Minister must refer to the Board for investigation such matters as the classification of goods for duty; the determination of the value of goods for duty; appeals against the decisions of the Comptroller-General in respect of the interpretation of the tariff; the necessity for new or increased or reduced duties, or for bounties; the effect of bounties; proposals for applying preferential tariffs to any country; and complaints that a manufacturer is taking undue advantage of the protection afforded by the tariff to charge unnecessarily high prices. In addition, the Minister may request the Board to report as to the effect of the customs and excise tariffs and of the customs laws on the industries of the Commonwealth, and other matters affecting the encouragement of industries in relation to the tariff.

Certain inquiries conducted by the Tariff Board must be held in public, *e.g.*, those relating to revision of the tariff, to proposals for bounties, or to complaints that a manufacturer is taking undue advantage of the protection afforded by the tariff.

The Federal Department of Markets was established in 1925 to take over functions of the Department of Trade and Customs relating to the oversea marketing of Australian produce and to immigration, also the administration of the Commonwealth Board of Trade. The functions of the Board of Trade include the collection and dissemination of commercial and industrial intelligence, the control of Trade Commissioners abroad, and the investigation of matters affecting trade, commerce, and industry. The Board, under the presidency of the Prime Minister, includes in its membership representatives of the Customs Department, the Chamber of Commerce, the

Chamber of Manufactures, and of other kindred organisations. A section of the board has been established in each State of the Commonwealth.

The overseas export of a number of Australian products is controlled by boards constituted under Federal legislation to organise the marketing of these commodities. As a preliminary step towards initiating this form of control special legislation is passed in respect of each commodity, but it does not become effective until the project has been submitted to a poll of the producers. If a majority of the producers are favourable, a board elected by them is appointed to supervise the export from Australia and the subsequent sale and distribution of the product, and the expenses are defrayed by means of a levy on the exports. Thus boards have been organised in respect of dairy produce (butter and cheese), dried fruits (sultanas, currants, and lexias), canned fruits (apricots, peaches, and pears, and any other varieties as may be prescribed), and wine. Legislation was enacted also in respect of fresh fruits (apples and pears), but the poll of growers proved unfavourable and the Act was not brought into operation.

In terms of the Export Guarantee Act, 1924-1925, the Federal Government may guarantee bank advances made to boards constituted to control the export of Australian products, the maximum guarantee being 80 per cent. of the market value of the produce. The Act also authorises the Government to grant assistance, upon the recommendation of the Commonwealth Board of Trade, in respect of the export of Australian primary products, the total liability which may be incurred in this manner being limited to £500,000.

For some products, assistance has been given by the Government of the Commonwealth in the form of bounties payable on export, but all such bounties, except for fortified wine, have expired by effluxion of time. Details are shown in the chapter entitled "Factories."

STATISTICS OF IMPORTS AND EXPORTS.

Statistics relating to the overseas trade of the various States of Australia are recorded by the Federal Department of Trade and Customs. The records of imports as shown in this chapter relate to those received into New South Wales and include those re-exported for consumption in other States or elsewhere. In regard to exports those classified as "Australian Produce" include products of other Australian States which have been shipped overseas at ports in New South Wales, but they do not include products of New South Wales despatched abroad from ports in other States.

Complete records of interstate trade have not been available since 12th September, 1910, when the Customs Department ceased to record them. Therefore, the figures in this chapter, except those on page 124, are exclusive of the large volume of interstate trade, and do not represent the total external trade of New South Wales.

OVERSEA TRADE.

The value of the goods imported and exported overseas, as shown in the following tables, represents the value as recorded by the Department of Trade and Customs. The value of goods imported represents the amount on which duty is payable or would be payable if the duty were *ad valorem*, such value being the sum of the following:—(a) The actual price paid by the Australian importer plus any discount or other special deduction, or the current domestic value of the country of export at the date of exportation, whichever is the higher; (b) all charges for placing the goods free on board at the port of export; and (c) 10 per cent. of the amounts (a) and (b).

The value of goods exported is assessed, as a general rule, upon the basis of the value in the principal markets of New South Wales, but from 1st July, 1929, exception has been made in respect of goods subject to special

marketing arrangements, which have the effect of raising prices in the local markets above world parity. For instance, sugar if sold to an oversea buyer is assessed at the value f.o.b., and, if consigned for sale abroad, at the f.o.b. value which is equivalent to the London market price. In the case of butter, the amount of export bonus paid under the Paterson scheme is deducted from the current market value, and other goods subject to rebate or bounty are valued as in the principal markets of New South Wales less the amount of rebate or bounty.

As a general rule, the value of imports and the value of exports of bullion and specie are recorded by the Department of Trade and Customs in the currency of the United Kingdom. The value of exports, other than bullion and specie, is recorded in Australian currency. Rates of exchange, Australia on London, as shown in the chapter of this volume entitled *Private Finance*, illustrate the relation between these currencies.

The total value of oversea imports and exports, as recorded by the Customs Department, during various years since 1901 is shown in the following table, with the value per head of population. The figures, with the exception of those relating to the year 1901, do not include the value of exports in the form of ships' stores.

Year ended 30th June.	Overseas Imports.	Overseas Exports.			Total Trade Overseas.
		Australian Products.	Other Products.	Total.	
	£	£	£	£	£
1901*	17,560,207	†	†	18,210,627	35,770,834
1911*	27,343,428	29,938,415	2,222,986	32,161,401	59,504,829
1921	72,466,388	48,302,717	4,299,089	52,601,806	125,068,194
1926	64,009,919	51,565,742	2,436,072	54,001,814	118,011,733
1927	68,940,081	60,407,280	2,407,797	62,815,077	131,755,158
1928	65,072,266	49,493,820	2,389,109	51,882,929	116,955,195
1929	63,491,123	47,170,407	2,118,483	49,288,890	112,780,013
1930	57,129,636	33,877,584	1,884,273	35,761,807	92,891,443
1931	26,311,260	29,923,099	1,467,763	31,390,862	57,702,122

Per head of Population.					
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1901*	12 16 11	†	†	13 6 6	26 3 5
1911*	16 8 5	17 19 7	1 6 8	19 6 3	35 14 8
1921	34 13 4	23 2 2	2 1 1	25 3 3	59 16 7
1926	27 17 1	22 8 9	1 1 3	23 10 0	51 7 1
1927	29 7 3	25 14 7	1 0 6	26 15 1	56 2 4
1928	27 2 0	20 12 3	0 19 11	21 12 2	48 14 2
1929	25 18 9	19 5 5	0 17 4	20 2 9	46 1 6
1930	23 1 1	13 13 5	0 15 3	14 8 8	37 9 9
1931	10 10 6	11 19 4	0 11 9	12 11 1	23 1 7

* Year ended 31st December.

† Not available.

The increase in the aggregate value of trade during the decennium 1901 to 1911 was the result of industrial expansion, and the increase in trade between 1911 and 1921 was due in a large measure to enhanced prices.

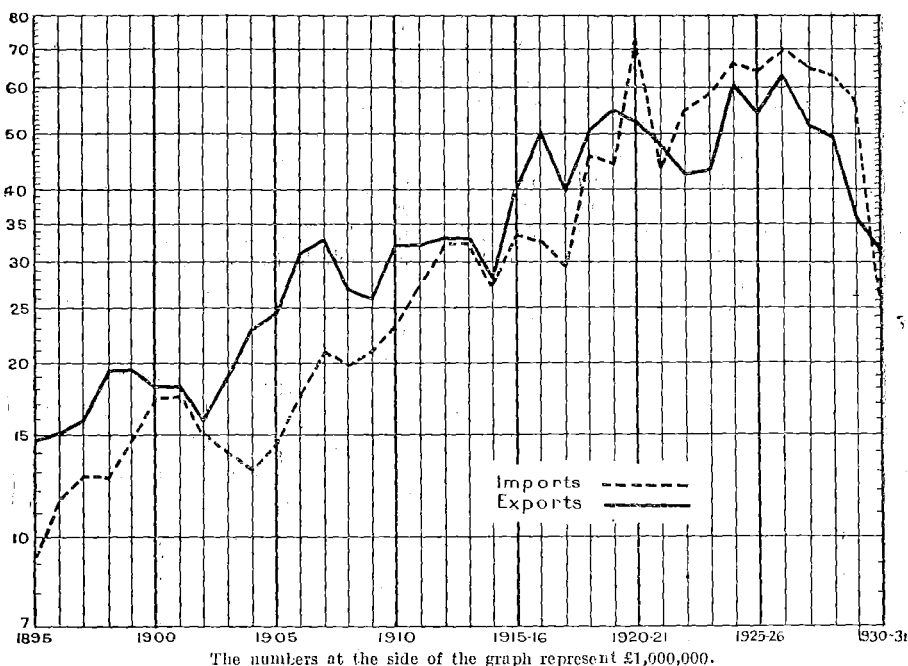
In 1920-21 the value of imports was abnormally high, as a result of the prompt despatch of goods ordered abroad during the post war period of trade expansion, in anticipation of a curtailment of quantity and protracted delivery. After a decline in the following year the value rose rapidly and remained at a high level for several years.

In 1929-30 the value, £57,129,636, was lower by £6,400,000 than in the previous year, the imports of machinery and metal manufactures having decreased by about £3,000,000, and apparel and textiles by nearly £2,000,000.

The value of imports in 1930-31 decreased to £26,300,000. This marked decline followed upon measures taken to discourage importations in view of the effects of an adverse trade balance upon economic conditions in Australia, though it was due in part to a fall in prices of the goods imported.

OVERSEA TRADE, 1895 TO 1930-31.

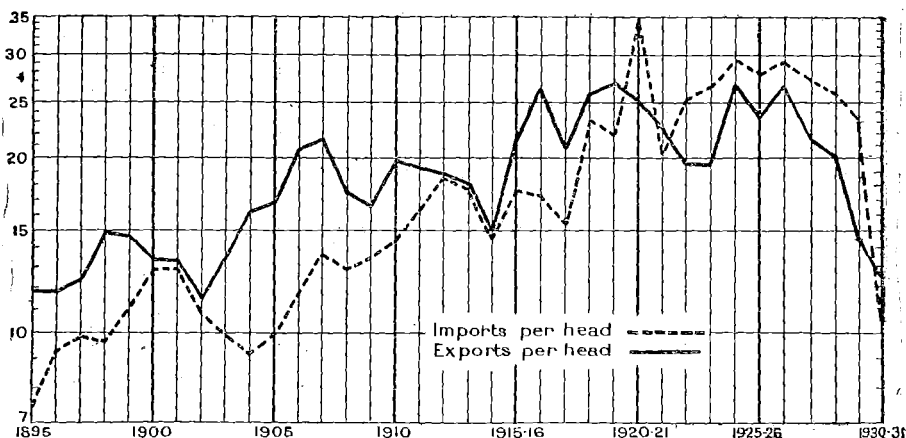
Ratio Graph.



The numbers at the side of the graph represent £1,000,000.

OVERSEA TRADE PER HEAD OF POPULATION, 1895 TO 1930-31.

Ratio Graph.



The numbers at the side of the graph represent £ per head.

The diagrams are ratio graphs. The vertical scale of each graph is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual values are shown by means of the numbers at the side of the graphs.

The bulk of the exports are products of the rural industries, and the quantities available for export vary with seasonal conditions. Between 1901 and 1911 the value of exports, increasing with production, rose by 77 per cent. During the following decade the industries suffered severely by reason of drought and war, which caused a diminution in production, but the value of exports continued to rise under the influence of higher prices.

In 1926-27 the total value of exports was the highest yet recorded, but it included over £10,000,000 of gold.

In 1927-28 exports of gold dropped to £2,000,000, and there was a decline of £2,300,000 in respect of wheat and flour and of £1,000,000 in minerals. Exports of meat, tallow, skins and hides also were lower, but this was compensated by an increase in the value of wool despatched overseas.

In 1928-29 the exports of wheat and flour showed an increase of £4,000,000, but there were decreases in wool £3,000,000 and gold £1,800,000. There were smaller decreases in the values of lead, coal, tin, butter, and skins, and the total value was reduced by £2,600,000 as compared with the preceding year.

In 1929-30 the exports of gold amounted to £4,000,000, as compared with £206,000 in the previous year, but there was a decline of £17,000,000 in the value of other exports, due mainly to a fall in prices. The value of wool declined by £11,000,000, wheat and flour by nearly £5,000,000, and skins and hides by £1,500,000.

In 1930-31 there was an increase of nearly £3,500,000 in the wheat and flour trade, but wool declined further by £2,000,000, skins and hides by nearly £1,500,000, and bullion and specie by £3,000,000. The net result was a decline of £4,000,000 in the total value of overseas exports, nevertheless it exceeded the recorded value of overseas imports by £5,000,000.

In any comparison of the values of imports and exports it is important that allowance be made for the unusually high rates of exchange between Australia and London during 1930-31. The approximate value in Australian currency of imports in that year was £30,000,000, and of exports £31,800,000, and the corresponding values in British currency were imports £26,300,000, and exports £27,000,000. It is not practicable, however, to assess a balance of the trade of New South Wales in the absence of records of the interstate movement of goods, etc.

Movement of Gold.

Gold is an item of domestic produce in Australia and imports and exports of bullion and specie are included in the figures relating to the overseas trade, though consignments received in or despatched from New South Wales are to be regarded as affecting the trade of the whole Commonwealth rather than that of New South Wales. Restrictions were imposed by the Federal Government upon the movement of gold during the war period, and the embargo upon its export was not removed until April, 1925. The export of gold again became subject to approval by the Commonwealth authorities in January, 1930. The values shown below are in British currency.

Year ended 30th June.	Overseas Imports of Bullion and Specie.	Overseas Exports of Bullion and Specie.		
		Australian Produce.	Other Produce.	Total.
	£	£	£	£
1901*	492,848	†	†	3,816,844
1911*	1,254,508	3,281,701	1,096,936	4,378,637
1921	29,392	3,770,195	15,275	3,785,470
1926	379,760	3,251,469	14,910	3,266,379
1927	503,134	10,304,680	6,000	10,310,680
1928	800,300	2,071,413	9,200	2,080,613
1929	210,523	176,809	29,068	205,877
1930	202,741	4,133,437	5	4,133,442
1931	240,143	1,141,485	179,061	1,320,546

* Calendar year.

† Not available.

Imports of bullion and specie during 1929-30 included gold from New Guinea 49,843 oz., valued at £108,932, and in the following year 48,116 oz., £139,815, also 21,393 oz., valued at £78,797, from New Zealand.

Exports in 1929-30 consisted of gold £4,114,144, silver £19,243, and bronze £55. Gold to the value of £2,267,344 was sent to Great Britain, £1,000,000 to the United States of America, £564,500 to India and Ceylon, and £250,000 to New Zealand. The gold exports in 1930-31 amounted to £1,182,859, of which Great Britain received £1,163,991. Exports of silver during the year were valued at £126,626, and bronze £11,061.

DIRECTION OF TRADE.

The direction of the overseas trade of New South Wales is indicated in the following statement, which shows the value of imports to and of exports from the principal countries during the years ended June, 1930 and 1931, in comparison with similar information for the year 1920-21. Particulars regarding the imports relate to the country of origin:—

Country.	Oversea Imports (Country of Origin).			Oversea Exports.		
	1920-21.	1929-30.	1930-31.	1920-21.	1929-30.	1930-31.
	£	£	£	£	£	£
United Kingdom ...	32,960,437	22,200,199	9,555,320	20,630,150	11,622,586	10,830,943
Canada ...	1,857,411	1,503,111	582,525	125,242	300,279	394,235
South African Customs Union ...	236,005	209,769	51,068	463,902	127,297	124,264
India and the East ...	3,337,251	3,638,192	2,000,335	1,699,290	1,223,299	565,944
New Zealand ...	965,682	753,489	430,728	4,797,519	2,613,661	1,946,735
South Sea Islands ...	1,511,143	852,246	406,745	2,083,277	1,240,853	1,002,518
Other British Possessions...	322,214	288,681	170,021	2,066,382	60,604	178,262
Total, British ...	41,240,143	29,445,687	13,196,742	31,865,762	17,188,579	15,042,901
Belgium ...	812,096	387,500	134,344	2,732,907	1,867,749	1,475,133
France ...	1,440,873	1,437,827	748,868	2,655,324	5,202,904	3,442,569
Germany ...	9,548	1,767,412	800,034	628,101	2,643,366	2,244,863
Italy ...	337,432	588,029	280,183	795,299	842,914	1,210,873
Netherlands ...	229,575	648,306	442,688	409,503	73,736	111,162
Norway ...	445,052	220,474	72,827	30,817	886	16,089
Sweden ...	1,126,569	635,684	355,659	98,687	24,294	26,507
Switzerland...	874,319	723,717	338,333	8,808	4,705	14,646
Other European ...	271,134	734,016	390,896	585,920	221,976	101,982
United States and Hawaii...	17,403,732	13,968,930	5,583,007	7,518,329	3,468,585	1,561,548
Japan ...	2,612,101	2,079,794	1,108,229	2,147,444	2,785,514	4,297,418
Netherlands East Indies ...	2,803,999	2,999,463	1,664,395	1,095,575	497,345	361,157
China and other Eastern Countries ...	577,275	379,305	188,707	403,648	280,929	894,236
South Sea Islands ...	149,802	110,716	34,711	573,972	248,039	208,476
Other Foreign Countries ...	2,132,738	392,557	276,570	1,051,710	407,286	381,302
Total, Foreign ...	31,226,245	27,073,730	12,419,451	20,736,044	18,573,225	16,347,961
Outside Packages and Containers ...	...	610,219*	695,067	...	...	...
Total, All Countries ...	72,466,388	57,129,636	26,311,260	52,601,806	35,761,807	31,390,862

* Six months January to June, 1930.

In the overseas trade of New South Wales the value of the goods to and from the United Kingdom exceeds the trade with any other country. In 1929-30 imports valued at £22,200,199 or 39.3 per cent. of the total imports were the products of Great Britain and Northern Ireland, and in 1930-31 the value was £9,555,320, or 37.3 per cent. Exports shipped to these countries in the respective years were valued at £11,622,586, representing

32.5 per cent. of the total exports, and £10,830,943, or 34.5 per cent. The corresponding proportions in 1921 were imports 45.5 per cent. and exports 39.2 per cent. The figures shown in respect of trade with the United Kingdom in 1929-30 and 1930-31 are exclusive of imports from and exports to the Irish Free State.

From European countries other than Great Britain and Ireland the imports were valued at £7,142,965 or 12.6 per cent. in 1929-30 and £3,563,832, or 13.9 per cent. in the following year. The direct exports thereto were valued at £10,885,530 or 30.4 per cent., and £8,643,824 or 27.5 per cent. in these years. The value of imports from Europe in 1920-21 was £5,546,598, the value of exports thereto was £7,945,366, and the relative proportions were 7.65 per cent. of imports and 15.1 per cent. of exports.

The interchange between New South Wales and British countries usually shows a pronounced excess of imports from the United Kingdom, Canada, India and Ceylon and an excess of exports to New Zealand and the South Sea Islands. In 1930-31, however, an excess of exports to the United Kingdom was recorded. Trade with most of the foreign countries with which the interchange is large, *e.g.*, France, Germany, Belgium, Italy and Japan, results in a large excess of exports. In contrast there is an excess of imports from the United States and Netherlands East Indies.

The following statement shows the value of British and foreign oversea imports in each of the last five years, as compared with the annual average values in the three quinquennial periods between 1911 and 1926:—

Period.	Value of Oversea Imports, according to Country of Origin—Annual Average.								Total Imports.
	United Kingdom	Other British Countries	Total British Empire	Continent of Europe.	United States of America	Japan.	Other Foreign Countries	Total Foreign Countries	
	£000	£000	£000	£000	£000	£000	£000	£000	£000
1911 to 1915-16* ...	14,006	4,459	18,465	4,541	5,479	662	1,393	12,075	30,540
1916-17 to 1920-21	17,227	7,370	24,597	2,825	11,979	2,747	2,938	20,489	45,086
1921-22 to 1925-26	25,068	7,396	32,464	5,674	14,405	1,951	2,884	24,914	57,378
1926-27 ...	26,830	9,921	36,751	7,721	17,891	2,644	3,933	32,189	68,940
1927-28 ...	26,321	8,574	34,895	7,822	16,746	2,150	3,450	30,177	65,072
1928-29 ...	23,619	8,449	32,068	7,760	16,884	2,391	4,388	31,423	63,491
1929-30 ...	22,200	7,246	29,446	7,143	13,947	2,080	3,904	27,074	57,130†
1930-31 ...	9,555	3,642	13,197	3,564	5,582	1,108	2,165	12,419	26,311†

Per cent. of Total Oversea Imports.

1911 to 1915-16* ...	45.9	14.6	60.5	14.9	17.9	2.2	4.5	39.5	100
1916-17 to 1920-21	38.2	16.4	54.6	6.2	26.6	6.1	6.5	45.4	100
1921-22 to 1925-26	43.7	12.9	56.6	9.9	25.1	3.4	5.0	43.4	100
1926-27 ...	38.9	14.4	53.3	11.2	26.0	3.8	5.7	46.7	100
1927-28 ...	40.4	13.2	53.6	12.0	25.8	3.3	5.3	46.4	100
1928-29 ...	37.2	13.3	50.5	12.2	26.6	3.8	6.9	49.5	100
1929-30 ...	39.3	12.8	52.1	12.6	24.7	3.7	6.9	47.9	100
1930-31 ...	37.3	14.2	51.5	13.9	21.8	4.3	8.5	48.5	100

* Calendar years 1911 to 1913, and years ended June, 1915 and 1916.

† Includes outside packages not included in previous columns, *viz.*, £610,219 in January-June, 1930, and £695,067 in 1930-31.

The imports of British origin represent about 50 per cent. of the total, and about 75 per cent. of the British goods are imported from Great Britain and Northern Ireland. The proportion of imports from the Continent of

Europe is rising slowly. Importations from the United States increased very rapidly during the war period until they represented 27 per cent. of the total, but the proportion in 1930-31 was the lowest since 1922-23. The ratio of Japanese goods, usually between 3 per cent. and 4 per cent. increased in 1930-31. It has been exceeded in recent years by imports from the Netherlands East Indies whence the bulk of the goods classed as "other foreign" are imported.

The following comparison relates to the annual value of overseas exports from New South Wales to British and foreign countries since 1911:—

Period.	Value of Oversea Exports to British and Foreign Countries—Annual Average.								Total Export.
	United Kingdom	Other British Countries	Total British Empire	Continent of Europe	United States of America	Japan.	Other Foreign Countries	Total Foreign Countries	
1911 to 1915-16* ...	£000 13,212	£000 5,069	£000 18,281	£000 8,117	£000 4,002	£000 1,335	£000 1,673	£000 15,127	£000 33,408
1916-17 to 1920-21	22,279	11,778	34,057	3,349	6,088	2,895	2,722	15,654	49,711
1921-22 to 1925-26	16,614	6,217	22,831	14,656	5,109	5,066	2,002	26,833	49,664
1926-27 ...	15,417	5,770	21,187	18,597	14,847†	5,466	2,718	41,628	62,815
1927-28 ...	13,673	5,227	18,900	18,988	5,613	6,551	1,821	32,983	51,883
1928-29 ...	13,011	6,037	19,048	17,732	3,166	6,391	2,952	30,241	49,289
1929-30 ...	11,623	5,566	17,189	10,886	3,391	2,785	1,511	18,573	35,762
1930-31 ...	10,831	4,212	15,043	8,644	1,555	4,298	1,852	16,348	31,391

PER CENT. OF TOTAL OVERSEA EXPORTS.

1911 to 1915-16* ...	39.5	15.2	54.7	24.3	12.0	4.0	5.0	45.3	100
1916-17 to 1920-21	44.8	23.7	68.5	6.7	13.5	5.8	5.5	31.5	100
1921-22 to 1925-26	33.5	12.5	46.0	29.5	10.3	10.2	4.0	54.0	100
1926-27 ...	24.5	9.2	33.7	29.6	23.7	8.7	4.3	66.3	100
1927-28 ...	26.3	10.1	36.4	36.6	10.8	12.6	3.6	64.6	100
1928-29 ...	26.4	12.2	38.6	36.0	6.4	13.0	6.0	61.4	100
1929-30 ...	32.5	15.6	48.1	30.4	9.5	7.8	4.2	51.9	100
1930-31 ...	34.5	13.4	47.9	27.5	5.0	13.7	5.9	52.1	100

* Calendar years 1911 to 1913 and years ended June, 1915 and 1916.

† Includes gold, £10,000,000.

The proportion of exports sent to British countries during the last two years was above the average, but it has not yet regained pre-war level. The United States of America, which provides more than one-fifth of the imports, takes a very small proportion of exports, and the proportion is declining. In the trade with Eastern countries the value of imports exceeded £9,000,000 in 1920-21 and 1929-30, then it fell below £5,000,000. Exports, on the other hand, increased in value in 1930-31, when they were £6,118,800, as compared with £5,346,000 in 1920-21 and £4,787,000 in 1929-30.

ARTICLES OF IMPORT.

A classification of the overseas goods imported into New South Wales during the three years ended June, 1931, is shown in the following table. The items are grouped in accordance with a statistical classification of imports adopted by the Department of Trade and Customs:—

Classification of Oversea Imports.	1928-29.	1929-30.	1930-31.
	£	£	£
Foodstuffs of Animal Origin	1,126,533	1,054,458	404,225
Foodstuffs of Vegetable Origin, Beverages (non-alcoholic), etc.	3,445,517	3,430,724	1,755,719
Spirituous and Alcoholic Liquors	1,040,186	932,436	299,048
Tobacco and Preparations thereof	1,905,452	1,757,597	1,112,097
Live Animals	118,334	151,931	45,327
Animal Substances not Foodstuffs	665,708	776,231	407,196
Vegetable Substances and Unmanufactured Fibres	1,776,112	1,669,590	682,593
Apparel	2,512,082	1,977,285	537,277
Textiles	10,031,607	9,316,892	4,228,572
Yarns and Manufactured Fibres... ..	2,280,143	1,745,498	1,181,247
Oils, Fats, and Waxes	4,393,111	4,234,832	2,583,923
Paints and Varnishes	397,543	363,656	150,307
Stones and Minerals (including Ores and Concentrates)	402,354	380,424	152,878
Machines and Machinery... ..	7,206,591	6,690,019	2,893,826
Metals and Metal Manufactures other than Machinery	10,996,937	8,469,715	2,385,618
Rubber and Rubber Manufactures	1,219,534	858,276	338,810
Leather and Leather Manufactures	168,033	147,052	32,356
Wood and Wicker	2,555,612	2,198,307	431,780
Earthenware, China, Glass, etc.	1,159,811	1,033,476	360,064
Paper	2,346,801	2,443,021	1,203,602
Stationery and Paper Manufactures	1,282,106	1,265,563	771,199
Jewellery, Timepieces, and Fancy Goods	1,342,620	1,032,898	400,943
Optical, Surgical, and Scientific Instruments	891,186	908,849	819,242
Drugs, Chemicals, and Fertilisers	1,828,559	1,708,394	1,133,905
Miscellaneous	2,188,998	2,419,728	1,756,363
Gold and Silver; and Bronze Specie	210,523	202,741	240,143
Total Imports	63,491,123	57,129,636	26,311,260

The group of imports which consists of minerals, machinery, and other metal manufactures is usually the most important in point of value. In 1930-31, however, the decline affecting all classes of trade was much more pronounced in this group, and the value, £5,432,322, or 20.6 per cent. of the total, was £13,000,000 below the value in 1928-29, when the proportion was 29.3 per cent. Electrical machinery and appliances represent about half the machinery imported in each year, the value being £3,442,023, in 1928-29 and £1,596,889 in 1930-31. The value of imports of vehicles and parts was nearly £5,000,000 lower in 1930-31 than two years earlier, the decrease in motor bodies and chassis being nearly £4,000,000.

In the textile group, the value, £5,947,096, or 22.6 per cent., has declined from £14,823,832 since 1928-29. The principal item—piece goods—has declined by £3,400,000; floor coverings by £800,000; bags and sacks, and yarns each by £500,000 (approximately), while the imports of socks and stockings declined in value from £793,000 to £42,000.

The decline in the value of petroleum spirit was due to a fall in price as well as a reduction in quantity. Importations of crude petroleum increased in 1929-30. With an expansion in local manufacture, imports of pneumatic tyres diminished, and imports of crude rubber expanded, though the quantity in 1930-31 was less than in the two preceding years. Moreover, there has been a marked fall in the price of rubber.

The imports of tobacco and tea have been fairly well maintained as to quantity, but show an appreciable drop in values, and imports of tinned fish and whisky have declined in a marked degree.

A comparative statement of the principal items in the groups machinery, etc., apparel and textiles, and food, drink, etc., and of other items of considerable value is shown below. Where quantities are recorded they are stated as well as values.

Articles of Oversea Imports.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Electrical cable and wire (covered)	cwt. £ 244,900	206,713	199,501	224,399	88,014
Other electrical machinery and appliances	£ 1,154,371	1,075,664	795,436	970,556	236,812
Other machinery	£ 2,530,886	2,580,082	2,646,587	2,353,416	1,310,077
Iron and steel—Plate and sheet	cwt. £ 1,309,186	1,431,838	1,250,034	1,320,417	505,543
Other	£ 664,653	757,922	567,181	584,461	173,272
Iron pipes and tubes	cwt. £ 470,075	554,010	556,256	428,800	119,441
Motor-car—Bodies	No. £ 6,608	4,936	6,719	3,174	63
Chassis—Unassembled	No. £ 31,814	20,503	33,559	19,709	2,216
Assembled	No. £ 9,627	4,617	2,641	1,197	42
Other vehicles and parts	£ 1,383,582	637,039	417,523	232,964	6,142
Other metals and metal manufactures	£ 1,304,421	1,027,853	1,292,574	914,253	237,979
Socks and stockings	£ 3,498,183	3,155,746	3,134,377	2,616,552	1,116,299
Piece goods	£ 658,987	610,658	793,114	405,342	42,041
Floor coverings	£ 9,093,221	8,553,295	7,874,705	7,285,852	3,448,689
Bags and sacks	£ 1,108,680	685,290	1,066,508	959,602	277,365
Yarns	£ 1,212,172	946,163	1,239,308	727,279	746,415
Tobacco, cigars, etc.	£ 658,403	685,290	952,427	938,156	400,641
Tea	lb. £ 16,345,070	17,891,076	17,803,558	16,718,200	16,819,910
Whisky	gal. £ 1,784,629	1,976,069	1,905,432	1,757,597	1,112,097
Fish, in tins	£ 28,922,652	25,813,496	28,732,712	30,285,470	23,831,410
Copra	£ 2,297,585	2,046,024	2,114,514	2,119,034	1,239,505
Oil—Petroleum spirit, etc.	gal. £ 515,981	640,220	650,133	643,997	227,725
crude	£ 616,245	622,499	744,358	751,246	262,955
Lubricating (mineral)	gal. £ 11,192,635	9,902,856	12,257,172	12,388,075	5,013,400
Rubber—Crude and waste	cwt. £ 551,775	514,398	568,319	639,009	203,938
Tyres, pneumatic	£ 784,896	611,167	576,414	520,262	190,110
Timber, undressed	£ 918,164	701,013	651,683	497,320	97,878
Printing paper	gal. £ 53,423,418	63,916,047	72,200,636	80,525,117	59,792,848
Books (printed)	£ 2,243,245	2,389,299	2,697,151	2,596,246	1,376,787
Glass and glassware	gal. £ 14,725,078	17,262,208	26,980,605	39,914,219	38,847,936
Jewellery and precious stones	£ 166,290	221,161	378,348	650,898	472,123
Musical instruments	gal. £ 5,838,909	5,170,909	6,576,245	5,040,725	4,264,042
Gramophones, records, etc.	£ 482,713	388,631	526,596	409,172	275,723
Bullion and specie	cwt. £ 72,457	78,206	125,659	97,587	85,840
... ..	£ 790,341	691,204	626,443	438,135	179,232
... ..	£ 4,774,964	3,108,098	1,282,042	634,225	81,778
... ..	£ 968,962	509,055	174,853	79,511	9,240
... ..	£ 173,261	229,977	179,595	167,384	46,689
... ..	£ 1,904,040	2,207,103	1,821,245	1,587,917	284,247
... ..	£ 67,401	74,090	75,486	77,177	40,937
... ..	£ 1,447,794	1,436,535	1,440,864	1,433,929	713,279
... ..	£ 564,847	622,755	533,999	520,881	378,439
... ..	£ 522,772	536,537	529,253	457,967	113,805
... ..	£ 504,300	490,515	493,445	294,076	66,883
... ..	£ 629,455	448,740	292,623	143,524	25,661
... ..	£ 470,895	217,296	209,902	237,037	73,444
... ..	£ 503,134	800,300	210,523	202,741	240,143

The United Kingdom is the main source of supply of most of the manufactured articles imported into New South Wales, the largest items being piece goods, valued at over £4,000,000 in 1929-30 and £2,500,000 in 1930-31; machinery and metal manufactures—notably vehicles and parts, iron and steel, and electrical machinery and appliances—floor coverings, printing paper, and whisky. The principal products of other European countries imported into New South Wales are as follow:—France, silk piece goods, paper manufactures, and toilet preparations; Switzerland, silk piece goods, artificial silk yarn, trimmings and ornaments, timepieces; Netherlands,

electrical appliances and artificial silk yarn; Norway, paper; Sweden, cream separators, paper, and wood pulp; Italy, silk piece goods; Germany, machinery, metal manufactures, chemicals, gloves, silk piece goods and toys. The items of Eastern origin include the following:—From Japan, piece goods of silk and cotton, raw silk; from India, bags and sacks, hessian and other jute goods, goatskins, tea, linseed; from Ceylon, tea, and crude rubber; from British Malaya, rubber and spices; from China, tea; from Netherlands East Indies, kapok, petroleum oils, tea, and rubber.

The products of the United States are imported in large quantities, *e.g.*, machines and machinery of various kinds, tools, vehicles and parts, other metal manufactures, oils, tobacco, films for kinematographs, timber, and piece goods. The principal imports of Canadian origin are paper, tinned fish, cutlery, motor chassis, machinery, and timber. Undressed timber is usually the principal item of import from New Zealand. Copra is imported from various South Sea Islands, rock phosphates from Nauru, Gilbert, and other Pacific Islands, diamonds from South Africa, oils from Persia, asphalt, bitumen, etc., from Mexico, linseed from Argentina, cocoa beans from British West Africa, and gold from New Guinea.

ARTICLES OF EXPORT.

The exports of Australian produce consist mainly of raw materials. In regard to such commodities as wool, wheat, etc., the quantity available for export depends mainly on local seasonal conditions, but the exportation of industrial metals is influenced to a greater extent by market prices, and a movement up or down reacts promptly on the productive activity. The value of the principal commodities exported from New South Wales during each of the last two years is shown below in comparison with the annual average value during the five years ended 30th June, 1929.

Items,	Value of Australian Produce exported Oversea from New South Wales.			Percentage of Total.		
	Annual Average, 1924-25 to 1928-29.	1929-30.	1930-31.	Annual Average, 1924-25 to 1928-29.	1929-30.	1930-31.
	£	£	£			
Wool	27,964,589	16,235,877	14,126,432	52.4	47.9	47.2
Hides and skins ...	4,384,494	2,875,056	1,447,860	8.2	8.5	4.8
Meat—						
Frozen Mutton and						
Lamb	651,179	777,353	625,456	1.2	2.3	2.1
Other	892,224	745,280	587,076	1.7	2.2	2.0
Leather	369,915	288,371	235,350	.7	.8	.8
Tallow	592,456	429,223	282,400	1.1	1.3	.9
Butter	1,724,816	1,415,340	1,676,247	3.2	4.2	5.6
Wheat	4,742,730	220,402	3,818,105	8.9	.6	12.8
Flour	1,895,052	1,428,566	1,242,475	3.5	4.2	4.1
Copper Ingots ...	175,303	496,465	376,073	.3	1.5	1.2
Lead Pig	2,071,788	1,114,415	947,145	3.9	3.3	3.2
Tin Ingots	374,685	159,779	78,364	.7	.5	.3
Coal	797,006	194,042	386,289	1.5	.6	1.3
Timber undressed ...	365,498	270,019	228,561	.7	.8	.8
Bullion and Specie ...	3,187,474	4,133,437	1,141,485	6.0	12.2	3.8
Other	3,180,791	3,093,909	2,723,781	6.0	9.1	9.1
Total	53,370,000	33,877,534	29,923,099	100.0	100.0	100.0

Wool usually represents in value more than half the export trade in domestic products, and the fall in the price of this commodity was the main factor in the decline of £19,500,000 in 1929-30 as compared with the average of the previous quinquennium. The quantity of wool in 1929-30 was only 11 per cent. below the quinquennial average and the decrease in value was 42 per cent. Wheat usually ranks second to wool, but the quantity exported in 1929-30 was the smallest since 1908, and the value was only £220,402. The aggregate value of wool, hides and skins, butter, wheat and flour exported in 1929-30 was £22,200,000, as compared with an annual average of £40,700,000 during the preceding five years.

In 1930-31 there was a further decline in the value of wool exports, notwithstanding an increase in quantity, and the value of hides and skins dropped 50 per cent., but large quantities of wheat and butter were shipped. In the aggregate the value of the commodities named in the foregoing paragraph was approximately the same as in 1929-30.

Details of the quantity and value of the principal items of the overseas export trade from New South Wales during each of the last five years are shown below:—

Commodities.		Oversea Exports of Australian Produce from New South Wales.				
		1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Wool—Greasy	lb. £	335,025,736	314,747,186	340,541,026	308,265,801	334,602,517
	£	25,593,195	26,892,422	25,221,441	14,916,935	13,021,206
Scoured	lb. £	26,731,310	24,592,623	18,741,799	16,669,157	17,371,983
	£	2,739,770	3,088,600	2,055,854	1,256,867	983,269
Tops, Noils, etc. ...	lb. £	2,900,897	1,638,546	469,187	353,766	1,302,118
	£	562,715	339,175	100,503	62,075	121,957
Total, Wool	£	28,895,680	30,320,197	27,377,798	16,235,877	14,126,432
Cattle hides and calf skins	No. £	407,765	672,177	618,270	494,802	520,897
	£	422,940	869,093	696,715	386,933	302,435
Rabbit and hare skins ...	lb. £	11,860,570	9,316,863	8,223,218	5,813,615	4,675,901
	£	2,437,010	1,886,523	1,948,852	1,040,943	414,408
Sheep skins with wool ...	No. £	2,808,444	3,170,630	3,176,168	3,970,013	3,248,523
	£	1,102,775	1,311,511	1,343,559	982,401	550,391
Frozen lamb	lb. £	19,998,339	9,783,792	9,811,112	17,870,438	21,395,742
	£	480,732	273,857	296,205	474,735	427,081
Mutton	lb. £	25,987,670	7,887,037	12,832,235	16,897,390	15,313,005
	£	375,061	136,888	265,959	302,618	198,375
Rabbits and hares ...	prs. £	2,881,701	2,884,026	1,956,508	2,371,506	3,526,033
	£	257,641	262,759	193,525	214,203	252,074
Leather	£	388,990	339,394	321,119	288,371	235,350
Tallow	cwt. £	450,143	283,937	300,284	257,640	227,922
	£	761,585	457,255	541,039	429,222	282,400
Butter	lb. £	17,753,508	20,820,334	15,455,928	19,916,763	31,388,919
	£	1,239,541	1,392,797	1,160,443	1,415,340	1,676,247
Wheat	centals. £	6,457,472	2,971,449	11,361,843	511,644	18,633,141
	£	3,031,014	1,444,290	4,609,101	220,402	3,818,105
Flour	centals. £	3,059,471	2,015,840	3,664,001	2,624,095	3,640,930
	£	1,984,684	1,285,299	1,992,130	1,428,566	1,242,475
Copper ingots	cwt. £	25,630	47,157	57,904	126,953	153,150
	£	81,923	157,930	225,029	496,465	376,073
Lead, pig	cwt. £	1,476,170	1,494,684	995,531	1,028,917	1,001,237
	£	2,193,797	1,637,207	1,132,592	1,114,415	947,145
Tin, ingots	cwt. £	32,718	26,270	21,049	16,325	11,565
	£	483,348	340,419	232,468	159,779	78,364
Coal	tons. £	803,254	546,075	311,608	153,344	357,367
	£	961,551	680,929	389,407	194,042	386,289
Timber, undressed ...	uper. ft. £	18,281,645	16,576,815	13,989,086	15,898,348	16,383,875
	£	301,671	283,053	241,504	270,019	228,561
Bullion and specie ...	£	10,304,680	2,071,413	176,809	4,133,437	1,141,485
Other	£	4,702,657	4,343,006	4,026,153	4,089,766	3,239,409
Total	£	60,407,280	49,498,820	47,170,407	33,877,534	29,923,099

In 1926-27 the volume of trade in staple products was heavy, with prices at a high level, and the value of oversea exports reached the peak, £60,400,000. In the following year quantities were generally smaller, then prices began to decline. As the downward movement of prices was accelerated the value of the exports dropped in 1930-31 to a point 50 per cent. lower than in 1926-27. Taking wool as an example, the range of export values was as follows:—18½d. per lb. (greasy) in 1926-27, 20½d. in 1927-28, 17½d. in 1928-29, 11½d. in 1929-30, and 9½d. in 1930-31. The bulk of the wool exported from New South Wales is shipped direct to the United Kingdom, the Continent of Europe or Japan. The countries to which shipments were made in the last two years are shown below:—

Country,	1929-30.			1930-31.		
	Greasy wool.	Scoured wool, tops, noils, etc.	Total value.	Greasy wool.	Scoured wool, tops, noils, etc.	Total value.
	bales.	bales.	£	bales.	bales.	£
Great Britain and Northern Ireland ...	209,563	25,634	3,873,461	247,963	26,253	3,372,653
Belgium	125,363	9,431	1,705,431	115,220	13,522	1,355,781
France	277,072	18,456	4,285,412	237,171	17,449	2,941,441
Germany	157,791	10,884	2,409,891	161,261	9,859	2,047,078
Italy	48,217	758	697,663	49,959	1,362	649,949
Japan	150,455	3,578	2,379,186	232,448	5,041	2,972,939
United States of America	35,086	662	597,180	35,553	356	566,367
Other Countries ...	12,661	1,322	287,653	7,584	2,953	220,224
Total	1,016,208	70,725	16,235,877	1,087,159	76,795	14,126,432

In addition to the wool to which the foregoing statement relates, a large quantity is exported on sheep skins, mainly to France, where 2,880,917 woolly skins, valued at £668,205, were sent in 1929-30, and 2,532,829, valued at £408,685, in 1930-31. The total value of hides and skins of all kinds exported was £2,875,056 in 1929-30 and £1,447,860 in the following year. The value of the hides and skins exported to the United States was £1,170,968 and £521,039, and to the United Kingdom, £608,208 and £257,611, in the respective years.

Butter and meat are exported mainly to Great Britain, and these shipments of butter were 136,100 cwt., valued at £1,082,141, in 1929-30, and 222,100 cwt. valued at £1,328,632 in 1930-31. Exports of frozen mutton and lambs to Great Britain were 833,005 carcasses, value £631,216, and 896,501 carcasses, value £559,617, in the respective years. The value of butter sent to Eastern ports was £175,223 in 1929-30, and £130,039 in 1930-31. The tallow consigned to Japan was valued at £182,720 and £155,078 in these years.

The quantity of wheat exported in 1929-30 was unusually small, viz., 511,644 centals, of which 369,716 centals, valued at £155,990, were shipped to Great Britain. The exports in 1930-31 included 6,787,594 centals, £1,321,926 to Great Britain, 1,972,572 centals, £425,529, to Italy, 5,103,917 centals, £1,037,284, to Japan, 2,899,829 centals, £621,690, to China. The exports of flour to Great Britain in the respective years were 355,613 centals, £176,855, and 1,130,444 centals, £327,696, and to Egypt 624,711 centals, £318,715, and 699,396 centals, £224,301. The flour exported to Eastern countries amounted to 1,454,024 centals, valued at £710,665, in 1929-30, and 1,244,055 centals, valued at £471,998, in the following year, the principal markets being in British Malaya, Netherlands East Indies, and Philippine Islands.

The trade in metals is mainly with the United Kingdom. Exports included pig lead 897,755 cwt., £969,246, in 1929-30, and 980,066 cwt., £847,793, in 1930-31 to Great Britain. Exports to New Zealand in 1930-31 included coal £223,263, and undressed timber £150,196.

Re-exports.

There is a fairly large re-export trade in provisions and manufactured articles with New Zealand, New Caledonia, Fiji and other South Sea Islands. The principal items re-exported in the last two years are shown below:—

Commodity.	Value of Re-exports from New South Wales to Oversea Ports.	
	1929-30.	1930-31.
	£	£
Machinery	274,134	271,648
Metals and Metal Manufactures	195,776	164,417
Tea	105,772	56,482
Tobacco, etc.	96,580	79,408
Whisky	61,721	29,440
Piece Goods	81,768	63,114
Films for Kinematographs, etc.	36,851	85,170

Re-exports of copra during 1929-30 amounted to 349,478 cwt., valued at £303,919, including 204,084 cwt., valued at £209,356, to France. In 1930-31 only 13,039 cwt. of copra, valued at £9,420, were re-exported, all to France.

Oversea Exports—Ships' Stores.

The figures relating to oversea exports, as shown in the foregoing tables, do not include exports in the form of ships' stores. This is an important

branch of the trade of the State, as will be seen from the following statement of the value of ships' stores exported from New South Wales in 1911 and 1921, and in each of the last six years:—

Year ended 30th June.	Oversea Ships' Stores Exported from New South Wales.		
	Australian Produce.	Other Produce.	Total.
	£	£	£
1911*	839,700	76,547	916,247
1921	2,023,728	300,569	2,329,697
1926	1,906,153	322,007	2,228,160
1927	1,608,241	142,609	1,750,250
1928	1,485,633	93,737	1,578,775
1929	1,210,607	84,241	1,294,248
1930	914,913	87,010	1,001,953
1931	787,881	95,942	883,823

* Calendar Year.

The most important items of Australian produce exported as ships' stores in 1929-30 were bunker coal 552,469 tons valued at £552,469, and meats £119,242. The corresponding exports in the following year were coal 445,714 tons £495,102 and meats £94,190. The chief item of foreign produce was oil 1,890,344 gallons valued at £36,015 in 1929-30 and 6,032,966 gallons £53,344 in 1930-31.

CUSTOMS AND EXCISE TARIFFS.

The customs tariff is contained in the Customs Tariff Act, 1921-1930. There are three tariffs, viz., (1) British preferential, (2) intermediate, (3) general. The British preferential tariff applies to products of the United Kingdom, and by proclamation it may be applied, wholly or in part, to any part of the British Dominions, if the Tariff Board, in view of reciprocal arrangements, has reported upon the question and the Federal Parliament has agreed. Under similar conditions the intermediate tariff may be applied in respect of goods from any part of the British Dominions or from a foreign country. The general tariff is imposed on all goods to which the other tariffs do not apply. In 1925 material alterations were made in the conditions under which the British preferential tariff may be applied.

The tariff list includes some duties which may be deferred upon the recommendation of the Tariff Board until the date when, in the opinion of the Board, the goods will be produced locally in reasonable quantities and of satisfactory quality.

In August, 1929, the Government of the Commonwealth decided to increase some of the duties with the main purpose of obtaining additional revenue from customs and excise. The schedules were validated by temporary measures pending a general election and they were superseded by schedules introduced in November and December, 1929, when additional items were embodied with the object of rectifying an adverse exchange position and of affording further protection to local industries.

In April, 1930, a special duty at the rate of 50 per cent. of existing duties was imposed on a number of items and the importation of certain goods was prohibited, except by permission of the Minister for Trade and Customs. It was announced, however, that permission would be given, in respect of the following items, for the importation in each year of 50 per cent. of the quantities imported during the previous twelve months:—Ale, beer, porter and stout, spirits, wines, manufactured tobacco, etc., and locomotives. Porter and stout were exempted from the special duty and the

restriction of importation as from 24th July, 1931. In June and July, 1930, further customs duties were imposed, also a primage duty at the rate of 2½ per cent. *ad valorem* on nearly all goods entered for home consumption. In November, 1930, the primage duty was raised to 4 per cent., and some customs duties were increased. A few variations in the tariff were introduced in July, 1931, and the rate of primage duty on the majority of items subject to the tax was increased to 10 per cent. as from 11th July, 1931.

Goods imported into Australia, as well as local secondary products, have been subject to sales tax, unless specifically exempted; as from 1st August, 1930. The rate was 2½ per cent. of value from 1st August, 1930, to 11th July, 1931, when it was increased to 6 per cent.

Reciprocal trade treaties are in operation in respect of New Zealand and Canada. A measure of preference is accorded to the territories of Papua and New Guinea in terms of an Act which commenced on 1st April, 1926, certain tropical products imported direct therefrom being free of duty.

Reciprocity with New Zealand was introduced in 1922. The British preferential tariff is applied generally to goods produced in New Zealand, and special rates have been fixed in relation to certain commodities. The British preferential rates are charged also on goods transhipped from New Zealand, which would have been classified under the British preferential tariff if they had been imported direct from the country of origin to Australia. The New Zealand Re-exports Act, 1924, which commenced on 1st October, 1925, provides that when foreign goods are re-exported to Australia from New Zealand the value for duty shall be the sum of the following:—(a) The current domestic value in the country of origin, (b) charges for placing goods f.o.b. at port of export to New Zealand, (c) 10 per cent. of the sum of (a) + (b), (d) 10 per cent. of the sum of the foregoing amounts. In 1926 it was agreed reciprocally that except by mutual arrangement a custom duty shall not be imposed, nor an existing rate increased, on the products of either country entering the other until six months' notice has been given.

The tariff treaty with Canada was brought into operation on 1st October, 1925, and it was replaced in 1931 by a new treaty providing a larger measure of reciprocity. This treaty contains an agreement that neither country will apply "dumping" duties to the products of the other country. Concessions in respect of Canadian products entering Australia include canned salmon, timber, newsprinting paper, and motor chassis. Australian products to be admitted to Canada under preferential rates include meats, butter, fruits (fresh, dried, canned), hops, rice, and wine.

The Customs Tariff (Industries Preservation) Act, 1921-22, provides for the imposition of special customs duties to prevent the dumping of foreign goods in Australia to the detriment of local industries and to safeguard the preference accorded to the United Kingdom under the tariff. These duties, which are additional to those payable under the tariff, may be imposed on the recommendation of the Tariff Board.

The excise tariff is contained in the Excise Tariff Act, 1921-1930. The dutiable goods are beer, spirits, saccharin, starch made from imported rice, tobacco, cigars, cigarettes, snuff, petrol, and playing cards.

The Department of Trade and Customs issues an official guide to the tariff which shows in detail a classification, for purposes of duty, of all articles of import, and the rates of tax.

Customs and Excise Revenue.

The following statement shows the net amount of customs and excise revenue collected in New South Wales under each division of the tariff

during the years ended June, 1911, 1921, 1930 and 1931. Sydney is an important distributing centre, and the collections include receipts on account of goods which were transferred for consumption in other States. A notable instance is the excise collected in New South Wales on cigarettes made locally, though more than half the output of the factories is subsequently exported interstate. On the other hand, the receipts do not include duties on goods from other States consumed in New South Wales:—

Tariff Division.	1910-11	1920-21.	1929-30.	1930-31.
Customs—	£	£	£	£
1. Stimulants, Ale, Beer, etc. ...	1,109,212	832,473	1,427,140	556,739
2. Narcotics	506,426	1,013,697	2,093,108	2,104,793
3. Sugar	67,438	1,206	5,144	381
4. Agricultural Products and Groceries	354,855	339,997	583,187	492,401
5. Apparel and Textiles ...	822,576	2,626,199	2,220,190	874,654
6. Metals and Machinery ...	477,766	2,050,953	2,044,560	692,670
7. Oils, Paints, and Varnishes ...	92,800	231,733	1,427,960	1,391,318
8. Earthenware, etc. ...	128,593	276,091	320,264	157,686
9. Drugs and Chemicals... ..	42,350	214,132	260,500	178,889
10. Wood, Wicker, etc.	156,632	214,043	842,000	149,236
11. Jewellery and Fancy Goods	120,335	395,041	647,990	339,502
12. Leather and Rubber	110,351	284,894	223,880	152,823
13. Paper and Stationery	83,521	490,762	439,811	360,868
14. Vehicles	66,317	361,343	902,753	120,710
15. Musical Instruments	50,707	112,997	55,936	6,680
16. Miscellaneous	104,395	323,468	497,746	318,290
Primage Duty ... ..	...	...	...	777,952
Other Receipts	12,678	29,043	35,989	70,570
Total, Customs	£4,306,952	£9,797,982	£14,028,158	£8,746,162
Excise—				
Beer	210,728	2,019,397	2,360,494	1,903,032
Spirits	119,169	677,537	735,964	495,081
Concentrated Must ... ..	...	...	...	12
Tobacco	188,763	586,760	802,783	752,745
Cigars	958	18,072	7,635	1,766
Cigarettes	250,093	1,721,252	1,818,430	1,381,984
Sugar	261,758	...	...	...
Starch	507	...	...	...
Petrol ... ..	...	...	45,662	220,272
Playing Cards ... ..	...	...	120	6,645
Licenses—Tobacco, etc. ...	2,259	4,479	4,340	3,714
Total, Excise	£1,034,235	£5,027,497	£5,775,428	£4,755,251
Total, Customs and Excise	£5,341,187	£14,825,479	£19,803,586	£13,501,413
Per head of population ...	£ s. d. 3 5 2	£ s. d. 7 1 10	£ s. d. 7 19 10	£ s. d. 5 8 0

The net customs collections, apart from primage duty, were less than £8,000,000 in 1930-31, as compared with £14,000,000 in each of the preceding three years. Proportionately the decrease was greatest in the groups vehicles, wood, etc., metals and machinery, apparel and textiles, stimulants, etc. Narcotics was the only group in which there was an increase. The excise receipts declined by £1,000,000, or 18 per cent., in 1930-31, as compared with the previous three years, though new duties were imposed.

The amount of customs and excise revenue obtained from duties on stimulants, etc., and narcotics was £9,245,554 or £3 14s. 7d. per head of population in 1929-30, and £7,186,152 or £2 17s. 6d. per head in 1930-31.

INTERSTATE TRADE.

At a conference of the Statisticians of Australia in 1930 it was resolved that steps be taken to publish statistics in respect of interstate trade. With this object in view the following summary has been compiled from data obtained from the Sydney Harbour Trust, the railway authorities of New South Wales, Victoria, and South Australia, and persons and firms engaged in interstate trade. The available data are shown below. The figures are not complete, but probably represent the bulk of the interstate consignments of the products specified.

Commodity.	Interstate Imports.			Interstate Exports.		
	1928-29.	1929-30.	1930-31.	1928-29.	1929-30.	1930-31.
Wheat centals.	54,930	19,054	*	1,625,082	1,073,844	*
Flour "	161,782	146,880	*	967,287	950,200	*
Oats† "	176,396	188,610	121,900	*	*	*
Maize "	893,325	1,024,210	361,600	*	*	*
Barley "	198,272	238,930	45,810	*	*	*
Potatoes cwt.	2,138,000	1,896,520	2,036,705	151,760	63,100	53,596
Onions "	458,346	489,182	500,760	...	...	28
Butter lb.	5,311,348	3,748,304	2,114,094	5,025,044	5,087,152	1,971,368
Cheese "	2,923,907	4,096,680	3,086,496	*	*	*
Bacon and Ham ...	9,007,376	10,843,280	9,418,528	727,800†	940,600†	971,100†
Eggs—In shell § doz.	*	2,071,370	1,992,510	*	*	*
Egg Pulp§ cub. tons	*	1,462	666	*	*	*
Fruit—Fresh ... cases	2,752,178	2,139,215	2,161,214	730,236	400,757	529,723
Tomatoes ... ½-bush.	421,765	579,926	427,010	...	...	...
Wool lb.	9,837,000	9,300,000	11,344,000	73,440,000	64,340,000	54,940,000
Sheep No.	1,282,000	1,412,000	1,581,330	3,076,000	3,487,000	2,465,563
Horses "	11,779	15,392	17,680	10,578	11,248	15,021
Cattle "	218,982	172,948	274,388	152,436	122,305	183,352
Pigs "	7,477	20,482	8,146	4,675	4,545	4,195
Coal—Cargo ... tons	85,496	110,430	*	1,520,436	746,665	1,322,273
Bunker "	...	937	...	488,220	281,222	308,074
Ale, Beer, and Stout** ... gallons	1,333,209	1,199,008	*	567,424	419,543	*
Tobacco** ... lb.	796,005	739,401	541,206	2,010,235	2,147,858	1,446,726
Cigars** "	40,162	43,107	30,308	7,535	5,440	3,785
Cigarettes** ... "	20,974	200,290	181,276	3,110,140	3,248,502	2,161,382

* Not available.

† Excluding arrivals at Newcastle.

‡ Exports by principal firms.

§ Imports into Sydney only.

** Excluding movements in bond.

The imports of maize, dairy products, tomatoes and cattle are obtained mainly from Queensland. Potatoes, onions, barley and oats are imported from Victoria, potatoes and oats from Tasmania, and large quantities of fresh fruits from all three States. Exports of wheat from New South Wales consist almost entirely, and those of flour to a large extent, of consignments from the southern districts to Victoria; flour is exported to Queensland also. Victoria is the main outlet for sheep and cattle, and Western Australia for butter. Coal is exported to all the States except Queensland, and some is re-exported from South Australia to Broken Hill.

Further information relating to the interstate trade with Tasmania, Western Australia, and South Australia, as shown below, has been compiled by the Statisticians of those States. Thus it has been recorded that ores to the value of £2,983,955 were despatched from Broken Hill to the Port Pirie smelters in 1929-30. Other imports to South Australia from New South Wales during the year included coal, 350,706 tons, valued at £759,949; and iron and steel rails, 19,896 tons, valued at £243,726. Exports from South Australia to New South Wales included lead, 62,178 tons, valued at £1,193,340; motor bodies, numbering 6,736, valued at £521,236;

iron ore, 463,785 tons, £533,353; wine, 825,595 gallons, £223,997; brandy, 76,648 gallons, £153,296. Coal, 107,223 tons, £232,760, was re-exported from South Australia to Broken Hill.

The total value of imports to Western Australia from New South Wales in 1929-30 was £4,010,014. The principal items were sugar, 283,142 cwt., £525,691; butter, 4,080,888 lb., £376,089; tobacco, 671,622 lb., £263,214; cigarettes, 411,826 lb., £345,942; apparel, boots, piece goods, £453,594. The value of exports from Western Australia to New South Wales was £330,326.

In the trade with New South Wales in 1929-30 exports from Tasmania were valued at £3,162,084 and imports at £1,852,815. Of the former, the chief items were as follows:—Potatoes, 54,112 tons, £547,012; fresh fruit, 786,829 bushels, £287,057; jams, 7,150,000 lb., £203,181; blister copper, 6,887 tons, £593,959; zinc, 9,663 tons, £268,433; and woollen manufactures, £248,002. Sugar, 12,217 tons, £450,986; and tobacco, cigarettes, etc., £151,751, were the principal imports to Tasmania from New South Wales.

OVERSEA IMPORTS, COUNTRY OF ORIGIN, 1905 TO 1930-31.

Ratio Graph.



The numbers at the side of the graph represent £100,000

The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

SHIPPING.

OWING to the geographic position of New South Wales, efficient transport services are essential to maintain regular and speedy communication with other countries, and to place the staple products upon distant markets in a satisfactory condition without unduly increasing the cost. In modern ships special provision is made for refrigerated cargoes, and improved methods of carrying perishable products have promoted the growth of a permanent export trade in such commodities as butter, frozen meat, and fruit.

CONTROL OF SHIPPING.

Prior to the inauguration of the Commonwealth in 1901, the shipping of New South Wales was regulated partly by an Imperial enactment, the Merchant Shipping Act, 1894, and partly by the laws of the Parliament of New South Wales. Under the Commonwealth Constitution the Federal Parliament is empowered to make laws with respect to trade and commerce with other countries and among the States, including navigation and shipping, and in relation to such matters as lighthouses, lightships, beacons and buoys, and quarantine.

Special legislation relating to navigation and shipping is contained in the Federal Navigation Act, 1912-26. It is drafted on the lines of the Merchant Shipping Act and of the Navigation Act of New South Wales and embodies the rules of an international convention for Safety of Life at Sea signed in London in 1914.

The provisions of the Act apply to ships registered in Australia, also to other British ships on round voyages to or from Australia. The Governor-General may suspend its application to barges, fishing boats, pleasure yachts, missionary ships, or other vessels not carrying passengers or goods for hire; and the High Court of Australia has decided that clauses relating to manning, accommodation, and licensing do not apply to vessels engaged in purely intra-state trade.

A ship may not engage in the coasting trade of Australia unless licensed to do so, and a license may not be granted to a ship in receipt of a foreign subsidy. Licensees, during the time their ships are so engaged, are obliged to pay to the seamen wages at current rates ruling in Australia, and, in the case of foreign vessels, to comply with the same conditions as to manning and accommodation of the crew as are imposed on British ships. Power is reserved to the Minister for Trade and Customs to grant permits, under certain conditions, to unlicensed British ships to engage in the coasting trade if a licensed British ship is not available for the service, or if the service by licensed shipping is inadequate. A permit may be continuing, or for a single voyage.

The Governor-General may suspend by proclamation the operation of the foregoing provisions, and under certain conditions he may grant permission to British ships to carry tourist traffic between ports in the Commonwealth and the territories, such traffic to be exempt from the provisions of the Navigation Act relating to the coasting trade of Australia.

The part of the Navigation Act which relates to pilotage has not yet been brought into operation, and this service is regulated under the State Navigation Act of 1901.

The State Department of Navigation exercises control over the ports of New South Wales, and administers the Harbour and Tonnage Rates Act,

1920, which authorises the collection of shipping rates and port dues, except in Sydney Harbour, which is subject to the control of the Sydney Harbour Trust.

Matters relating to seaboard quarantine are administered by the Commonwealth in terms of the Quarantine Act, 1908-24, and arrangements may be made with the State Government to aid in carrying out the law. The Act defines the vessels, persons, animals, plants, and goods which are subject to quarantine, and provides for examination, detention, and segregation in order to prevent the introduction or spread of diseases or pests. Imported animals or plants may not be landed without a permit granted by a quarantine officer. The master, owner, and agent of a vessel ordered into quarantine are severally responsible for the expenses, but the Commonwealth Government may undertake to bear the cost in respect of vessels trading exclusively between Australasian ports. Quarantine expenses in the case of animals and goods are defrayed by the importer or owner.

Vessels arriving from overseas ports are examined by quarantine officers only at the first port of call in Australia unless they have travelled along the northern trade route, when they are inspected again at the last port of call. The quarantine station of New South Wales is situated in Sydney Harbour, near the entrance to the port.

The liability of shipowners, charterers, etc., in regard to the transportation of goods is defined by the Sea-carriage Acts passed by the State and the Commonwealth Parliaments. The State Act passed in 1921 applies to the intra-state trade, and the Commonwealth Act of 1924 applies to the interstate and the outward overseas trade.

INTERSTATE AND OVERSEA SHIPPING.

The figures in this chapter relating to shipping are exclusive of particulars concerning ships of war, cable-laying vessels, and yachts, which are not included in the official shipping records. Where tonnage is quoted it is net tonnage.

Vessels Entered and Cleared.

In compiling the records of overseas and interstate shipping, a vessel is treated as an entry once and as a clearance once for each voyage to and from New South Wales, being entered at the first port of call, and cleared at the port from which it departs. The repeated voyages of every vessel are included.

The aggregate number and tonnage of interstate and overseas vessels which arrived in and departed from ports of New South Wales in various years since 1901, with the average net tonnage per vessel, are shown in the following statement:—

Year ended 30th June.	Entries.		Clearances.		Average Tonnage per Vessel.
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	
1901*	2,760	4,133,200	2,853	4,274,101	1,498
1911*	3,127	6,822,135	3,146	6,833,782	2,177
1921	3,019	7,123,331	3,023	7,122,209	2,358
1926	2,945	8,534,292	2,906	8,495,031	2,910
1927	3,229	9,084,476	3,267	9,213,319	2,817
1928	3,039	8,674,540	3,041	8,705,497	2,859
1929	2,865	8,516,413	2,847	8,532,023	2,985
1930	2,623	8,258,562	2,600	8,187,996	3,149
1931	2,517	7,938,164	2,568	8,008,827	3,118

* Year ended 31st December.

In 1926-27 the tonnage of vessels entered and cleared was the largest on record. It declined by 5 per cent. in the following year, when there was a smaller quantity of wheat available for oversea export and a marked diminution in the coal trade. There was a further decline in the next two years, mainly in interstate trade due to dislocations in the coal-mining industry, and in 1930 to inactivity in the export trade in wheat.

The number of vessels which entered in ballast during 1929-30 was 230, their aggregate net tonnage being 458,814 tons, or 5.6 per cent. of the total. The clearances in ballast were 206 vessels, 599,060 tons (net), or 7.3 per cent. of the total tonnage cleared. In 1930-31 the entries in ballast were 418 vessels 874,768 tons, and the clearances 160 vessels 442,853 tons.

Very few sailing vessels are engaged in the trade of New South Wales, and in 1929-30 the entries included only 2 sailers with an aggregate tonnage of 4,093 tons, and the clearances, one vessel, 1,743 tons.

A comparison of the shipping of the Australian States shows that the tonnage trading to and from New South Wales is far in excess of the figures of any other State. The following statement shows the entries and clearances during the year ended 30th June, 1931, excluding the coastal trade:—

State.	Interstate and Oversea.			
	Entries.		Clearances.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
New South Wales	2,547	7,938,164	2,568	8,800,827
Victoria	2,166	6,161,699	2,181	6,238,325
Queensland	945	3,186,198	943	3,160,577
South Australia	1,020	4,165,788	1,033	4,186,856
Western Australia	741	3,687,357	742	3,686,229
Tasmania	992	1,318,633	1,003	1,341,458

DIRECTION OF SHIPPING TRADE.

The shipping records do not disclose the full extent of communication between New South Wales and other countries, as they relate only to terminal ports and are exclusive of the trade with intermediate ports, of which some are visited regularly by many vessels on both outward and inward journeys. But the following statement of the tonnage entered from and cleared for interstate ports and overseas countries, grouped according to geographical position, indicates, as far as practicable, the growth or decline of shipping along the main trade routes since 1911:—

Destination.	1911.		1920-21.		1930-31.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
Australian States	3,519	6,528,328	3,206	6,382,297	3,164	8,076,145
New Zealand	623	1,223,238	769	1,473,057	346	901,695
Great Britain and Europe	771	3,033,630	582	2,798,459	594	3,499,602
Africa	59	114,035	81	225,856	16	50,294
Asia and Pacific Islands	710	1,410,164	1,009	2,179,040	691	2,129,777
North and Central America	253	638,393	299	1,003,137	297	1,269,104
South America	338	708,129	96	183,694	7	20,374
Total	6,273	13,655,917	6,042	14,245,540	5,115	15,546,991

Shipping to and from the other Australian States in 1930-31 was greater by 1,694,000 tons than in 1920-21. A decrease was recorded in respect of the New Zealand trade and the tonnage engaged in trade with North and Central America increased by 27 per cent. The South American trade, which was mainly for the export of coal, has lost its former importance.

INTERSTATE AND OVERSEA CARGOES.

A comparative statement of the interstate and oversea cargoes discharged and shipped in New South Wales in each year since 1924-25 is shown below:—

Year ended June—	Cargo Discharged.			Cargo Shipped.		
	Interstate.	Oversea.	Total.	Interstate.	Oversea.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.
1925	1,651,936	1,804,416	3,456,352	3,559,476	2,702,003	6,261,479
1926	1,613,036	2,084,052	3,697,088	3,038,259	1,993,228	5,031,487
1927	1,768,175	2,196,135	3,964,310	3,713,721	1,925,622	5,639,343
1928	1,712,724	2,275,833	3,988,557	3,289,426	1,394,084	4,683,510
1929	1,877,919	2,284,817	4,162,736	2,519,279	1,601,254	4,120,533
1930	1,510,177	2,175,266	3,685,443	1,804,415	874,304	2,678,719
1931	1,194,001	1,200,861	2,394,862	2,030,847	1,908,396	3,939,243

NOTE.—Cargo recorded by measurement has been converted to tons on the basis of 40 cubic feet = 1 ton.

Cargoes from other States of the Commonwealth have declined by 36 per cent. since 1928-29. Oversea trade was maintained at a high level until 1930-31, when there was a decline of 45 per cent. Fluctuations in the coal trade have been the main cause of variations in the outward interstate trade. Oversea shipments were exceptionally small in 1929-30, when only a small quantity of wheat was exported, and there was a recovery in the following year.

NATIONALITY OF VESSELS.

The majority of the vessels engaged in the trade of the State of New South Wales are under the British flag, the deep-sea trade with the mother country and British possessions being controlled chiefly by shipowners of the United Kingdom, and the interstate trade by Australian shipping companies. In the table below the British and the foreign shipping are shown under distinctive headings.

Year ended 30th June.	Net Tonnage Entered and Cleared.				Percentage.		
	Australian.	Other British.	Foreign.	Total.	Australian.	Other British.	Foreign.
1901*	3,348,502	3,714,217	1,344,552	8,407,301	39·8	44·2	16·0
1911*	4,645,195	6,594,649	2,416,073	13,655,917	34·0	48·3	17·7
1921	4,739,555	6,739,914	2,766,071	14,245,540	33·3	47·3	19·4
1926	5,540,386	8,389,138	3,099,799	17,029,323	32·5	49·3	18·2
1927	6,448,697	8,768,280	3,080,818	18,297,795	35·3	47·9	16·8
1928	5,799,805	8,396,707	3,183,525	17,380,037	33·4	48·3	18·3
1929	4,656,402	9,247,088	3,144,946	17,048,436	27·3	54·3	18·4
1930	4,338,726	8,785,023	3,322,809	16,446,558	26·4	53·4	20·2
1931	4,639,497	7,930,626	3,376,868	15,946,991	29·1	49·7	21·2

* Year ended 31st December.

The Australian tonnage was less than usual in 1928-29, when fewer vessels were engaged in the interstate coal trade and the regular voyages of Australian vessels to and from Great Britain had ceased in consequence of the sale of the Commonwealth Government steamships. On the other hand, the British tonnage increased by reason of the large quantities of wool and wheat exported and activity in the import trade. In the last two years there were decreases in British tonnage and increases in foreign shipping.

Particulars relating to the nationality of vessels engaged in trade with New South Wales in 1913, 1929-30, and 1930-31, are shown in greater detail in the following statement:—

Nationality of Shipping.	Entries and Clearances.						Net Tonnage— Percentage of each Nationality.		
	1913.*		1929-30.		1930-31.		1913.*	1929-30.	1930-31.
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.			
British—									
Australia	3,221	5,711,398	2,398	4,338,726	2,584	4,639,497	35.3	26.4	29.1
New Zealand	771	1,359,138	348	732,962	274	591,455	8.4	4.5	3.7
Great Britain	1,589	6,081,117	1,447	7,554,745	1,303	7,026,026	37.5	45.9	44.0
Other British	22	30,459	170	497,816	110	313,145	.2	3.0	2.0
Total	5,613	13,182,112	4,363	13,123,749	4,271	12,570,123	81.4	79.8	73.8
Foreign—									
Denmark	2	768	31	92,713	19	50,662	.0	.5	.3
France	150	313,252	73	224,610	79	241,764	1.9	1.4	1.5
Germany	487	1,533,728	95	406,465	84	377,911	9.5	2.5	2.4
Italy	29	47,770	31	146,115	35	193,453	.3	.9	1.2
Netherlands	52	128,870	89	496,552	89	486,639	.8	3.0	3.1
Norway	183	353,843	153	537,427	129	462,036	2.2	3.3	2.9
Sweden	23	57,643	65	205,331	59	185,178	.4	1.2	1.2
Japan	103	332,471	173	637,465	235	932,783	2.0	3.9	5.3
United States of America	76	148,353	143	557,513	103	401,885	.9	3.4	2.5
Other Nationalities	50	89,292	7	18,618	7	39,557	.6	.1	.3
Total	1,155	3,006,490	860	3,322,809	844	3,376,868	18.6	20.2	21.2
Grand Total	6,768	16,188,602	5,223	16,446,558	5,115	15,946,991	100.0	100.0	100.0

* Year ended 31st December.

The tonnage owned in Great Britain represented 44 per cent. of the total in 1930-31, and the Australian tonnage 29 per cent. The foreign tonnage is owned for the most part in Japan, the Netherlands, Norway, or the United States. The foreign tonnage in 1930-31 was 21.2 per cent. of the total, as compared with 20.2 per cent. in 1929-30 and 18.6 in 1913.

Of the Australian tonnage, entries and clearances in interstate trade amounted to 4,235,668 tons, or 91 per cent., and voyages in overseas trade to 403,829 tons, the tonnage to and from New Zealand being 209,640. Of the other British tonnage, including ships owned in Great Britain, 2,843,602 tons were entered from and cleared for interstate ports, and 2,607,545 tons plied between Australia and Great Britain. The tonnage belonging to other nations was employed chiefly in the foreign trade.

During the year 1930-31 the interstate cargo discharged at ports in New South Wales amounted to 1,194,001 tons, and the overseas cargo to 1,200,861 tons, and the shipments to interstate ports represented 2,030,847 tons, and

to oversea countries 1,908,396 tons. The interstate trade is carried for the most part in Australian ships, and the nationality of the vessels in which oversea trade is carried is shown below:—

Nationality of Shipping.	1928 29.		1929-30.		1930-31.	
	Discharged.	Shipped.	Discharged.	Shipped.	Discharged.	Shipped.
Oversea Cargoes.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Australia	81,102	115,508	71,047	88,293	64,395	131,447
New Zealand	67,475	272,432	50,987	221,527	27,117	246,950
Great Britain	1,421,383	625,224	1,253,871	315,534	673,861	843,882
Other British	80,034	49,261	61,387	27,973	42,367	31,225
Total British	1,650,594	1,62,423	1,427,292	651,327	807,740	1,253,504
Denmark	47,449	13,748	84,669	1,470	16,722	6,393
France	13,567	79,457	21,982	31,662	5,702	27,842
Germany	66,269	58,991	52,285	33,152	16,861	36,343
Italy	17,438	28,466	16,191	21,191	6,478	26,698
Japan	57,014	124,993	72,643	33,682	23,734	358,470
Netherlands	62,262	87,994	31,983	49,963	38,051	75,018
Norway	150,498	60,434	226,133	23,343	140,698	71,349
Sweden	56,311	27,209	66,925	6,400	50,721	13,301
United States of America	158,386	33,334	161,738	20,114	78,996	39,469
Other Foreign	5,629	24,203	3,420	...	15,158	...
Total, Foreign	634,223	538,829	737,974	220,977	393,121	654,892
Total, Oversea	2,284,817	1,601,254	2,175,266	874,304	1,200,861	1,908,396

Note.—Cargo recorded by measurement is converted to tons on basis of 40 cubic feet = 1 ton.

In 1930-31 British vessels carried 67 per cent. of the oversea cargo discharged at ports in New South Wales and 66 per cent. of the cargo shipped abroad.

The interstate and oversea trade of New South Wales is confined practically to three centres, viz., Sydney, Newcastle, and Port Kembla, and the distribution amongst the ports of the inward trade at intervals since 1901 is shown in the following table. On each voyage a vessel is counted as an entry only at the first port of call in New South Wales and intra-state trade is excluded, therefore the figures do not indicate the total tonnage entered at each port.

Year ended 30th June.	Port Jackson (Sydney).		Port Hunter (Newcastle).		Port Kembla.		Other Ports.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
1901*	1,884	2,953,511	702	1,036,178	53†	67,558†	140	45,864
1911*	2,181	5,246,351	701	1,857,132	64	102,866	81	115,786
1921	1,869	4,776,182	1,082	2,255,040	42	85,514	26	6,595
1926	1,088	6,304,313	826	1,964,191	83	243,918	48	21,870
1927	2,174	6,809,122	800	1,961,909	90	241,208	75	42,187
1928	2,137	6,674,798	793	1,772,952	72	200,825	37	25,965
1929	2,671	6,768,664	620	1,355,411	144	366,401	30	25,937
1930	2,044	6,958,916	371	836,229	183	445,473	25	17,944
1931	1,800	6,430,904	601	1,262,149	114	232,228	32	12,883

*Year ended 31st December.

† Wollongong.

Many vessels, including steamers engaged regularly in the trade of New South Wales, discharge cargo at Sydney, then proceed to Newcastle for coal. Such vessels are counted as entries at Sydney only, therefore the inward shipping of Newcastle is greatly in excess of the tonnage stated in the table. The trade of Port Kembla increased as a result of the establishment of important industries in the locality. The decline in the inward trade of other ports between 1911 and 1921 was due mainly to the omission of Twofold Bay as a port of call for interstate vessels.

The trade of the various ports, as indicated by the quantity of interstate and oversea cargo discharged and shipped, is shown in the following particulars relating to the years 1929-30 and 1930-31:—

Port.	Cargo Discharged.			Cargo Shipped.		
	Interstate.	Oversea.	Total.	Interstate.	Oversea.	Total.
1929-30.						
	Tons.	Tons.		Tons.	Tons.	
Sydney	878,455	1,994,373	2,872,828	727,857	701,745	1,429,602
Newcastle	427,233	131,458	558,691	650,269	57,150	707,419
Port Kembla	204,199	49,435	253,634	352,259	105,085	457,344
Other Ports	290	...	290	74,030	10,324	84,354
Total	1,510,177	2,175,266	3,685,443	1,804,415	874,304	2,678,719
1930-31.						
Sydney	690,391	1,107,895	1,798,286	472,183	1,539,099	2,011,282
Newcastle	416,037	67,821	483,858	1,428,633	337,450	1,766,083
Port Kembla	86,903	25,145	112,048	95,584	12,900	108,484
Other Ports	670	...	670	34,447	18,947	53,394
Total	1,194,001	1,200,861	2,394,862	2,030,847	1,908,396	3,939,243

NOTE.—Cargo recorded by measurement is converted on basis of 40 cubic feet = 1 ton.

The trade of Newcastle and Port Kembla in 1929-30, as illustrated above, was affected by the closing of the northern coal-mines, which caused a diversion of shipping from the northern to the southern port. In the following year the coal trade reverted to its former course.

HARBOURS AND ANCHORAGES.

Along the coast of New South Wales there are numerous ports, estuaries, and roadsteads, which provide shelter to shipping and afford facilities for trade.

There are four natural harbours where vessels of deep draught may enter, viz., Port Stephens, Broken Bay, Port Jackson (Sydney Harbour), and Jervis Bay. Port Jackson ranks first by reason of extent, natural facilities, and volume of trade. Port Stephens, 21 nautical miles north of Newcastle, and Broken Bay at the mouth of the Hawkesbury River, have not been developed owing to proximity with Newcastle and Sydney Harbour respectively. Jervis Bay is 82 miles south of Sydney; part of the bay has been

ceded to the Commonwealth Government as a port for Canberra, the Federal Capital. Newcastle is a bar harbour at the mouth of the Hunter River, where extensive accommodation has been provided for oversea shipping. Artificial harbours have been constructed at Coff's Harbour, Wollongong, Port Kembla, Shellharbour, Kiama, and Ulladulla. With the exception of Port Kembla, they are useful only for small vessels.

There are a number of estuarine harbours, but the entrances are usually blocked to some extent by sandbars, formed by the combined action of ocean currents and waves and wind. There are also numerous roadsteads or anchorages which afford shelter to vessels of moderate draught during southerly or south-easterly weather. Breakwaters and training-walls have been constructed to control the sand movement at the majority of the bar harbours, so that the navigating channels may be maintained with little difficulty.

The shipping trade of the ports other than Sydney, Newcastle, and Port Kembla is relatively small.

Sydney Harbour.

Port Jackson (Sydney Harbour) is the principal port of New South Wales. It has a safe entrance and provides good shelter. At the Heads the depth of water is not less than 80 feet at low water, ordinary spring tide. Near the entrance the fairway divides into two channels about half a mile long, over 700 feet wide, and 40 feet deep. The total area of the harbour is 14,284 acres, or about 22 square miles. The coastline, being irregular, is over 188 miles in length, and gives facilities for extensive wharfage.

The control of the port was vested in the Sydney Harbour Trust in the year 1901. The Trust consists of three Commissioners appointed for a term of seven years, with control over the port and shipping, harbour lights, buoys and wharves, and authority to undertake works for the preservation and improvement of the port, to appropriate wharves, stores, etc., to special uses, and to levy rates and charges in respect of vessels and goods and for the use of property.

The wharves are situated in close proximity to the business centre of the city, about 4 or 5 miles from the Heads. Excluding private lighter and ferry berths there are 77,030 feet of wharfage in Sydney Harbour. The principal wharves are leased to the various shipping companies whose vessels engage regularly in the trade of the port, and other wharves are reserved for vessels which visit the port occasionally. Details relating to the number and length of the berths are shown below:—

Particulars.	Controlled by Sydney Harbour Trust.		Private Wharfage.		Total.	
	No. of Berths.	Length.	No. of Berths.	Length.	No. of Berths.	Length.
Ship berths—		feet.		feet.		feet.
Oversea	67	35,245	14	3,819	81	39,064
Interstate	24	9,242	3	516	27	9,758
Intrastate	38	10,523	5	772	43	11,295
Cross wharves adjoining ships' berths	39	4,693	...	...	39	4,693
Harbour trade berths	19	4,633	30	4,160	49	8,793
Ferry berths	25	3,427	...	...	25	3,427
Total	212	67,763	52	9,267	264	77,030

On a spit of land, known as Glebe Island, lying between Rozelle Bay and White Bay, works have been constructed to facilitate the shipment of wheat which may be delivered in bulk from a large railway elevator into the holds of vessels at the rate of 1,400 tons per hour.

Special facilities are available along the waterside for other important classes of trade, such as wool stores fitted with appliances to expedite the handling of the staple product, and storage for hazardous goods. By private enterprise, a plant has been installed at Ball's Head, where bunkers may be replenished rapidly with coal or oil.

The wharves are situated on the southern shore of the port, and the northern is used mainly for residential sites. The ferry steamers on which traffic is carried across the harbour are certificated as to seaworthiness by the Department of Navigation and licensed by the Sydney Harbour Trust. During 1930-31 certificates were issued to 56 steamers in Port Jackson with an aggregate tonnage of 8,643 tons and capacity to carry 43,881 passengers.

An arch bridge which spans the harbour from Dawes' Point to Milson's Point has been constructed. It provides for pedestrian, vehicular and railway traffic, and is to be opened in March, 1932. It is estimated that the cost of the bridge and approaches will amount to about £6,250,000, excluding interest capitalised during construction, which will probably increase the capital expenditure to about £8,000,000. A description of the bridge and particulars relating to the progress of the undertaking are published in the chapter relating to Roads and Bridges.

An account of the dock accommodation provided in Sydney Harbour is shown on a later page.

The number and tonnage of vessels which entered Sydney Harbour during the last five years, as recorded by the Harbour Trust, are shown below. The figures differ from those in the table on page 131, as they include vessels engaged in the coastal trade of the State, also vessels which do not report to the Customs authorities on return from a journey to Newcastle for bunker coal:—

Year ended 30th June.	Coastal (State).		Oversea and Interstate.		Total Trade.	
	Number.	Net Tonnage.	Number.	Net Tonnage.	Number.	Net Tonnage.
1927	5,740	1,667,968	2,626	7,879,005	8,366	9,546,973
1928	5,261	1,612,012	2,539	7,600,283	7,800	9,212,295
1929	4,564	1,352,945	2,498	7,707,208	7,062	9,060,153
1930	3,743	1,183,437	2,449	7,757,098	6,192	8,940,535
1931	3,798	1,260,344	2,184	7,207,938	5,982	8,468,282

The aggregate tonnage of vessels which entered the port of Sydney during the year 1926-27 was the largest on record. The subsequent decline in the coastal trade was due mainly to adverse conditions in the coal-mining industry. Oversea tonnage decreased in 1927-28 with a diminution in wheat exports, and in 1930-31, when there was a marked decline in the import trade.

Very few sailing vessels are engaged in the trade of New South Wales. The number which entered Sydney Harbour in 1929-30 was only 6 with a tonnage of 4,093, as compared with 242 vessels and a tonnage of 124,328 in 1920-21. On the other hand the number of motor ships is increasing. The oversea and interstate shipping included 86 motor vessels, 303,695 tons (net) in 1925-26, and 288 of an aggregate net tonnage of 1,051,296 in 1929-30. The steamers included 395 oil-burning vessels with a tonnage of 2,201,658 tons (net) in 1929-30.

The following statement shows the arrivals in the principal ports of Australasia and Great Britain. The figures include coastwise trade and tonnage which arrived at the respective ports, although not recorded by the Customs Department.

Port.	Arrivals incl. Coastwise— Net Tonnage.	Port.	Arrivals incl. Coastwise— Net Tonnage.
<i>Australia (1930-31)—</i>		<i>England (1929)—</i>	
Sydney	8,468,282	London	28,911,898
Melbourne	6,310,549	Liverpool (including Birkenhead)	17,180,434
Port Adelaide	3,983,519	Southampton	12,557,237
Newcastle	3,383,198	Newcastle and Shields	11,529,734
Brisbane	3,570,102	Cardiff	9,365,675
Fremantle	3,461,655	Hull	6,061,745
Townsville	1,040,193	Plymouth	7,186,660
Hobart	767,592		
Port Kembla	536,650		
Geelong (1929-30)... ..	714,007		
<i>New Zealand (1930)—</i>		<i>Scotland (1929)—</i>	
Wellington	3,756,293	Glasgow	6,320,966
Auckland	2,476,051	Greenock	2,827,376
Lyttelton	2,041,897	Leith	2,183,980

Up to 30th June, 1928, the revenues collected by the Sydney Harbour Trust were paid into the Consolidated Revenue Fund of the State. This arrangement was altered as from 1st July, 1928, when the accounts of the Harbour Trust were separated from the Consolidated Revenue Account, and the receipts are paid now into the Sydney Harbour Trust Fund. A renewals fund has been created to meet the cost of renewals and reconstruction of wasting assets and the Trust is required to contribute a proportionate share of the sinking fund established under the financial agreement between the Commonwealth and the States. The net profits are payable into a reserve fund to meet losses and for the reduction of rates and charges.

The revenue and expenditure by the Sydney Harbour Trust during each of the last six years are shown in the following statement, also the capital debt at the end of each year. Owing to the changes in the method of keeping the accounts, as described above, the figures for the years ended June 1929 to 1931, are not strictly comparable with those of earlier years. The capital debt at 30th June, 1928, as stated, was determined by a committee appointed for that purpose when the finances of the Trust were separated from the Consolidated Revenue Fund:—

Year ended 30th June.	Capital Debt.	Revenue.	Expenditure.				Surplus.
			Working Expenses.	Renewals and Re- placements.	Interest.	Total Ex- penditure.	
	£	£	£	£	£	£	£
1926	10,956,555	1,015,876	258,117	39,985	554,446	852,548	163,330
1927	11,299,989	1,083,855	273,412	46,620	569,884	889,916	193,939
1928	11,204,370	1,078,293	308,615	35,385	584,815	928,815	149,478
1929	11,488,441	1,103,598	330,130	35,907	614,067*	983,104	120,494
1930	11,673,981	1,017,934	341,286	40,135	629,896*	1,011,227	6,707
1931	11,622,200	840,077	295,635		635,572*	931,207	(-91,130)

* Includes Sinking Fund.

During the year 1929-30, the ratio of working expenses to the revenue was 33.5 per cent. After deducting interest, £597,123, and sinking fund charges, £32,683, and the expenditure on renewals and replacements, £40,135, there was a surplus on the year's transactions of £6,707. In the following year there was a decline of £177,857 in revenue, and the net receipts were not sufficient to cover interest and sinking fund, the deficiency being £91,130.

The principal sources of revenue in 1929-30 were wharfage and transhipment rates, which amounted to £611,845, and rents from properties £311,490. The corresponding amounts in 1930-31 were £456,853 and £295,500.

Newcastle Harbour.

Newcastle Harbour (Port Hunter) is the second port of New South Wales and the fourth port of Australia in regard to the volume of its shipping trade. The harbour lies in the course of the Hunter River, and its limits are not defined, but an area of about 990 acres is enclosed by about 8 miles of coastline, extending on the western side as far as Port Waratah, omitting Throsby Creek, and on the eastern side to a point due east of the southern end of Moscheto Island. 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 at the entrance is 19 chains, and the navigable channel is 350 feet wide. The minimum depth is 23 feet 6 inches at low water ordinary spring tide, but vessels which draw 27 feet can enter at high water. Works are in progress with the object of increasing the depth at the entrance to 32 feet.

The harbour is landlocked sufficiently to render it safe for vessels in all kinds of weather, and breakwaters have been erected to improve the entrance and to prevent the ingress of sand from the ocean beaches. Newcastle is primarily a coal-loading port, and the proximity of the coalfields has led to the establishment of important industries, including iron and steel works, in the district, so that trade in other commodities is likely to develop steadily. Arrangements have been made for the shipment of butter produced in the northern dairying districts. Frozen meat also may be dispatched, and a wharf is available for timber.

Wharfage accommodation to the extent of 23,812 feet is provided; 10,138 feet are used for the shipment of coal, £7,900 feet for general cargo, 2,428 feet for Government purposes, and 3,346 feet are leased. There are 98 mooring dolphins and jetties for vessels awaiting cargo. The general cargo wharves are connected with the main railway system, and the railway extends along the coal wharves.

The shipping entered during 1930-31 included coastal, 2,284 vessels, 948,822 tons; interstate, 832 vessels, 1,199,677 tons; and oversea, 358 vessels, 1,234,699 tons; total, 3,474 vessels, 3,383,198 tons. In 1929-30 the total was 2,661,394 tons.

RIVER TRAFFIC.

New South Wales has few inland waterways, and although there is some river traffic its extent is not recorded. The coastal rivers especially in the northern districts are navigable for some distance by sea-going vessels and trade is carried further inland by means of small steamers and launches.

The use of the inland rivers for navigation depends mainly on seasonal conditions. Normally, the Murray River may be used by flat-bottomed barges and other small craft. Traffic on the Darling is intermittent. At certain times, in seasons when the rainfall is sufficient to maintain a fair volume of water, barges carry wool and other products for a considerable distance.

A scheme is in progress for the construction of storage dams, weirs and locks on the Murray, Murrumbidgee and Darling Rivers. The works are

being constructed under an agreement between the Governments of the Commonwealth and of the States of New South Wales, Victoria, and South Australia, which provides that, except in times of unusual drought, sufficient water must be maintained in the weirs and locks for navigation by vessels drawing 5 feet of water.

At 30th June, 1931, ten weirs and locks had been completed and were in operation, and two were under construction. The expenditure for the construction of locks and other works at that date amounted to £8,379,042.

HARBOUR FERRY SERVICES.

In the ports of Sydney and Newcastle, ferry services have been established by private companies to transport passengers, vehicles, etc., across the harbours, the conditions under which the services are conducted being regulated by license. At 30th June, 1931, fifty-seven boats licensed to carry 44,066 passengers were in service, and 1,004 persons were employed. Approximately 46,200,000 passengers were carried during the year 1930-31; and in accidents one employee was killed and 9 passengers and 63 employees were injured; the total revenue amounted to £697,388, and the expenditure to £566,701.

These ferries are distinct from those to which reference is made in the chapter entitled Local Government, which are maintained by the central Government or by municipalities or shires for the free transport of traffic across rivers where bridges have not been erected.

RATES OF FREIGHT.

Freight charges represent an important factor in the cost of marketing in overseas countries the products of the industries of New South Wales. Generally the rates charged by British lines of steamships are determined by organisations of shipowners.

An association of shipowners and shippers, known as the Australian Oversea Transport Association, was formed in June, 1929, with the object of organising on an economical basis the shipping services to and from Australia. A series of agreements has been arranged in regard to rates of freight and other conditions affecting the shipment of cargoes by vessels engaged regularly in the trade between Australia and Europe.

During the war period, rates of freight rose to an extraordinary level. The maximum for most commodities was reached in 1919, then the over-supply of shipping led to a general decline and the movement became steadily downward. The decrease is especially noticeable in regard to classes of cargo carried by tramp steamers, *e.g.*, wheat, for which freight was charged at £7 10s. per ton in 1920, and in the following year space was obtained at the rate of £2 6s. 8d. per ton. During the three years ended June, 1931, rates for most commodities were fairly steady.

The following statement shows the range of rates for the carriage of various commodities by steamer from Sydney to London in the last two years, as compared with the rates in 1911 and later years:—

Article.	1911.	1920-21.	1925-26.	1929-30.	1930-31.
Butter box 56 lb.	2s. to 2s. 6d.	6s.	4s. 6d.	4s.	4s.
Copra ton	40s.	225s. to 120s.	61s. 3d.	61s. 3d.	61s. 3d.
Idies lb.	40s. to 52s. 6d.†	1½d. to 1d.	¾d.	¾d.	¾d.
Leather ton	60s.	270s. to 244s.	153s.	137s. 9d.	137s. 9d.
Mutton—Frozen ... lb.	5d. to 1½d.	1½d.	1½d.	1d.	1d.
Tallow "	40s. to 42s. 6d.	180s. to 170s.	78s. 9d.	70s. 9d.	70s. 9d.
Wheat "	17s. 6d. to 30s.	120s. to 46s. 8d.	38s. 9d. to 20s.	33s. 9d. to 20s.	32s. 6d. to 20s.
Wool—Greasy lb.	¾d. to 1½d.	1½d.†	1½d.†	1½d.†	1½d.†
Measured Goods—40 cub. ft. ...	25s. to 45s.	120s. to 105s.	70s.	63s.	63s.
Timber 100 sup. ft.	6s.	35s. to 22s.	11s.	11s.	11s.

† Per ton. ‡ Plus 5% primage, less 10% rebate.

Wool is carried direct to Continental ports in Europe at the same rates as to London, but higher rates are charged if it is taken to London and transhipped there to the Continent. The rate for wool from Sydney to Japan in the years ended June, 1930, and 1931, was 14d. per lb., less 10 per cent. rebate.

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 Lighthouses 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 Acts. The various charges are shown in detail in the Statistical Register of New South Wales, published annually, and only a brief reference to the rates collected by each authority is made in this volume.

The gross collections by the State authorities, *i.e.*, the Department of Navigation of New South Wales and the Sydney Harbour Trust, during the last three years are shown below in comparison with those during the years 1910-11 and 1920-21:—

Charges.	Year ended 30th June.				
	1911.	1921.	1929.	1930.	1931.
	£	£	£	£	£
Pilotage	43,856	74,733	70,029	64,527	58,221
Harbour Removal Fees	7,306	10,647	4,718	3,958	3,786
Harbour and Light Rates	41,331	49,551	50,855	48,722	46,015
Navigation Department Fees, etc.	9,256	10,839	2,951	2,328	1,170
Harbour and Tonnage Rates (Out-ports)	6,792	72,865	157,517	132,482	116,690
Sydney Harbour Trust—					
Wharfage and Tonnage Rates	228,379	475,230	724,477	654,625	499,736
Rents of Wharves, Jetties, etc.	77,930	188,473	201,786	202,724	} 295,500
Rents of other premises	46,178	71,666	106,388	108,766	
Miscellaneous	22,273	61,629	70,947	51,819	44,841
Total	483,301	1,015,633	1,389,668	1,269,951	1,065,959

The light-houses and light dues collected in Australia by the Commonwealth Government during the year ended 30th June, 1930, amounted to £190,180, and receipts under the Federal Navigation Act to £11,030.

Charges levied on Ships.

The principal charges imposed under Federal legislation are light dues and fees for the survey of ships, the adjustment of compasses, etc.

The Commonwealth light dues must be paid in respect of every ship entering a port in Australia. The rate, payable quarterly, is 9d. per ton (net), and payment at one port covers all Australian ports which the vessel may enter during the ensuing period of three months. Vessels calling at only one port in Australia *en route* to an oversea destination are charged at the rate of 5d. per ton (net). If a vessel is laid up for a period of at least one month, a proportionate remission of the light dues may be made.

The Federal Navigation Act prescribes that sea-going vessels must be surveyed at least once in every twelve months, and a vessel may not go to sea without a certificate of survey or equipment issued by the Federal Department of Navigation, or other approved certificate. The fees for survey and for compass adjustment are collected by the Federal Department

of Navigation and paid to licensed marine surveyors and compass adjusters. The prescribed survey fees for a twelve-months' certificate in respect of steamers, motor ships, and of sailing ships (15 tons and over) with auxiliary engines, range from £4 where the gross registered tonnage does not exceed 100 tons to £13 10s. if the gross tonnage is between 2,100 and 2,400 tons; and a charge is made for each additional 300 tons at the rate of 30s. for passenger ships and £1 for cargo ships. For ships under 1,800 tons propelled by sails only, the fee ranges from £3 to £6 with 15s. for each additional 300 tons. The survey fees for dry docking certificates range from £1 to £4, and double rates are charged for vessels without certificates of survey. The fees for the adjustment of a ship's compasses range from £2 2s. to £7 7s.

The certification of ships trading exclusively within the limits of the State of New South Wales is a function of the State Department of Navigation. The fees payable to marine surveyors for surveys in respect of a twelve months' certificate range from £2 to £8 where the tonnage does not exceed 600 tons, with £2 for each additional 300 tons up to a maximum of £20.

Pilotage rates are charged by the Navigation Department of New South Wales in respect of every ship entering or clearing a port in the State. Vessels engaged in the whaling trade and vessels in the charge of a master possessing a pilotage certificate are exempt unless a pilot is actually employed. The rate is 1½d. per ton (net), on arrival and on departure for ships (a) in ballast, (b) arriving solely for refitting or docking, (c) resorting to port solely on pleasure or for orders, repairs, provisions or coal, or through stress of weather or otherwise in distress. The rate for other ships is 2½d. per ton on arrival and on departure. The maximum rate is £25 and the minimum is £3 at Sydney or Newcastle, and £1 10s. at other ports.

Vessels being removed from one place to another in a port where there is a pilot establishment are charged harbour removal dues unless the master possesses a pilotage certificate. The rate for a removal varies from £1 to £4 10s. according to the size of the vessel; half rates are charged after the third removal.

The harbour and light rate imposed by the State Government is payable half-yearly at the rate of 4d. per ton (net). The exemptions are vessels engaged in the whaling trade, vessels entering port for refitting or docking, for pleasure, orders, repairs, provisions or coal, or in distress, and those in respect of which the rate has been paid at any port in the State during the preceding six months.

Tonnage rates are payable in respect of vessels of 240 tons and over while berthed at a wharf—the charge is $\frac{3}{16}$ d. per ton (gross) for each period of six hours. Vessels under 240 tons are liable for berthing charges, the daily rate in Sydney Harbour being £1 for vessels engaged in vehicular traffic, 1s. to 10s., according to passenger capacity, for vessels engaged in picnic, excursion or passenger traffic, and 2s. 6d. to 10s. for other vessels. Berthing charges in other ports are calculated at the rate of 2s. 6d. for each period of six hours. Where wharves are leased to shipping companies the tonnage rates and berthing charges in respect of their vessels are not charged as they accrue, but are accounted for in rent.

Moorings may be laid down in Sydney Harbour with the approval of the Harbour Trust Commissioners. An annual license fee of £5 is charged for moorings owned and used by shipping companies; and from 2s. 6d. to 10s. for those used in connection with docking premises or for small vessels. In other ports vessels are allowed to occupy Government mooring buoys for a period of two clear days free of charge, thereafter buoyage rates ranging

from £1 to £3 per day are imposed. Exemption from buoyage rates may be granted by the officer in charge of a port if a vessel is detained through stress of weather or when an unforeseen circumstance renders it desirable that the vessel should occupy a Government buoy.

Tugs, ferry boats, hulks, and launches plying for hire in Sydney Harbour must obtain a license, for which the charge is £1 per annum. For water boats supplying water to shipping in the port the annual license fee is £5; for lighters, 2s. per ton up to 200 tons and 1s. for each additional ton, the minimum fee being £2; and for watermen 5s. In other ports the annual license fees for ballast lighters and for watermen are £1 and 10s. respectively. The charge for water supplied to a vessel by the Sydney Harbour Trust is 2s. per 1,000 gallons if the water is taken through hoses supplied by the Commissioners; in other cases the rate is 1s. 6d. per 1,000 gallons.

Harbour and Wharfage Rates.

In addition to the foregoing charges levied on the vessels and payable by their owners, harbour or wharfage rates payable by the owners of the goods are imposed on the cargoes landed or shipped in the ports. Goods transhipped are subject to transshipment rates and not to inward or outward wharfage or harbour rates. Passengers' luggage is exempt. The schedules of rates for the port of Sydney are contained in the Sydney Harbour Trust regulations, and for other ports they are proclaimed under the Harbour and Tonnage Rates Act.

In Sydney Harbour, unless it is otherwise specified in the schedule, the inward rate is 4s. per ton assessed by weight or by measurement (40 cubic feet) at the option of the Commissioners. There are a number of special inward rates—some apply only to Australian products arriving from another port in the Commonwealth, *e.g.*, 2s. 6d. per ton of dairy produce, fresh fish, poultry, iron or steel, fencing wire, copper or stone; 2s. 6d. per 630 superficial feet of rough or sawn timber. The inward rate on coal is 1s. per ton, and on liquid fuel 2s. per ton, but only the transshipment rate—6d. per ton—is levied when these commodities are shipped in Sydney for consumption as bunker fuel by the loading vessel. Kerosene in the case is charged at the rate of 2½d. per case; green fruit—Australian 1½d. and other 2d. per package; vegetables, 1½d. per case; timber (other than Australian), 3s. 6d. per 630 super feet; copra, 3s. per ton; guano, 1s. 3d. per ton; sugar for refining, 2s. per ton; wool, 9d. per bale. The general rate on transshipments is 6d. per ton, but there are a number of special rates ranging down to ¾d. per ton, which is payable on firewood.

The general outward rate in operation in Sydney Harbour is 1s. 6d. per ton. The rate in respect of coal is 6d. per ton; wheat and coke 9d. per ton; wool 9d. per bale; ore 4½d. per ton.

In ports other than Sydney there is a schedule of inward rates for coastwise and interstate goods, and a separate schedule for oversea goods. The inward general rate for coastwise and interstate goods arriving at these ports is 2s. per ton, and special rates include coal and firewood 6d. per ton; coke and fertilisers 1s. per ton; ore 4½d. per ton; ore products 9d. per ton; timber 2s. per 630 super. feet. The general inward rate imposed on oversea goods is 4s. per ton by weight or by measurement, and the special rates include coal 1s. per ton; undressed timber 3s. 6d. per 630 super feet; ore 9d. per ton.

The outward rate on coastwise, interstate, and oversea goods is 1s. per ton, unless otherwise specified; ore and ore products are rated at 4½d. per ton; timber—sawn or rough—1s. 3d. per 630 super feet; wool shipped overseas 6d. per bale.

Storage Charges.

In order to avoid congestion on the wharves, storage charges are imposed on goods placed on a wharf if not removed within a specified period.

SHIPPING REGISTERS.

Shipping in New South Wales is registered in accordance with the Merchant Shipping Act of the Imperial Parliament, under sections which apply to the United Kingdom and to all British dominions. The Act prescribes that all British vessels engaged in trade must be registered, except those under 15 tons burthen employed in the coasting trade of the part of the British Empire in which the owners reside. Ships not legally registered are not entitled to recognition as British ships and are not permitted to proceed to sea. Although the registration of vessels under 15 tons is not compulsory, many small vessels are registered at the request of the owners, as registration facilitates the transaction of business for the purpose of sale or mortgage. The flag for merchant ships registered in Australia is the red ensign usually flown by British merchant vessels, defaced with a white seven-pointed star indicating the six federated States of Australia and the territories of the Commonwealth and the five smaller white stars representing the Southern Cross.

In New South Wales shipping registers are kept at the ports of Sydney and Newcastle. The following statement shows particulars regarding the shipping on the registers, as at 30th June, 1931:—

Tonnage Class.	Steam.		Motor.		Sailing.		Total.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
Under 50 tons	231	5,103	260	2,698	198	2,727	689	10,528
50 and under 500...	193	30,349	2	307	69	10,886	264	41,542
500 " " 1,000...	17	11,868	1	516	9	7,056	27	19,440
1,000 " " 2,000...	9	14,073	...	...	3	3,727	12	17,800
2,000 and over	8	21,189	1	2,626	...	...	9	23,815
Total	458	82,582	264	6,147	279	24,396	1,001	113,125

Sixty-seven vessels, with an aggregate tonnage of 7,217 tons (net), were sold during the year 1929-30. All these vessels were sold to British subjects, and the transactions did not necessarily involve removal from the registers. In the following year twenty-two vessels, aggregate tonnage 1,320 tons, were sold to British subjects, and two vessels, 3,379 tons, to foreigners.

Excluding yachts, launches, and boats, twelve vessels, valued at £57,900, were imported into New South Wales during 1929-30, viz., two valued at £49,000, from the United Kingdom, and one, valued at £8,000, from Germany. One vessel, valued at £10,750, was exported to New Zealand. During 1930-31 six vessels, value £483,790, were imported, including four valued at £450,850 from the United Kingdom, and one valued at £25,000 was exported to New Zealand.

SHIPBUILDING AND REPAIRING.

Accommodation for building, fitting, and repairing ships has been provided by State and private enterprise at Sydney and Newcastle, and at four other ports in New South Wales.

In Sydney Harbour there are four large graving docks, five floating docks, and seven patent slips. Two graving docks, the Fitzroy and the Sutherland, situated on Cockatoo Island, were under the control of the Government of New South Wales until February, 1913, when they were transferred to the Commonwealth. They are controlled now by the Australian Commonwealth

Shipping Board. The Sutherland Dock is 720 feet long, and can accommodate a vessel with a breadth of 88 feet, and a draught of 30 feet. The Fitzroy Dock is 497 feet long and its breadth is 45 feet. It can take vessels drawing 18 feet 3 inches. At Cockatoo Island there are also two patent slips, where vessels drawing 9 feet and 4 feet respectively may be slipped. The vessels docked at the Cockatoo Island docks during the year ended 30th June, 1930, numbered 101, including 30 warships; their gross tonnage was 434,916. The number in the following year was 77, including 33 ships of war, and the gross tonnage was 329,087 tons. The vessels slipped in 1929-30 numbered 43, with a gross tonnage of 1,419 tons; and 42 vessels, 1,386 tons were slipped in 1930-31.

A private company, Mort's Dock and Engineering Company, Limited, owns two graving docks in Sydney Harbour, four floating docks and four patent slips. The Woolwich Dock is 850 feet long, and at high tide can take vessels drawing 28 feet; Mort's Dock is 625 feet long, and vessels drawing 17 feet may be floated into it. The largest of the slips is 270 feet long; it can take a vessel weighing 1,600 tons gross, drawing 11 feet forward and 16 feet aft. The works of the Mort's Dock and Engineering Company are equipped with plant for shipbuilding, as well as for all classes of repairs.

There is another dock, under private ownership, with a lifting power of 300 tons, and the State Government maintains a slip with a lifting capacity of 100 tons.

At Newcastle there are a floating dock and two patent slips attached to the State Government Dockyard at Walsh Island, and three slips which are privately owned. Of the latter, the largest is 200 feet long and 40 feet wide; it can take vessels which weigh 800 tons, and draw 8 feet forward and 12 feet aft.

The works at Walsh Island were established on a site which was originally a sandspit, and has been built up by dredging from the bed of the Hunter River. In 1913, after the Cockatoo Dockyard had been transferred to the Federal Government, workshops were erected at Walsh Island for the construction and repair of Government dredges and other vessels. Subsequently the establishment was extended, and provision was made for the construction of merchant ships and ferry steamers, and for other classes of engineering and iron work. The length of the dock is 630 feet and it is 82 feet broad, with a capacity for floating vessels up to 15,000 tons. The cost of constructing the floating dock to 30th June, 1930, amounted to £500,438, including £135,000 contributed by the Commonwealth. The patent slips are 292 feet in length; one has a lifting power of 900 tons and the other 400 tons. During the year ended 30th June, 1931, twenty-two vessels were slipped at Walsh Island, and twenty-three were docked. The gross tonnage of these vessels was 69,875 tons.

Graving docks under the control of the State Government are maintained at the ports of the Tweed, Richmond, Clarence, and Manning Rivers to meet the requirements of vessels engaged in the coastal trade. The largest, at Richmond River, is 214 feet long and 45 feet wide; it can accommodate a vessel with a draught of 10 feet. Twenty-five vessels with a gross tonnage of 1,633 tons were docked at these ports during the year 1930-31.

During recent years only a few vessels have been built in New South Wales, the number in 1929-30 being thirteen motor vessels of an aggregate tonnage of 199 tons, and in 1930-31 three motor vessels 38 tons and two sailing vessels 29 tons.

SEAMEN.

Matters relating to the employment of seamen are subject to control by the Commonwealth Government in terms of the Federal Navigation Act. Provision is made for the regulation of the methods of engagement and

discharge, the form of agreement, rating, the ship's complement, discipline, hygiene, and accommodation. Mercantile marine offices were established in March, 1922, to undertake functions performed hitherto by State shipping offices at Sydney and Newcastle, where engagements and discharges are registered.

The following statement shows the number of transactions at the offices during the last five years:—

Year ended 30th June.	Engagements Registered.			Discharges Registered.			Licenses to Ship.		
	Sydney.	New-castle.	Total.	Sydney.	New-castle.	Total.	Sydney.	New-castle.	Total.
1927	23,921	4,152	28,073	24,064	4,099	28,163	874	211	1,085
1928	22,389	3,772	26,161	23,273	3,874	27,147	804	142	946
1929	17,848	2,091	19,939	18,195	2,138	20,333	579	63	642
1930	17,740	1,573	19,313	17,429	1,337	18,766	501	35	536
1931	13,916	1,836	15,752	13,271	2,134	15,405	315	40	355

The rates of wages, hours of labour, and conditions under which crews work on vessels engaged in the interstate and coastal trade of Australia are fixed by awards and agreements under the Commonwealth Conciliation and Arbitration Act. In accordance with the practice of the Federal industrial tribunals the rates are subject to periodical adjustment on account of changes in retail prices, and they were reduced by 10 per cent. in 1931 by order of the Commonwealth Arbitration Court.

The rates ruling in August, 1931, were as follow, victualling and accommodation being provided in addition to wages:—

Occupation.					Rates of Wages per Month.						
					£	s.	d.	£	s.	d.	
Officers—Chief	18	2	9	to	30	9	9
Second	16	6	9	„	26	17	9
Third	17	4	9	„	22	16	9
Junior	£16 6s. 9d.						
Engineers—Chief	26	13	3	to	57	9	9
Second	21	18	9	„	35	7	0
Third	19	9	3	„	27	15	9
Fourth	16	15	9	„	23	12	0
Firemen	£14 17s. 0d.						
Trimmers	£13 1s. 0d.						
Seamen—Steamers	£13 1s. 0d.						
Cooks	11	6	0	to	18	19	0
Stewards	11	14	0	to	15	15	0
Stewardesses	£8 6s. 6d.						

The monthly rates payable to officers and engineers vary according to the size of the vessels on which they are engaged.

Except where provided specifically in the awards and agreements, the ordinary hours of work for seamen are eight per day, and overtime must be paid for time worked in excess of eight hours. Manning conditions are regulated by committees representing the shipowners and the unions.

Compensation to seamen is provided by a federal law, the Seamen's Compensation Act, 1911, which applies to ships in the service of the Commonwealth (exclusive of naval and military service), and to ships trading with Australia, or engaged in any occupation in Australian waters, or in trade and commerce with other countries or among the States. The schedules of the Act indicate the amount of compensation payable, in case of death or

total or partial incapacity resulting from personal injury by accident to seamen in the course of their employment. Methods of procedure for the recovery of compensation are prescribed by regulations under the Act.

Seamen employed on New South Wales ships, *i.e.*, ships registered in New South Wales, or owned or chartered by the Government or by a person or body corporate whose place of business is in the State, may claim compensation under the Workers' Compensation Act of New South Wales, if they agree not to proceed under the federal law.

SAFETY OF LIFE AT SEA.

The navigation laws contain stringent provisions designed to prevent unseaworthy ships from proceeding to sea, and to ensure that all vessels are manned by competent crews, that life-saving appliances are carried, and that special arrangements are made to safeguard dangerous cargoes. Regulations have been framed for the prevention of collisions, also rules regarding the lights and signals to be used.

On account of the regularity of the coast of New South Wales and the absence of islands, navigation in the seaboard waters is usually safe. Along a coastline less than 700 miles in length there are about thirty light-houses, and lighted beacons, leading lights, and other guides have been placed for the safety of harbour navigation in the ports of Sydney, Newcastle, Port Kembla and other shipping places. The lights on the sea coast are under the control of the Commonwealth.

Pilotage is a State service under the provisions of the Navigation Act of New South Wales. A pilot must be engaged for every vessel entering or leaving a port of New South Wales unless the master holds a certificate of exemption. Such certificates may be granted to British subjects only, for use in respect of British ships registered in Australia or New Zealand and employed in the trade between ports in Australasia and the South Sea Islands, or engaged in whaling. The pilotage rates are shown on page 139.

Wrecks and shipping casualties which occur to British merchant shipping on or near the coast of New South Wales are investigated by Courts of Marine Inquiry.* The majority of wrecks reported are small coasters under 200 tons. The following statement shows the wrecks reported in each of the last five years. The figures relate to vessels with crews who were domiciled in New South Wales:—

Year ended 30th June.	British Vessels.				Total Tonnage (net).	Crews and Passengers.	Lives Lost.
	Steam.	Motor.	Sailing.	Total.			
1927	3	...	...	3	2,951	273	7
1928	6	...	1	7	2,322	206	45
1929	4	...	...	4	581	29	6
1930	3	...	...	3	302	31	...
1931	2	1	...	3	2,722	258	...

Lifeboat stations are maintained at Sydney and at Newcastle, and life-saving appliances are kept at certain places along the coast. The pilot vessels are fitted for rescue work, and steam tugs are subsidised for assisting vessels in distress.

The Royal Shipwreck Relief and Humane Society of New South Wales affords relief to distressed seamen and their dependents and to the crews and necessitous passengers wrecked in New South Wales waters. It is maintained by public subscription, without subsidy from the State. The relief given during the year 1929-30 amounted to £1,237.

* See chapter relating to Law Courts.

LAND TRANSPORT SERVICES.

It is now an established policy in New South Wales that the railways shall be under the control of the State, although a few private lines are in operation.

The State railway services are administered by a statutory body consisting of three commissioners appointed by the Governor. The Railway Commissioners controlled the tramways also, until these services were transferred to transport trusts constituted in terms of the Transport Act, 1930, which was brought into operation by proclamation on 5th August, 1930.

The Transport Act relates to land transport services other than railways. Its administration is vested in the Commissioner of Road Transport appointed by the Governor for a term of seven years. He is chairman of the transport trusts, which in particular districts are charged with the supervision and regulation of the road transport services and the licensing and regulation of public vehicles. A transport trust has the exclusive right to operate tramway services in its district, and may conduct other transport services, except railways. A transport trust was constituted for the metropolitan district in August, 1930, and for Newcastle and district in October, 1930. Trusts may be constituted for other country districts by proclamation.

The metropolitan transport district is comprised by the county of Cumberland and the parish of Cowan in the county of Northumberland, which was added by proclamation on 1st October, 1930. The area under the supervision of the Newcastle and District Transport Trust embraces the city of Newcastle, its suburban municipalities and parts of the Tarro and Lake Macquarie Shires.

The Metropolitan Transport Trust consists of seven members, including the Commissioner of Road Transport as chairman, and a member appointed by the Governor for a period of three years to represent business interests in the district, as vice-chairman. The other members were appointed by the Governor for a term which is not to exceed three years, and their appointment is liable to be terminated after a month's notice, so that the vacancies may be filled by election. For the purposes of elections, the city of Sydney is one constituency, and the other municipalities and the shires in the district are grouped to form four constituencies, and in each constituency the aldermen and councillors are to elect one member. The Newcastle and District Transport Trust is constituted in a similar manner under the chairmanship of the Commissioner of Road Transport, and its district is subdivided into constituencies, the city of Newcastle being one. Persons are not eligible for membership of a trust if they hold a motor omnibus service license or are financially interested in a transport undertaking in the district of the trust, except as shareholder in a company of more than twenty persons. Members, other than the chairman, are required to reside in the district of the trust. They are remunerated by fees, and the amount payable to any member may not exceed £150 per annum.

In August, 1931, the State Transport (Co-ordination) Act was passed to authorise the appointment of the State Transport Co-ordination Board for the purpose of improving and co-ordinating the services and facilities relating to transport. The board consists of four members appointed for a term not exceeding two years and eligible for re-appointment for a further term of two years. The Board will be required, as soon as practicable, to furnish a report to the Minister as to steps to be taken to co-ordinate the

activities of the Railway Commissioners, the Commissioner of Road Transport, the Management Board (which controls the working of the tramways) and the Main Roads Board (described in the chapter entitled Local Government), and to provide for the administration of these services under one corporate body. The Board may be required also, at the direction of the Minister, to investigate the administration or operations of the statutory authorities mentioned above, and to advise the Minister on matters relating to the transport of passengers and goods and to traffic generally. The Act contains provisions, which commenced on 2nd November, 1931, for the regulation of motor vehicles, including aircraft, used for the conveyance of passengers or goods for hire or in the course of trade or business. Particulars of these provisions are shown on page 174.

RAILWAYS.

The railways open for traffic at 30th June, 1931, included 6,044 miles of line vested in the Railway Commissioners of New South Wales; a line 5 miles long running from Liverpool to Holdsworthy which is owned by the Federal Government; 203 miles of border railways in the Riverina district owned by the State of Victoria; and 109 miles of private railways available for general traffic. The total length of the routes covered by these railways was 6,361 miles. The length of State railways laid with one or more tracks is shown on page 150.

STATE RAILWAYS.

The Railway Commissioners, viz., the Chief Commissioner and two assistant Commissioners are appointed for seven years, though the present occupant of the office of Chief Commissioner was appointed for an additional period of about two years, being the unexpired portion of his predecessor's term. There are also four Area Commissioners, appointed by the Chief Commissioner, to supervise operations within areas allotted to them, their headquarters being in Sydney, Newcastle, Orange, and Goulburn respectively.

The railway property is vested in the Railway Commissioners as a body corporate; they conduct the services on existing lines and construct the new lines authorised by the Legislature. By-laws for the regulation of the services, including those by which rates of freight and fares are prescribed, must be approved by the Government before they become operative.

Up to 30th June, 1928, the Commissioners paid all receipts into consolidated revenue, and moneys to be expended on the services as well as funds for construction were appropriated annually by Parliament. This procedure was altered as from 1st July, 1928, when the railway and tramway accounts were separated from the Consolidated Revenue Fund in terms of the Government Railways Amendment Act, 1928, which provides that the receipts, loan moneys for railway purposes, and fines and penalties recovered by the Commissioners be paid into the Government Railways Fund.

Provision has been made for the establishment of a renewals fund to meet Parliamentary appropriations for renewals, reconstruction and conversion of lines, buildings and other wasting assets. These provisions are to commence on a date to be proclaimed, and after proclamation the Commissioners will be required to transfer from revenue to the renewals fund an amount determined annually by the Governor after investigation by a Committee of Review. The renewals fund will receive also any additional amounts appropriated by Parliament. The net profit in each year, as certified by the Auditor-General, is transferable to a reserve account to be available only to meet losses incurred in any year, and for the reduction of rates and fares.

The Committee of Review consists of the Auditor-General, the Chief Commissioner, and the Under Secretary to the Treasury. Two additional members may be appointed by the Governor. The Committee will determine the capital debt of the railways and tramways as at 30th June, 1928, and the Commissioners must pay to the Treasurer such a proportion of the

interest, sinking fund, and other charges in respect of the public debt as the capital debt so determined bears to the outstanding public debt. The Government will continue to raise loan moneys for railways and tramways, and interest and charges on moneys so provided since 30th June, 1928, are payable out of railway and tramway receipts.

The Railways Fund shares proportionately in the benefits and obligations of the State under the financial agreement between the Commonwealth and the States, which is described in the chapter of the volume entitled "Public Finance," as if the fund had not been separated from the Consolidated Revenue Fund. For this reason the Government Railways Amendment Act, 1928, provided that contributions for sinking fund were to be a charge against the revenue of the railways as from 1st July, 1928, but the operation of these provisions was suspended in 1930, to a date to be proclaimed.

Provision is made in the amending Act of 1928 for annual contributions from State revenues to make good two-thirds of the loss incurred on country developmental railways, the amount of contribution not to exceed £800,000 in any year. This is offset to a considerable extent by additional charges against the receipts of the railways, *e.g.*, provision for sinking fund, superannuation, etc.

Proposals for the construction of new railway lines are submitted in the Legislative Assembly by the Minister for Railways and are investigated by the Parliamentary Standing Committee on Public Works, consisting of members of both Houses of Parliament. If the Assembly passes a resolution in favour of a proposal, a bill is introduced to sanction its construction. The order of construction and the rate of progress of railway lines and works are determined by the Commissioners, and interest on lines under construction may be added to the capital cost.

The finances of the railways and tramways, as Government business undertakings, and their relation to the revenue, expenditure, and public debt of the State, are discussed in the chapter of this volume entitled "Public Finance."

LENGTH AND COST OF STATE RAILWAYS.

The statistics of State railways shown in this chapter refer to the lines vested in the Railway Commissioners of New South Wales, including the Campbelltown to Camden and Yass tramways, which are worked in conjunction with the railways.

The first railway line, 14 miles in length, was opened for traffic between Sydney and Parramatta on 26th September, 1855, and communication was established between Newcastle and East Maitland on 11th April, 1857.

The total length of the lines open at 30th June, 1931, was 6,044 miles, distributed as follows:—Southern system, 2,113 miles; Western, 2,262 miles; and Northern, 1,669 miles; in addition there were 1,222 miles of sidings and crossovers.

The total capital expenditure on lines open for traffic amounted to £132,565,362 as at 30th June, 1931. The cost of construction was £91,298,206, and the expenditure on rolling stock, etc., was £41,267,156, *viz.*:—Rolling stock, £25,918,930, power stations, substations and plant, £8,132,214; machinery, £2,270,219; workshops, £2,604,938; Lithgow coal mine, £567,819; furniture, £10,036; and stores advance account, £1,763,000.

The growth of the State railway system is illustrated in the following table:—

Period.†	Lines opened for traffic during the period.	Lines open for traffic at end of period.			Capital expenditure on lines open for traffic—	
		Total length.	Population per mile.	Area per mile.	During the period.	Total at end of period.
	Miles.	Miles.	No.	Sq. miles.	£	£
1855-64 ...	143	143	2,789	2,170	2,631,790	2,631,790
1865-74 ...	260	403	1,427	770	4,212,756	6,844,546
1875-84 ...	1,215	1,618	559	192	13,235,592	20,080,138
1885-94 ...	883	2,501	490	124	15,775,133	35,855,271
1895-1904 ...	789	3,281	435	95	6,433,246	42,288,517
1905-14 ...	686	3,967	472	78	18,976,352	61,264,869
1915-24 ...	1,556	5,523	403	56	32,090,298	93,355,167
1925 ...	133	5,656	402	55	6,268,049	99,623,216
1926 ...	86	5,742	404	54	5,614,452	105,237,668
1927 ...	8	5,750	413	54	7,551,481	112,789,149
1928 ...	117	5,867	413	53	5,195,225	117,984,374
1929 ...	73	5,940	415	52	6,345,048	124,329,422
1930 ...	34	5,974	416	52	1,988,814	126,318,236
1931 ...	70	6,044	415	51	6,247,126*	132,565,362

* Includes £3,341,254 in respect of power-stations, etc., transferred from tramways, being expenditure of earlier years. † Calendar years to end of 1887, later years ended June.

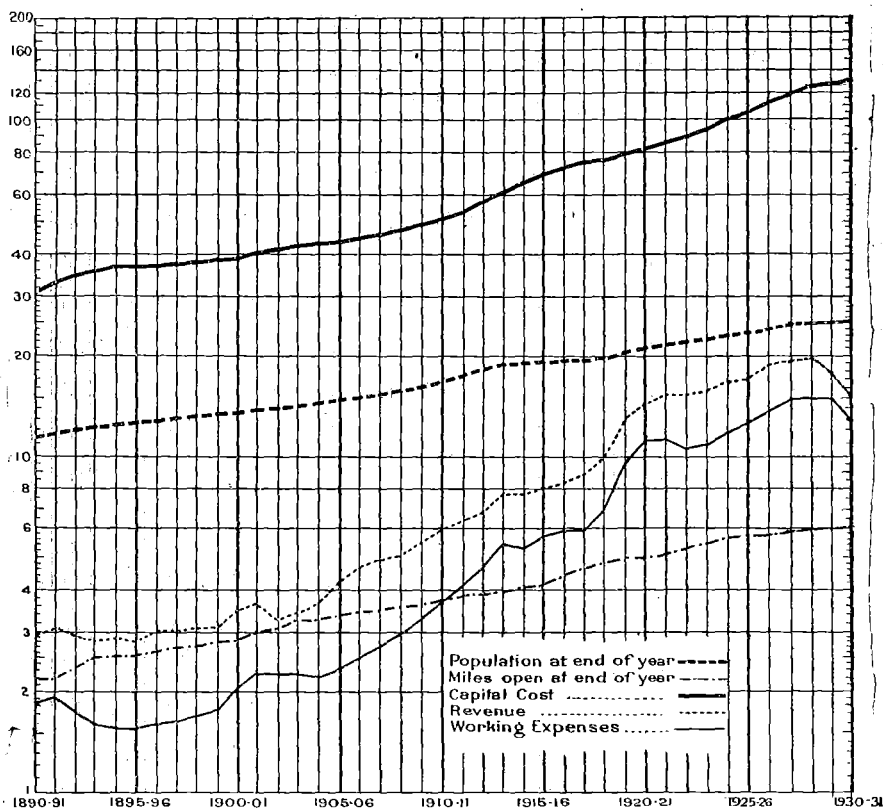
Of £132,565,362 expended to 30th June, 1931, an amount of £675,245 was provided from consolidated revenue, leaving a balance of £131,890,117 raised by debentures and stock. The capital expenditure charged to the railways in 1930-31 included £3,341,254 not actually expended during the year, as it represented expenditure on power stations, etc., which, up to 5th August, 1930, formed a debit against the tramways.

The average cost per mile as at 30th June, 1931, was £21,933, viz., construction £15,105 and equipment £6,828. The cost of construction varies greatly according to the class of traffic for which the lines are constructed and the number of tracks laid, also by reason of the different physical characteristics of the wide expanse of territory through which they run.

The standard rails are 100 lb. in the metropolitan area, 80 lb. and 90 lb. on the main trunk lines, and 60 lb. on branch lines. Sleepers of Australian hardwood, measuring 8 ft. x 9 in. x 4½ in., are laid at the rate of eighteen per 40 feet of rail along the permanent way.

RAILWAYS, 1890-91 TO 1930-31.

Ratio Graph.



The numbers at the side of the graph represent £1,000,000 of capital cost, revenue and working expenses; 100,000 of population and 1,000 miles of railway.

The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the rate of increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

The following statement shows the length of line laid with one or more tracks at intervals since 30th June, 1901:—

At 30th June.	Single.	Double.	Triple.	Quadruple.	Sextuple.	Total.
	miles.	miles.	miles.	miles.	miles.	miles.
1901	2,678	158½	...	8½	...	2,845
1911	3,476½	276	...	8½	...	3,761
1921	4,428	572	7½	34½	1*	5,043
1926	5,083	606½	9½	42	1*	5,742
1927	5,090	609	8	39	4	5,750
1928	5,207	609	8	35	8	5,867
1929	5,278	611	8	35	8†	5,940
1930	5,312	611	8	35	8†	5,974
1931	5,381	612	8	35	8†	6,044

*Five tracks. †Includes 47 chains with eight tracks.

There are duplicate lines on the Main Western line as far as Orange; the Southern line is duplicated as far as Cootamundra, the Northern line as far as Branxton, and the South Coast line to Wollongong, except certain tunnels.

EARNINGS AND EXPENSES.

As the carriage of goods and live stock constitutes the principal source of railway revenue, the earnings in each year are affected by the seasons experienced in the agricultural and pastoral districts. In unfavourable seasons the carriage of fodder and the transfer of live stock at reduced rates cause a diminution in the earnings, and at the same time an increase in the working expenses. The extension of the lines into sparsely settled districts also causes an increase in the proportion of working expenses to total earnings, as many of these lines do not earn the cost of maintenance.

Year.	Gross Earnings.	Working Expenses.		Net Earnings.		Interest on Capital.	Loss.
		Amount.	Proportion to Gross Earnings.	Amount.	Per cent. on Capital.		
	£	£	per cent.	£	per cent.	£	£
1901	3,573,779	2,118,201	59.3	1,455,578	3.78	1,424,940	£30,638
1911	6,042,205	3,691,061	61.1	2,351,144	4.67	1,797,146	£553,998
1916	8,006,078	5,661,168	70.7	2,344,910	3.45	2,568,659	223,749
1921	14,267,205	11,032,677	77.3	3,234,528	4.01	3,811,560	577,032
1926	16,939,032	12,519,993	73.9	4,419,039	4.30	5,249,710	830,671
1927	18,906,543	13,795,853	73.0	5,110,690	4.69	5,562,308	451,618
1928	19,029,512	14,756,327	77.5	4,273,185	3.70	5,882,452	1,609,267
1929	19,615,616	14,978,050	76.4	4,637,566	3.82	6,150,000	712,434*
1930	17,826,692	14,962,423	83.9	2,864,269	2.28	6,420,643	2,756,374*
1931	15,205,741	12,899,646	84.8	2,306,095	1.75	7,527,715†	4,421,620*

* In addition to loss covered by annual contribution from consolidated revenue, £800,000.

† Includes exchange on remittances abroad, £737,633.

‡ Profit.

State railways being regarded as a developmental agency in the settlement of the country rather than as a revenue-producing enterprise, freights and fares have not been raised sufficiently to cover the increases in cost of maintenance and interest charges which occurred in recent years. Moreover the railway finances bear the burden of substantial concessions made for the direct benefit of primary and secondary industries. These include rebates from ordinary charges for the transport of livestock and fodder, and concessions in respect of the carriage of raw materials and the products of certain manufacturing industries which are assisted for national reasons. The ratio of working expenses to gross earnings was exceptionally high in 1929-30. Earnings were low on account of the small wheat harvest, dislocation in the coal-mining industry, and adverse business conditions. On the other hand, there was no appreciable reduction in working expenses, and the interest bill was high. A sum of £800,000 was contributed from consolidated revenue towards losses on country developmental lines; nevertheless there was a deficiency of £2,756,374 on the year's operations.

In the following year there was a general decline in receipts on account of adverse economic conditions, moreover the contribution of £800,000 from the State's revenue was almost offset by the cost of remitting moneys abroad for the payment of interest, etc., £737,633.

The following table shows the gross earnings, working expenses, and net earnings per train mile and per average mile open at intervals since 1901:—

Year ended 30th June.	Per Train Mile.			Per Average Mile Open.		
	Gross Earnings.	Working Expenses.	Net Earnings.	Gross Earnings.	Working Expenses.	Net Earnings.
	d.	d.	d.	£	£	£
1901	79·68	47·23	32·45	1,268	751	517
1911	85·27	52·09	33·18	1,627	994	633
1921	150·23	116·17	34·06	2,843	2,198	645
1926	165·09	122·02	43·07	2,960	2,188	772
1927	172·36	125·77	46·59	3,290	2,401	889
1928	169·80	131·67	38·13	3,266	2,533	733
1929	171·93	131·28	40·65	3,323	2,537	786
1930	160·16	134·42	25·74	2,992	2,511	481
1931	143·15	121·44	21·71	2,529	2,145	384

NON-PAYING LINES.

Many of the railways of New South Wales have been constructed with the view of promoting settlement and developing the natural resources of the State rather than of meeting requirements already existing, and traffic over a number of lines is conducted at a loss. Even on portions of the main lines the earnings do not cover working expenses and interest on the capital cost, and most of the branch lines of comparatively recent construction are unprofitable.

Of the main lines, only the Southern line returns a profit over its whole length; the Western line from Nyngan to Bourke, the Northern line from Tamworth to Wallangarra, the North Coast lines, and the South Coast line from Kiama to Nowra are worked at a loss.

Particulars relating to non-paying lines are shown below, mainly for the year ended 31st December, 1929:—

Line.	Length.	Capital Cost.	Interest.	Working Expenses.	Earnings.	Loss after providing for Working Expenses and Interest.
Northern—						
Main Line—Tamworth to Wallangarra	m. c.	£	£	£	£	£
.. .. .	211 27½	3,473,340	178,551	374,674	513,826	59,339
Branch lines	476 77½	2,602,344	133,776	229,354	242,808	120,322
Total Northern	688 24½	6,075,684	312,327	604,028	756,634	159,721
North Coast and Branches	522 67½	8,793,021	452,016	654,900	704,579	402,337
Southern—Branch lines	1,376 62½	9,826,482	499,786	719,067	645,820	573,033
South Coast—Kiama to Nowra	22 59½	411,295	21,143	31,456	25,549	27,050
Western—						
Main Line—Nyngan to Bourke	126 43½	760,704	39,105	64,097	46,265	56,937
Branch lines	1,332 28½	9,137,097	472,275	843,176	833,180	482,271
Total Western	1,458 71½	9,947,801	511,380	907,273	879,445	539,208
Suburban—Clyde to Carlingford	4 41½	73,760	3,792	22,374	10,249	15,917
Total Specified Lines	4,074 8	35,128,943	1,800,444	2,339,098	3,022,276	1,717,266

Similar data in calendar years are not available for all lines; the total deficiency on paying and non-paying lines being £1,512,434 in the year ended 30th June, 1929, and £3,556,374 in 1929-30.

DISTRIBUTION OF EARNINGS AND EXPENSES.

A statement of the various items of earnings and working expenses of all lines during each of the last five years is shown below:—

Particulars.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
<i>Earnings.</i>	£	£	£	£	£
Passengers	6,643,337	6,998,147	7,238,329	6,610,951	5,172,359
Mails, parcels, horses, etc. £	830,208	853,365	886,387	829,065	698,317
Total Coaching ...	7,473,545	7,851,512	8,124,716	7,440,016	5,870,676
Refreshment-rooms	684,536	688,984	745,070	660,142	515,156
Goods—					
Merchandise	5,890,130	5,556,712	6,196,543	5,110,608	4,546,155
Wool	849,622	754,961	804,064	767,650	739,586
Livestock	1,563,973	1,645,305	1,315,552	1,454,448	1,200,983
Minerals	2,186,868	2,271,608	2,063,033	2,021,161	1,354,682
Total Goods £	10,490,593	10,228,586	10,379,192	9,353,867	7,841,406
Rents	156,829	164,178	221,088	225,472	190,123
Miscellaneous	101,040	96,252	145,550	147,195	788,380
Total Earnings £	18,906,543	19,029,512	19,615,616	17,826,692	15,205,741
<i>Working Expenses.</i>					
Maintenance of way and works	2,146,257	2,573,142	2,538,981	2,583,896	2,199,347
Rolling Stock—					
Maintenance	3,026,627	3,336,934	3,448,215	3,676,728	2,991,184
Motive power—					
Coal, etc.	1,227,169	1,174,478	1,151,235	1,009,554	786,403
Other	2,292,503	2,260,667	2,203,501	2,024,369	1,678,301
Other rolling stock ...	199,691	212,547	200,513	215,645	186,831
Transportation and traffic	3,733,225	3,877,254	3,848,525	3,703,106	3,212,276
Electrical	86,598	197,592	292,176	405,940	623,829
General charges and stores	466,314	500,255	506,093	553,683	527,024
Refreshment-rooms	617,469	623,458	728,811	655,302	527,001
Contribution to Superannuation Fund ... ..	...	...	60,000	134,200	167,450
Total Working Expenses ...	£13,795,853	14,756,327	14,978,050	14,962,423	12,899,646
Net Earnings	£ 5,110,690	4,273,185	4,637,566	2,864,269	2,306,095

During 1930-31 the earnings derived from the carriage of passengers represented 34 per cent. of the total; mails, parcels, etc., 4.6 per cent.; goods, 51.6 per cent.; refreshment-rooms, 3.4 per cent.; and miscellaneous items, including over £640,000 for sales of electricity to tramways, etc., 5.2 per cent. The expenditure on locomotive power represented 19 per cent. of the working expenses; transportation and traffic, 25 per cent.; maintenance of rolling stock, 23 per cent.; and maintenance of way and works, 17 per cent.

Coaching Traffic.

Particulars of the passenger traffic—suburban and country—and the receipts therefrom are shown in the following statement. Suburban lines are those within 34 miles of Sydney or Newcastle. The figures relating to

miles travelled in years prior to 1926 are not strictly comparable with those of later years, owing to an alteration in the method of estimating the mileage travelled by season ticket holders:—

Year ended June 30.	Passenger Train Mileage.	Number of Passenger Journeys.			Miles Travelled.			Amount Received from Passengers.
		Suburban.	Country.	Total.	Suburban.	Country.	Total.	
000 omitted.								£
1901 ...	4,927	26,042	3,219	29,261	164,638	*	*	1,143,430
1911 ...	8,094	54,103	6,817	60,920	367,729	538,488	906,217	2,074,860
1921 ...	11,301	110,256	10,479	120,735	799,586	821,271	1,620,857	5,736,256
1926 ...	14,038	119,825	10,901	130,726	912,757	762,334	1,675,091	6,311,690
1927 ...	15,044	130,317	11,299	141,616	982,579	782,799	1,765,378	6,643,337
1928 ...	16,036	136,796	11,251	148,047	1,026,075	783,232	1,809,307	6,998,147
1929 ...	16,738	140,158	10,958	151,116	1,045,854	774,847	1,820,701	7,238,329
1930 ...	16,952	137,548	10,345	147,893	1,018,192	712,881	1,731,073	6,610,951
1931 ...	16,496	119,016	7,796	126,812	867,733	546,328	1,414,061	5,172,359

* Not available.

Passenger traffic increased very rapidly between 1901 and 1921. The increase was most marked on suburban lines, where it continued until 1929-30, though country traffic commenced to decline in 1927-28. Further analysis of the traffic figures indicates that the expansion in recent years occurred in second-class journeys.

In the aggregate second-class passengers paid £3,339,000, or 74 per cent. of the total receipts from passengers in 1930-31, and first-class passengers £1,333,000, or 24 per cent. Corresponding ratios in 1920-21 were 65 per cent. and 35 per cent.

Particulars are shown below regarding first and second class passenger traffic on suburban and country lines during the years ended June, 1926, and 1931:—

Particulars.	Year ended June, 1926.			Year ended June, 1931.		
	First Class.	Second Class.	Total.	First Class.	Second Class.	Total.
<i>Suburban Lines.</i>						
Journeys—						
Ordinary Passengers ... 000	4,667	39,098	43,765	2,219	44,236	46,455
Season Ticket Holders ... 000	9,408	26,121	35,529	8,668	42,584	51,252
Workmen's ... 000	...	40,531	40,531	...	21,309	21,309
Total Journeys ... 000	14,075	105,750	119,825	10,887	108,129	119,016
Miles Travelled ... 000	107,721	805,036	912,757	86,107	781,627	867,734
Average Mileage per Passenger ...	7.65	7.61	7.62	7.91	7.23	7.29
Amount Received from Passengers ... £	347,896	1,932,307	2,280,203	248,373	2,191,254	2,439,627
Average Receipts per Passenger per mile ... d.	0.77	0.58	0.60	0.69	0.67	0.67
<i>Country Lines.</i>						
Passengers ... 000	2,694	8,206	10,901	1,707	6,089	7,796
Miles travelled ... 000	269,029	493,305	762,334	168,551	377,777	546,328
Average Mileage per Passenger ...	99.86	60.11	69.94	98.70	62.05	70.08
Amount Received from Passengers ... £	1,764,809	2,266,678	4,031,487	1,085,000	1,048,000	2,733,000
Average Receipts per Passenger per mile ... d.	1.57	1.10	1.27	1.54	1.05	1.20

On suburban lines in 1930-31 the average journey was about $7\frac{1}{3}$ miles, the rate paid by first-class passengers was .69d. per mile and by second-class

passengers, .67d. per mile. On country lines the average journey by first-class passengers was 99 miles and by second-class 62 miles, the rates per mile being 1½d. and slightly over 1d., respectively. The journeys of second-class passengers represented 90 per cent. of the mileage and 90 per cent. of the receipts on suburban lines. The corresponding proportions on country lines were 69 per cent. of the mileage and 60 per cent. of the receipts.

Information relating to the density of passenger traffic from 1911 onwards is contained in the following table:—

Year ended 30th June.	Average Number of Passengers carried per Train Mile.	Average Mileage per Passenger Journey.*	Average Receipt per Passenger Mile.*	Average Fare per Passenger Journey.	Density of Traffic per Average Mile Worked.*
			d.	d.	
1911	112	14.88	0.55	8.17	244,066
1921	143	13.42	0.85	11.40	322,976
1926	119	12.81	0.90	11.59	292,733
1927	117	12.47	0.90	11.26	307,184
1928	113	12.22	0.93	11.34	310,568
1929	109	12.05	0.95	11.50	308,410
1930	102	11.70	0.92	10.73	290,519
1931	86	11.15	0.88	9.79	235,158

* The figures for the last six years are not strictly comparable with those for earlier years.

Goods Traffic.

The following figures show the volume of the goods traffic in recent years, as compared with 1901 and 1911. The term "ton-mileage" used in the statement is the product of the load in tons, and the distance over which it is carried:—

Year ended 30th June.	Goods train mileage.	Goods and Live-stock Tonnage.	Ton mileage (000 omitted)*	Gross Earnings.
				£
1901	5,836,587	6,398,227	404,740	2,203,249
1911	8,913,171	10,355,565	810,949	3,585,424
1921	11,490,782	15,563,131	1,418,386	7,270,856
1926	10,587,285	15,032,811	1,509,555	8,941,123
1927	11,282,100	17,224,894	1,654,815	10,490,593
1928	10,860,778	15,433,083	1,550,375	10,228,586
1929	10,644,549	14,516,643	1,690,560	10,379,192
1930	9,761,798	12,150,964	1,498,723	9,353,867
1931	8,997,391	10,743,109	1,425,184	7,841,406

* Exclusive of coal on which only wayleave charges were collected.

The tonnage and gross earnings in 1926-27 were the largest on record. In 1927-28 there was a reduction in the tonnage of nearly all the principal classes of freight, viz., grain, wool, coal, and general merchandise. In 1928-29 there were increases over the previous year's figures for grain and for wool, but there was a decline in the total tonnage. In 1929-30 there was a general decline in all classes, except livestock, and the total was the lowest since 1917-18. A further decline to 10,743,000 tons occurred in 1930-31, the wheat traffic increased, but the tonnage of other classes of goods diminished.

The next statement shows the classes of goods carried on the railways in various years since 1901:—

Year ended 30th June.	General Merchandise.		Wool.	Live Stock.	Minerals.		Total Goods.
	Grain, Flour, etc.	Other.			Coal, Coke, and Shale.	Other.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1901	504,880	1,267,742	99,104	200,339	3,956,033	370,129	6,395,227
1911	787,632	2,298,078	137,599	485,021	6,059,648	587,587	10,355,565
1921	1,216,834	3,375,443	93,760	732,804	8,881,796	1,262,494	15,563,131
1926	1,450,813	3,656,355	154,946	766,557	7,145,225	1,858,915	15,032,811
1927	1,523,519	3,971,798	189,605	810,515	8,289,937	2,439,520	17,224,894
1928	1,222,382	3,632,926	171,249	829,791	7,074,845	2,501,890	15,433,083
1929	1,767,585	3,631,914	179,960	729,581	5,801,880	2,405,723	14,516,643
1930	1,211,030	3,245,905	170,884	783,599	4,761,633	1,977,913	12,150,964
1931	2,128,431	2,067,786	162,031	639,043	4,564,964	1,180,854	10,743,169

The gross earnings in respect of the various classes of goods carried during 1930-31 were as follows:—Coal, coke, and shale, £1,034,106, other minerals, £261,992; live stock, £1,200,983; grain and flour, £1,497,342; wool, £739,586; general merchandise, £3,107,397.

The following table contains information relating to the density of goods traffic. The average distance in 1930-31 was 134½ miles, and the average earnings per ton mile 1.3d.:—

Year ended 30th June—	Average Freight-paying Load carried per Train. †	Average Miles per Ton.	Earnings per Ton-mile.*	Density of Traffic per Average Mile worked.
	tons.		d.	tons.
1911	90.98	80.65	0.91	218,408
1921	148.44	92.94	1.10	282,631
1926	164.94	101.93	1.39	263,802
1927	165.30	98.13	1.50	287,994
1928	157.51	101.84	1.56	266,408
1929	183.17	118.16	1.45	286,376
1930	177.06	126.35	1.48	251,778
1931	183.62	134.25	1.30	237,260

* Exclusive of coal on which shunting charges only were collected. † Amended since last issue.

FARES AND FREIGHT CHARGES.

Passenger traffic is greatest within the Sydney and Newcastle suburban areas, and the fares charged within a 34 miles radius of either of the cities are lower than those for equal distances outside those areas. The following table shows the fares charged for ordinary single journeys at quinquennial

intervals since 1911, over stated distances from either Sydney or Newcastle. Cheaper fares are available for journeys to tourist districts and holiday resorts:—

Single Tickets.

Distance.	30th June, 1911.		30th June, 1921.		30th June, 1926.		31st December, 1930.	
	First-class.	Second-class.	First-class.	Second-class.	First-class.	Second-class.	First-class.	Second-class.
Miles.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1	0 2	0 1	0 3½	0 2	0 2	0 1½	0 2½	0 2
5	0 5	0 4	0 8	0 6½	0 8	0 6	0 8½	0 6½
10	0 9	0 6	1 3	0 10½	1 2	0 10½	1 3	0 11
20	1 6	0 11	2 5	1 6	2 0	1 6	2 1	1 7
30	2 2	1 5	3 7	2 4	2 10	2 1½	3 0	2 3½
34	2 6	1 7	4 1	2 7½	3 2	2 4½	3 4	2 6½
50	4 6	2 11	7 7	5 0	6 8	4 9	6 10	4 11
100	10 9	7 1	18 7	12 2	17 7	12 0	17 9	12 2
200	23 3	14 9	40 7	25 7	37 7	25 4	37 9	25 6
300	35 9	22 1	62 2	38 3	56 5	37 11	56 7	38 1
400	48 3	28 8	83 7	49 10	73 8	49 5	73 10	49 7
500	58 0	33 4	100 8	57 10	86 4	57 10	86 6	57 10

Between July, 1917, and June, 1921, railway fares were increased by 66 per cent. During 1923-24 second-class fares were lowered slightly and first-class fares were reduced to an appreciable extent. In December, 1927, when the last alteration was made, fares were raised again, and the increases on second-class tickets ranged from 33 per cent. to 7 per cent. in the suburban area.

The average fare paid by suburban passengers, including those who held periodical tickets, increased by about 50 per cent. between 1911 and 1926-27. Similar information is not available in respect of country traffic, but, generally, the first-class single fares were between 50 per cent. and 60 per cent. higher in 1931 than in 1911, and the second-class single fares were about 70 per cent. higher.

Particulars relating to changes in the cost of monthly periodical tickets since 1911 are shown below:—

Periodical Tickets.

Distance.	30th June, 1911.		30th June, 1921.		30th June, 1926.		30th June, 1931.	
	First Class.	Second Class.	First Class.	Second Class.	First Class.	Second Class.	First Class.	Second Class.
Miles.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1	7 6	5 0	14 6	9 9	12 11	9 8	13 9	10 4
5	16 0	10 9	30 9	20 6	27 4	20 6	29 4	22 0
10	22 9	15 0	44 0	29 0	38 3	28 8	41 0	30 9
20	30 3	20 3	58 0	39 3	52 3	39 2	55 11	42 0
30	34 3	22 9	66 6	44 9	58 0	43 6	62 1	46 7
34	35 9	23 6	69 3	46 0	59 9	44 10	64 0	48 0
50	41 0	26 3	79 9	51 0	77 0	51 3	81 6	54 3
100	57 9	34 6	112 6	66 9	100 3	66 9	106 6	70 9
200	83 0	49 0	156 3	92 6	138 9	92 6	147 0	98 0
300	100 6	61 6	181 9	112 6	168 0	112 0	178 0	118 9
400	118 0	74 0	207 0	131 3	197 0	131 3	208 9	139 0
500	135 6	86 6	231 6	150 6	225 9	150 6	239 3	159 6

The above rates represent the maximum charges, but liberal concessions are made to school pupils, youths, and women. During 1922 there were

slight reductions in respect of second-class periodical tickets, and charges for first-class tickets over long distances were substantially reduced. Further reductions were made in 1924, in rates for distances up to 34 miles. At the beginning of January, 1928, the rates were raised by about 7 per cent. in the suburban area and by 6 per cent. over longer distances.

Workmen's weekly tickets are issued in the suburban areas to enable persons to travel to and from their work. They are available for one journey each week on every week day, the forward journey being by certain trains only. The charges for these tickets were increased by about 20 per cent. in December, 1927, and the increased rates are still in operation. The rates at various dates since June, 1911, were as follows:—

Distance.	Workmen's Weekly Tickets—Second Class.				
	June, 1911.	June, 1916.	June, 1921.	June, 1926.	June, 1931.
	s. d.	s. d.	s. d.	s. d.	s. d.
1	0 6	0 9	1 3	1 3	1 8
5	1 6	1 9	2 11	2 11	3 11
10	2 2	2 6	4 1	4 1	5 6
20	3 0	3 4	5 5	5 5	7 4
30	3 10	4 2	6 11	6 11	9 0
34	4 2	4 6	7 5	7 5	9 8

Freight Charges.

The system adopted in fixing freights on merchandise and live stock is to charge the lowest scale of freight on commodities of low values and on those which are used to assist production. The charge per ton mile decreases as the distance hauled increases.

The following table gives the charges per ton for haulage of the different classes of freight over distances of 100 and 500 miles at various dates since June, 1911:—

Class of Freight.	30th June, 1911.		30th June, 1921.		30th June, 1926.		30th June, 1931.	
	100 miles.	500 miles.	100 miles.	500 miles.	100 miles.	500 miles.	100 miles.	500 miles.
Ordinary Goods (per ton)—	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Highest Class Freight...	44 11	115 9	75 0	193 3	76 8	197 6	76 8	197 6
Lowest „ „ ...	3 7	11 11	6 6	15 0	6 9	12 4	6 9	12 4
Agricultural Produce ...	7 6	12 0	11 5	18 2	11 5	19 0	12 0	19 11
Butter	18 10	56 4	31 7	94 0	24 10	57 7	27 4	63 4
Beef, Mutton, Veal, etc. (frozen)	9 2	45 10	14 7	72 11	18 11	43 11	18 11	43 11
Wool—Greasy	25 0	68 9	37 11	104 4	41 8	109 5	41 8	109 5
„ —Scoured	29 2	75 0	44 3	113 10	45 10	115 8	45 10	115 8
Minerals—Crude Ore—								
Not exceeding £20 per ton in value	4 2	15 8	6 5	22 6	{ 6 5 22 5½		6 5	22 5½
Not exceeding £10 per ton in value					{ 6 5 17 10½			
Live Stock (per 4-wheeled truck)—	63 4	173 9	110 5	303 4	109 9	299 9	120 9	329 8

The highest class freight includes expensive, bulky, or fragile articles, such as boots, drapery, drugs, groceries, furniture, liquors, crockery, glass-ware, cutlery, ironmongery, confectionery, and carpets; the lowest class applies to fertilisers.

The freight charges for a distance of 100 miles in 1921 were from 50 to 100 per cent. higher than in 1911. For a distance of 500 miles the increases have not been so great proportionately, and the charges for frozen meat have been reduced. Some of the rates were increased in November, 1926.

GRADIENTS.

In many cases the railways of New South Wales pass through mountainous country over the Great Dividing Range which separates the narrow coastal plain from the interior. Consequently steep gradients and sharp curves are features of many sections, including parts of the trunk lines where the traffic is heavy.

In the southern system, the railway station at Roslyn, near Crookwell, is situated at an altitude of 3,225 feet above sea level; and at Nimmitabel, on the Goulburn to Bombala railway, the height is 3,503 feet. In the western system a height of 3,503 feet is attained at Newnes Junction, on the Blue Mountains, and 3,623 feet at Oberon, the terminus of a branch line from Tarana. On the northern line Ben Lomond is 4,473 feet above sea level.

Numerous deviations have been made during recent years in order to secure easier grades and curves, with the result that considerable economy in working and expedition in traffic have been effected.

The following statement shows the number of miles on different gradients in June, 1930:—

Gradients.	Southern System.	Western System.	Northern System.	Total.
1 in	miles.	miles.	miles.	miles.
18 to 30	12½	7	3	22½
31 „ 40	65½	61½	54½	181½
41 „ 50	74½	54	87½	216
51 „ 60	65½	80½	62½	209
61 „ 70	58½	69½	40½	168½
71 „ 80	178½	142½	178	499½
81 „ 90	45½	58½	47½	151½
91 „ 100	118½	179½	92½	390½
101 „ 150	251½	289	157½	698
151 „ 200	134½	124½	91	349½
201 „ 250	70½	78½	43½	193
251 „ 300	99½	112½	67½	279½
301 „ level	907	964½	703½	2,575½
Total ...	2,082½	2,222½	1,628½	5,933½

The above table is exclusive of the line from Broken Hill to Tarrawin-gee, measuring 39 miles 41 chains, and a line at Wollongong of 1 mile 8 chains.

SIGNALLING AND SAFETY APPLIANCES.

In the matter of signalling and safety appliances the railways of New South Wales have progressed with modern invention. The points are interlocked on all the lines with the exception of a few in remote country districts where the traffic is light. The automatic signalling system is in operation on all the suburban lines under the electrical system.

Particulars regarding the various systems employed for the safe working of the lines in 1921 and 1931 are shown below:—

Single Line.	1921.		1931.	
	Mls.	Chs.	Mls.	Chs.
By automatic or track block system ... ..	...	...	82	28
electric train tablet	315	17	177	55
electric train staff	1,822	43	2,958	45
train staff and ticket with line clear reports..	1,451	38	1,361	74
train staff and ticket without line clear report	714	1	861	9
train staff and one engine only	116	57	3	39
	<u>4,419</u>	<u>76</u>	<u>5,445</u>	<u>10</u>
Double Line.				
	Mls.	Chs.	Mls.	Chs.
By automatic or track block system	251	8	392	21
absolute manual block system	382	0	317	31
permissive manual block system	5	12	3	41
telephone	0	33	...	...
	<u>638</u>	<u>53</u>	<u>713</u>	<u>13</u>

The passenger and freight vehicles in use on the railways are fitted with automatic brakes.

ROLLING STOCK.

A classification of the rolling stock of the State railways is shown in the following table:—

Classification.	June, 1922.		June, 1926.		June, 1930.	
	No.	Capacity.	No.	Capacity.	No.	Capacity.
Locomotive—Steam	1,321	Tractive power. 000 lb. 32,349	1,402	Tractive power. 000 lb. 35,369	1,423	Tractive power. 000 lb. 37,023
Coaching—		Pas'gers.		Pas'gers.		Pas'gers.
Passenger	1,674	97,324	1,719	101,890	2,243	141,786
Motor Passenger	1	33	22	1,144	36	1,872
Sleeping and Special	97	2,338	107	2,466	125	2,803
Horse Boxes, Brake Vans, etc.	422	158	419	78	396	451
Total	2,194	99,853	2,267	105,578	2,800	146,912
Goods—		tons.		tons.		tons.
Open Waggon	16,498	262,693	17,255	287,345	17,481	286,573
Livestock Waggon	2,957	18,370	3,156	19,564	3,040	19,268
Louved Vans	967	9,932	1,007	14,944	1,027	16,324
Refrigerator Vans	161	2,382	237	3,430	237	3,432
Brake Vans... ..	639	...	643	...	707	...
Other	251	3,250	69	755	65	775
Total	21,473	296,627	22,367	326,038	22,557	326,372
Service Stock	1,846	...	1,601	...	1,492	...

The average tractive power of the railway locomotives, as at 30th June, 1930, was 26,018 lb.; the average capacity of the passenger vehicles was

61 passengers, and of the goods stock 15 tons. Additions to railway rolling stock since June, 1926, included 55 locomotives, and 538 suburban passenger cars designed for use on the electric railways.

SYDNEY AND SUBURBAN PASSENGER SERVICES.

The passenger traffic between Sydney and suburbs is conducted by suburban railways and tramways maintained by the State, and by ferry and motor omnibus services conducted by private enterprise.

The railway suburban traffic is principally on the main trunk line, which runs in a westerly direction from Sydney through Granville and Parramatta. The main southern system branches from the western line at Lidcombe (10 miles from Sydney), and another branch runs southward from Granville (13 miles), joining the line from Lidcombe at Cabramatta. The northern system branches off at Strathfield (8 miles from Sydney). The South Coast or Illawarra railway, which has a branch from Sydenham (3 miles) to Bankstown (11 miles), brings passengers from the suburbs situated south of Sydney on the western shore of Botany Bay. A line from Bankstown connects with the main southern line at Regent's Park, 2 miles from Lidcombe. The suburban railways have been converted to electric traction.

Tramways run through the city streets from the Central Railway Station to Circular Quay. The populous suburbs of the north, western, central, and eastern divisions of the metropolitan area are served by tramways. On the north shore of Port Jackson there is a railway to connect the ferry service at Milson's Point with Hornsby on the main northern line, and at various points along the shores of the harbour tramways connect with the ferry services plying to the Circular Quay.

City and Suburban Electric Railways.

The city electric railway, which is under construction, will form a complete two-track loop railway around the city, running, for the most part underground, along the eastern side of the city to Circular Quay and returning along the western side to the Central Station. The scheme includes the construction of a branch from the city railway to Bondi for the eastern suburbs, and a branch from the main suburban line to Balmain to serve the western suburbs. The completion of the Sydney Harbour bridge with four lines of railways as well as roadways and footways, will place the northern suburbs in direct communication with the city.

The construction of the city railway was commenced in 1916 by a private company under contract with the Government, but the contract was cancelled and the work was suspended in 1917. Construction was resumed by the Railway Commissioners in February, 1922, and the eastern part of the railway to a temporary terminal station at St. James, Queen's-square, was opened for traffic in December, 1926. Work on the western section was commenced in November, 1925.

The eastern section of the city railway being the first to be opened for traffic, the most easterly of the suburban lines, viz., the Illawarra, were the first to be converted to the electric system. Electric trains were run on the Illawarra lines on 1st March, 1926, and with the opening of the City Railway the services were extended to St. James Station. The work of converting the North Sydney line was completed in 1928, and electric services were installed on the Sydney-Parramatta section of the main suburban line and on the section between Strathfield and Hornsby in 1929.

The total length of the lines under the electric system as at 31st March, 1931, was 87 miles 64 chains, as shown below:—

Line.	Length of Route.		Line.	Length of Route.	
	miles	chs.		miles	chs.
City Railway	1	20	Lidcombe to Cabramatta...	7	10
Sydney to National Park...	17	58	Granville to Liverpool ...	9	16
Sydenham to Bankstown...	8	33	Warwick Farm Racecourse	0	71
Sydney to Parramatta ...	14	64	Milson's Point Line ...	13	11
Strathfield to Hornsby ...	14	13			
North Strathfield Triangle	1	8	Total	87	64

Nearly all these lines are laid with at least two tracks. The line from Sydney to National Park includes $9\frac{1}{2}$ miles, and the line from Sydney to Parramatta $10\frac{1}{2}$ miles, with four tracks.

RAIL MOTOR SERVICES.

Rail motors have been provided in a number of country districts where the population is not sufficient to warrant the provision of ordinary services. The first rail motor was put into operation in 1919 on the line between Grafton and Lismore, a distance of 87 miles. Second-class accommodation was provided for passengers, also a trailer for the transport of cream. A few local services in the suburban districts are conducted by motor trains.

VICTORIAN GOVERNMENT RAILWAYS IN NEW SOUTH WALES.

In the southern portion of New South Wales the Government of Victoria has acquired certain railway interests by the purchase from a private company of a line between Deniliquin and Moama, and by agreement with the Government of New South Wales for the construction and maintenance of five border railways.

The agreement provides for railways on the 5 ft. 3 in. gauge, but all the works within New South Wales are being constructed suitably for conversion to the standard gauge, viz., 4 ft. 8½ in. When complete they are operated by the Victorian Railway Commissioners, but the fares and rates for the carriage of passengers, goods, and live stock thereon must not be less than the rates charged for similar mileage on the Victorian Railways. In the construction and working of the lines the same conditions and rates of wages as prevail in Victoria must be observed.

Two of the lines authorised under the agreement have been opened for traffic, viz., from Moama to Balranald, and from Gonn Crossing to Stony Crossing. Two are under construction, viz., from Euston to Lette, 30 miles, to serve en route the Benanee Settlement Area, and from Yarrawonga to Oaklands 37 miles. Goods traffic was carried on parts of these lines in 1930. The fifth line will cross the Murray at or near Golgol, New South Wales, and extend into this State for a distance not exceeding 20 miles.

The railway between Deniliquin and Moama, 44½ miles on the 5 ft. 3 in. gauge, was constructed by a private company, and opened for traffic in 1876. It became part of the Victorian railway system in December, 1923. A branch line to Balranald, 120 miles, was opened for traffic in March, 1926, and the line from Gonn Crossing to Stony Crossing, 38½ miles, on 16th March, 1928. The capital expended on these lines to the end of February, 1930, was £1,243,116. During the year ended February, 1930, the receipts amounted to £64,258, working expenses to £66,128, and interest to £58,041. The train mileage was 128,757. The number of passengers was 24,129 and the goods traffic amounted to 76,598 tons.

PRIVATE RAILWAY LINES.

The established policy in New South Wales has been to keep the railways under State control, and at the present time, with the exception of short lines connecting coal and other mines with the main railways, there are only 109½ miles of private lines, on some of which provision has been made for the carriage of passengers and goods.

During the year 1888 a line of 3 ft. 6 in. gauge, and 35 miles 48 chains in length, was laid down from Silverton and Broken Hill to the South Australian border. A short line connects the Government railway at Liverpool with the Warwick Farm Racecourse.

The Seaham Coal Company's line connects the West Wallsend and Seaham Collieries with Cockle Creek. The South Maitland system supplies the mining districts of East Greta, Stanford-Merthyr, and Cessnock. The Hexham-Minmi line runs between the collieries in the townships mentioned. The line of the Commonwealth Oil Corporation extends from Newnes Junction, on the Western line, to the Wolgan Valley.

The following table shows the operations of the private railway lines open to the public for general traffic during the year 1930:—

Name of Private Railway.	Line.		Total Capital Expended.	Reserve Fund.	Train Miles run.	Passengers carried.	Goods carried.	Live Stock carried.
	Length.	Gauge.						
	m. ch.	ft. in.	£	£	No.	No.	tons.	No.
Silverton	35 48	3 6	568,622	32,000	110,810	28,411	854,144	105,012
Warwick Farm	0 50	4 8½	5,700	...	170	95,726	...	123
Seaham Colliery	5 10	4 8½	16,000	...	570	330	2,432	...
South Maitland—								
East Greta, Stanford								
Merthyr, and Cess-							tons.	
nock	19 35	4 8½	660,061	...	219,385	290,752	38,055	
Hexham-Minmi	6 0	4 8½	†	...	36	...	110	
New Red Head	9 39	4 8½	102,000	...	73,700	220,833	379,209*	
Commonwealth Oil Corporation.	33 0	4 8½	194,000	...	†	†	†	

* Excluding coal.

† Not available.

† No traffic during 1930.

The Silverton Company has 20 locomotives and 680 goods vehicles, and passenger carriages are hired from the South Australian Government railways as required. The Seaham Colliery has 2 locomotives, 2 passenger carriages, and 2 goods vehicles, and Government rolling stock is hired. On the South Maitland system there are 23 locomotives, 5 passenger carriages, and 43 goods carriages. The Hexham-Minmi Company has 1 locomotive and 1 passenger carriage. The Warwick Farm and New Red Head lines are operated by the Government Railway Commissioners.

In addition to the private railway lines shown in the previous table, there are several branches, connected principally with coal and other mines, with a total length of 156 miles, a summary of which is given below:—

District.					Length.	Gauge.
Connected with Main Suburban Line	...	...	...	...	2—66	4 8½
„ Northern Line	...	...	...	...	101—55	4 8½
„ Western „	...	...	...	...	23—8	4 8½
„ South Coast „	...	...	...	...	{ 3—40	3 6
					{ 19—77	4 8½

RAILWAY GAUGES OF AUSTRALIA.

Particulars of the gauges of the railways in each State as at 30th June, 1930, are shown below. The figures relate to Government lines and to private railways open for general traffic, classified according to the States in which they are located. Particulars of private lines used exclusively for special traffic are not included in the figures:—

State.	Miles at each Gauge open for traffic.						Total Miles.
	2ft.	2ft. 6in.	3ft.	3ft. 6in.	4ft. 8½in.	5ft. 3in.	
New South Wales ...	...	...	...	76	6,017	203	6,296
Victoria ...	...	122	11	...	5	4,407	4,545
Queensland ...	200	7	...	6,519	...	...	6,726
South Australia (inc. N. Territory) ...	...	...	...	2,200	597	1,458	4,255
Western Australia ...	...	...	...	4,388	454	...	4,842
Tasmania ...	42	...	...	779	...	...	821
Total ...	242	129	11	13,962	7,073	6,068	27,485

The distances by rail between Sydney and the other capital cities are as follows:—Brisbane *via* North Coast line 611 miles, Brisbane *via* Wallangarra 715 miles, Melbourne 591 miles, Adelaide *via* Melbourne 1,074 miles, and Perth *via* Melbourne 2,761 miles. The journey from Sydney to Broken Hill *via* Melbourne and Adelaide is more than 1,400 miles, but a line across New South Wales opened for traffic in November, 1927, affords direct communication over a distance of 698½ miles.

Diversity of gauge hampers interstate railway communication, and in a journey from New South Wales to Western Australia breaks of gauge occur at Albury, on the border of New South Wales and Victoria; at Terowie and at Port Augusta in South Australia; at Kalgoorlie, where the Commonwealth and Western Australian lines connect. There is a break also at Wallangarra where the New South Wales and Queensland railways meet but communication on a uniform gauge—4 feet 8½ inches—was provided in September, 1930, with the opening of a line between Kyogle, on the North Coast railway in New South Wales, and Brisbane. The journey from Sydney to Brisbane by this route is shorter by 104 miles than the journey *via* Wallangarra.

The subject of a uniform gauge to connect the capital cities of the mainland has been discussed at conferences between the Prime Minister of the Commonwealth and Premiers of the States, and was investigated by a Royal Commission in 1921. It has been resolved that the adoption of a uniform gauge is essential to the development and safety of the Commonwealth, and that the gauge should be 4 ft. 8½ in., but an agreement has not been reached in regard to any comprehensive scheme for giving effect to the resolutions. As an outcome of the negotiations, however, the Kyogle-Brisbane line was constructed and an agreement was made between the Commonwealth and South Australia for works which would provide uniformity of gauge between Adelaide and Kalgoorlie.

The construction of the Kyogle-Brisbane line and the strengthening of the line between Kyogle and Grafton were undertaken by the two States

concerned. The cost was approximately £4,450,000, and the States of New South Wales and Queensland, and the Commonwealth each agreed to pay a share. The agreement between the Commonwealth and South Australia provides for the construction of a 4 ft. 8½ in. line in South Australia, from Port Augusta to Red Hill, and for laying a third rail on the existing 5 ft. 3 in. line between Red Hill and Adelaide. By these works the trans-Australian journey would be shortened by about 70 miles, and the breaks of gauge at Terowie and Port Augusta would be eliminated.

RAILWAYS OF NEW SOUTH WALES AND OTHER COUNTRIES.

The length of railways—State and private—in various countries is shown below in relation to population and area. The figures for the Australian States include the Federal Government lines as at 30th June, 1930, and the private lines available for general traffic. Particulars of private lines used for special traffic, included in the tables in former issues of the Year Book, are not available. The particulars relating to other countries are the latest available.

Country.	Length of Railways.	Per Mile of Line Open.		Country.	Length of Railways.	Per Mile of Line Open.	
		Population (approx)	Area.			Population (approx)	Area.
	miles.	No.	sq.mls.		miles.	No.	sq.mls.
New South Wales	6,296	396	49	Italy	13,442	3,060	9
Victoria	4,545	392	19	Austria	4,156	1,610	8
Queensland	6,726	140	100	Hungary	5,388	1,580	7
South Australia and Northern Territory ...	4,255	138	212	Russia (Soviet) ...	48,023	3,100	172
Western Australia	4,842	86	202	Union of S. Africa	12,830	606	37
Tasmania	821	263	32	India	40,950	8,000	44
New Zealand	3,403	437	31	Japan	12,590	5,100	13
Great Britain and Northern Ireland	21,140	2,160	4	Canada	42,677	230	86
Irish Free State ...	2,674	1,100	10	United States of America ...	249,310	480	12
France	33,688	1,164	6	Argentina	23,548	460	49
Germany	36,255	1,770	5	Brazil	19,796	1,980	165

TRAMWAYS.

The tramways of New South Wales, with the exception of one short line, are the property of the State Government. Tramway services have been in operation in the metropolitan and Newcastle districts only since 1st January, 1927, when services in Maitland and Broken Hill were abolished. The tramways were administered by the Railway Commissioners until 1930, when the tramway property—except the electric power stations—was vested in the Transport Trusts, and the services in Newcastle, as well as in

Sydney, were placed under the administration of a Management Board constituted in terms of the Transport Act, 1930. The tramway employees were transferred to the service of the Metropolitan Transport Trust, and the staff required for the Newcastle services is made available by the Metropolitan Trust under agreement between the trusts. The capital indebtedness in respect of the metropolitan tramways was declared by the Transport Act to be £7,487,154, and in respect of the Newcastle tramways £944,651, these amounts being subject to revision by a committee of review appointed by the Governor. Each trust is required to make payments to the State Treasurer in respect of interest and sinking fund charges on its capital indebtedness.

The gauge of the tramways is 4 feet 8½ inches, and all the services are operated by electric power, except the Kogarah-Sans Souci tramway. Steam services in the Newcastle district were discontinued in November, 1930, and on the Sutherland-Cronulla line in August, 1931.

The total length of lines open for traffic at 30th June, 1930, was 210½ miles. Many of the lines are laid with duplicate tracks, and the aggregate length of the tracks was 358½ miles. There were also 58½ miles of sidings, loops, and crossovers. The route mileage at 30th June, 1931, was 200 miles, the reduction being due to the closing of the Newcastle steam tramways.

Line.	Route Mileage.	Track Mileage.
Metropolitan—	mls. ch.	mls. ch.
City and Suburban	118 35	217 29
North Sydney	22 61	41 9
Ashfield to Mortlake and Cabarita	8 38	15 9
Rockdale to Brighton-le-Sands	1 49	1 49
Manly to The Spit and Manly to Narrabeen	11 49	16 36
Kogarah to Sans Souci	5 45	6 79
Sutherland to Cronulla*	7 32	7 32
Total, Metropolitan	175 69	306 3
Newcastle City and Suburban †	34 45	52 38
Total, Tramways June, 1930...	210 34	358 41

* Services discontinued, August, 1931.

† Services on 10½ miles discontinued November, 1930.

The tramway system has not been extended in recent years owing to the electrification of the metropolitan suburban railways and to the competition of motor transport. A number of steam tramway services, which had been operated at a loss for some years, were discontinued as from 1st January, 1927. The capital cost of these lines was written off to working expenses, viz., £50,000 in 1926-27, £95,510 in 1927-28, £1,705 in 1928-29, and £227 in 1929-30.

The capital cost of the State tramways open for traffic on 30th June, 1930, amounted to £11,764,978, or £55,909 per mile open. The cost of construction was £5,793,218, or £27,530 per mile, and the expenditure on rolling-stock, workshops, machinery, etc., amounted to £5,971,760, including £2,625,385 on the Ultimo and White Bay electric power stations, substations, and plant. The capital cost at 30th June, 1931, as shown below relates only to the tramways under the control of the Transport Trusts at that date, and is exclusive of the cost of the power stations, etc.

In the following table are given particulars of the miles open, cost of construction, and the financial results of the State tramways at intervals since 1901:—

Year ended 30th June.	Total Length of Lines.	Capital Expended on Lines open for Traffic.	Gross Revenue.	Working Expenses.	Net Earnings.	Interest Returned on Capital.
	Miles.	£	£	£	£	per cent.
1901	79½	2,194,493	551,674	462,471	89,203	4·10
1911	189½	5,121,886	1,365,631	1,143,949	221,682	4·53
1921	227½	9,060,757	3,471,738	2,943,252	528,486	5·93
1926	228½	11,434,523	3,619,406	3,319,996	299,500	2·65
1927	209½	11,586,050	3,806,098	3,487,854	318,264	2·77
* 1928	209½	11,903,073	4,556,561	3,937,356	619,205	6·34
1929	210½	11,743,189	4,457,800	3,835,944	622,216	5·33
1930	210½	11,764,973	3,903,470	3,625,564	277,906	2·36
1931	200	8,435,810	3,058,471	3,121,395	(—) 62,924	..

The receipts increased by £750,000 in 1927-28 in consequence of higher fares introduced in December, 1927. There was a decline in 1928-29, but working expenses were reduced and the net earnings were the highest during the period under review. In 1929-30 traffic declined on all the tramways except the Rockdale line, and the revenue from passengers decreased by £346,597, while the cessation of sales of electricity to the Sydney Municipal authorities, in consequence of the opening of the municipal power station at Bunnerong, caused receipts from that source to fall by £207,823. The decrease in working expenses did not offset the reduction in revenue, and net earnings declined to £277,906. In the following year working expenses exceeded revenue.

The percentage of working expenses to the total receipts was 92·88 during the year ending 30th June, 1930, as compared with 86·01 in the previous year. The net earnings represented 2·36 per cent. on cost of construction and equipment, as compared with 5·17 per cent., the average interest payable on the loan liabilities of the State. The net return per average mile open was £1,321 as compared with £2,966 in the previous year.

A comparative statement of the profit or loss on the tramways after allowing for interest is shown below:—

Year ended 30th June.	Net earnings.	Interest.	Profit (+) Loss (—) allowing for interest.
	£	£	£
1911	221,682	174,055	(+) 47,627
1921	528,486	421,814	(+) 106,672
1926	299,500	577,900	(—) 278,400
1927	318,264	588,180	(—) 269,916
1928	619,205	591,397	(+) 27,808
1929	622,246	631,589*	(—) 9,343
1930	277,906	663,150*	(—) 385,244
1931	(—) 62,924	475,571*	(—) 538,495

*Includes Sinking Fund charges, £31,589 in 1928-29, £33,000 in 1929-30, and £26,386 in 1930-31.

Until 1923-24 the tramways usually yielded a substantial surplus over working expenses and interest. Then there occurred a marked expansion in motor omnibus services and in the use of private motor vehicles, and tramway traffic began to decline. Meanwhile interest charges rose continuously under the system of public accounts which was in operation at that

period, and there was a large deficit of earnings as compared with interest charges in 1925-26 and 1926-27. In order to effect an improvement it was decided to abandon a number of unprofitable lines at the beginning of 1927, and in December, 1927, fares were increased. Consequently there was a surplus of £27,808 in 1927-28, notwithstanding the fact that a large sum had been written off to working expenses on account of the abandoned lines.

In 1928-29 sinking fund charges £31,589 were debited for the first time, and there was a deficit of £9,343. In the following year the deficit was £385,244, and it increased to £538,495 in 1930-31.

In the following statement particulars regarding the Metropolitan and Newcastle tramways are shown separately for a period of five years:—

Year ended June.	Length of line 30th June.	Cost of Construction and Equipment.	Gross Revenue.	Working Expenses.	Net Earnings.	Interest and Sinking Fund. §	Loss after paying Interest.
Metropolitan Tramways.							
	miles.	£	£	£	£	£	£
1927†	175½	9,995,481	3,503,149	3,134,476	368,673	505,873	137,202
1928	175	11,080,338	4,182,141	3,536,363	645,778	511,268	134,510†
1929	176	10,162,357	4,106,527	3,532,362	574,165	547,110	27,055†
1930	176	10,202,850	3,591,171	3,331,518	259,653	574,899	315,246
1931	176	7,515,805	2,894,285	2,905,345	11,060*	422,036	433,096
Newcastle Tramways.							
1927	34½	1,481,326	285,765	259,488	26,277	75,417	49,140
1928	34½	1,528,740	374,420	307,637	66,783	77,975	11,192
1929	34½	1,580,832	351,363	301,577	49,786	84,479	34,693
1930	34½	1,562,128	312,299	293,819	18,480	88,251	69,771
1931	24	920,005	164,186	216,050	51,864*	53,535	105,399

* Excess of working expenses. † Profit. ‡ Exclusive of lines on which services were discontinued as from 1st January, 1927. § Sinking Fund not included in years ended June, 1927 and 1928.

The receipts of the Metropolitan tramways declined by £1,287,856 between 1927-28 and 1930-31, while the reduction in working expenses was less than half that amount. Interest charges also were lower in 1930-31. The data for the latter year, however, do not include particulars of the electric power stations as in 1927-28.

Comparison of Tramway Traffic.

The following statement contains a comparison of the passenger traffic and the tram mileage since 1901:—

Year ended 30th June.	Length of line open at 30th June.	Passengers.	Tram mileage.	Earnings per tram mile.	Working Expenses per tram mile.
	miles.	No.		s. d.	s. d.
1901	79½	93,703,685	6,835,926	1 7½	1 4½
1911	189½	230,275,938	22,541,429	1 2½	1 0½
1921	227½	337,689,873	28,654,172	2 5	2 0½
1926	228½	339,411,765	34,214,733	2 1½	1 11½
1927	209½	347,231,141	34,188,015	2 2½	2 0½
1928	209½	346,013,775	34,471,601	2 7½	2 3½
1929	210½	333,476,049	34,081,498	2 7½	2 3
1930	210½	307,789,621	32,862,832	2 4½	2 2½
1931	200	266,346,801	32,193,040	1 10½	1 11½

There was a rapid extension of the tramway system between 1901 and 1911, and the traffic increased, but the average earnings declined from 1s. 7½d. to 1s. 2½d. per tram mile, and the excess of earnings over working expenses from 3d. to 2½d. Ten years later the earnings and expenses per tram mile were twice as high. The net earnings reached the maximum of 4½d. per tram mile in 1921-22, then declined, the average during the two years ended June, 1927, being only 2½d. It was 4½d. in 1928-29, only 2d. in 1929-30, and in the following year working expenses exceeded receipts by ½d. per mile.

Year ended June.	Metropolitan Lines.		Newcastle Lines.	
	Passengers.	Tram Mileage.	Passengers.	Tram Mileage.
	000.	000.	000.	000.
1927	324,260*	31,387*	21,350	2,650
1928	325,833	31,826	20,181	2,645
1929	315,668	31,576	17,808	2,506
1930	293,126	30,519	14,664	2,343
1931	253,243	29,620	13,104	2,573

* Exclusive of services discontinued as from 1st January, 1927.

TRAM FARES.

The tramways are divided into sections of an average length of nearly 2 miles.

From November, 1920, to December, 1927, the fares on week-days were charged at the following rates, viz., 2d. for one section and 1d. for each additional section up to 6d. for a journey of five or six sections. The rates on Sundays were higher by 1d. per journey between 1st November, 1920, and 11th February, 1923, when the extra charge was withdrawn, making the rates uniform for all days. In December, 1927, the fare for each journey extending over two, three or four sections was increased by 1d. Since December, 1930, lower fares have been charged for journeys extending beyond one section during the hours 10 a.m. and 4 p.m. on week-days (except Saturdays)—the fare is 3d. for two sections, and 4d. for three or more sections.

PRIVATE TRAMWAYS.

There is only one tramway under private control within the State, viz., a steam line, which passes through the town of Parramatta, commencing at the Park and continuing as far as the Newington Wharf at Duck River, a distance of 2 miles 66 chains. The line has been constructed to the standard gauge of 4 ft. 8½ in., and was opened in 1883.

RAILWAY AND TRAMWAY WORKSHOPS.

A large number of workshops have been established to meet the requirements of the various branches of the railways and tramways. The principal locomotive and carriage shops were situated at Eveleigh, close to the Central Railway Station. On this site the workshops could not be extended to meet the increasing requirements of the railway system, and some of the buildings had to be demolished to make way for extra tracks for the suburban electric railways. Therefore a new site was selected at Chullora, 11 miles distant, and workshops are being constructed on an area of 485 acres. Some of the workshops at Chullora are in use and a new township has been erected in the vicinity. When the Chullora scheme is complete all the works at Eveleigh will be removed.

Engine repairs are undertaken at Honeysuckle Point (Newcastle) and at a number of smaller workshops in country localities. There are five large workshops—at White Bay (Sydney), Lidcombe, Newcastle, Goulburn, and Bathurst—to supply the needs of the permanent-way branch by the preparation of structural steelwork, fish-plates, tools, implements, and other articles.

The principal tramway workshops are situated at Randwick, in Sydney, and there is a smaller establishment at Newcastle.

Particulars regarding the railway and tramway workshops are published in the chapter of this volume entitled *Factories*.

RAILWAY ELECTRICITY WORKS.

For the supply and distribution of electric current to the railways and tramways there are three main generating stations, viz., Ultimo and White Bay in Sydney, and one in Newcastle. A smaller station was opened in January, 1928, at Lithgow, near the State coal mine. A number of sub-stations are in operation throughout the suburban areas. During 1929-30 the electric energy generated at Ultimo was 15,463,680 kilowatt hours, at White Bay 357,430,430 kilowatt hours, at Newcastle 56,691,814 kilowatt hours, and at Lithgow 2,751,319 kilowatt hours. The supply of energy to the electric railway system amounted to 156,418,073 kilowatt hours.

Electric current is supplied also to a number of public bodies and factories. The amount was 156,700,000 kilowatt hours in 1928-29. It declined to 55,341,277 kilowatt hours in 1929-30, an agreement for the supply of energy to the Sydney Municipal Council having been terminated in September, 1929, in consequence of the opening of the council's new station at Bunnerong.

When the tramways were transferred to the administration of the Transport Trusts the electricity works remained under the control of the Railway Commissioners, and the trusts were authorised to purchase electricity from them.

RAILWAY AND TRAMWAY EMPLOYEES AND WAGES.

The average number of persons employed on existing lines of railways and tramways during 1920-21, and later years is shown in the following statement, also the amount of salaries and wages paid. The figures are exclusive of the staff of the construction branch.

Year ended 30th June.	Average number of Employees.			Salaries and Wages paid.		
	Railways.	Tramways.	Total.	Railways.	Tramways.	Total.
				£	£	£
1921 ...	37,558	9,018	46,576	9,153,089	2,278,998	11,432,087
1926 ...	42,174	11,246	53,420	11,192,851	2,947,313	14,140,164
1927 ...	45,265	11,524	56,789	12,509,021	3,143,667	15,652,678
1928 ...	44,973	11,184	56,157	12,693,706	3,144,067	15,837,773
1929 ...	43,972	11,121	55,093	12,422,298	3,121,457	15,543,755
1930 ...	41,342	10,493	51,835	11,656,142	3,005,881	14,662,023
1931 ...	40,620	8,388	49,008	10,167,293	2,119,794	12,287,087

Particulars relating to the staff of the tramways in the year 1930-31, as shown above, refer to persons employed by the Tramways Management Board in Sydney and Newcastle, and employees in the electric power stations in that year have been classified as railway employees.

COAL SUPPLIES FOR RAILWAYS AND TRAMWAYS.

Coal for use in connection with the railways and tramways is an important item of working expenses, the annual consumption being over 1,300,000 tons. As a result of the gradual electrification of the suburban railways the use of coal for locomotives diminished and the consumption for the generation of electricity increased. The quantity used during each of the last eight years was as follows:—

Year.	Coal used in Connection with Railways and Tramways.				
	Locomotive Purposes.	Electric Power Stations.	Gas Making.	Other Purposes.	Total.
	tons.	tons.	tons.	tons.	tons.
1923-24	1,150,526	219,414	9,425	46,681	1,426,046
1924-25	1,263,176	243,385	8,661	48,195	1,563,417
1925-26	1,342,280	273,244	6,908	46,455	1,668,887
1926-27	1,342,034	326,885	7,437	46,219	1,722,575
1927-28	1,267,823	384,637	7,630	43,946	1,704,036
1928-29	1,212,272	301,904	7,038	45,719	1,656,933
1929-30	1,097,049	370,627	6,471	33,939	1,508,086
1930-31	956,216	340,328	5,615	26,956	1,329,115

A coal-mine at Lithgow, on the main Western line, is worked by the Railway Commissioners to supply coal for the railways. The output during the year 1930-31 was 552,320 tons, as compared with 527,293 tons in the previous year.

RAILWAY AND TRAMWAY ACCIDENTS.

All accidents are recorded which occur in the working of the railways and tramways, or on railway or tramway premises, to persons other than railway and tramway employees, however slight the injuries may be. In the case of the employees all accidents must be reported which cause the employee to be absent from his ordinary work for at least five hours on any of the three days immediately following the day on which the accident occurred.

The railway and tramway accidents during each year of the quinquennium ended 30th June, 1931, are shown in the following table:—

Year ended 30th June.	Passengers.		Employees.		Others.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.

Railway Accidents.

1927	...	41	298	46	7,702	48	250	135	8,250
1928	...	10	255	30	6,633	50	293	90	7,181
1929	...	9	269	38	6,757	39	289	86	7,315
1930	...	11	232	28	5,439	43	246	82	5,917
1931	...	3	233	14	3,054	34	239	51	3,526

Tramway Accidents.

1927	...	8	405	3	1,537	19	417	30	2,359
1928	...	6	356	3	1,398	30	375	39	2,129
1929	...	7	275	5	1,287	22	326	34	1,888
1930	...	10	227	...	910	17	277	27	1,414
1931	...	7	258	...	603	18	273	25	1,134

The deaths of two railway employees included in the figures for the year 1930-31 were results of accidents not connected with the movement of

the railway vehicles. The majority of injuries to employees occurred in similar accidents, the number so injured in 1930-31 being 2,893 in the railway service and 402 in the tramway service.

The number of passengers carried on the railways during the year ended June, 1931, was 126,813,000, and on the tramways 266,347,000. The accident rates per million passengers were as follows:—Railways: Killed, 0.02; injured 1.84. Tramways: Killed 0.03, injured 0.97. The rates for the railways are usually the higher on account of the greater length of the average journey travelled by railway passengers.

The amount of compensation paid in respect of injuries to passengers and damage to goods during each of the last five years was as follows:—

Accidents.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Railway--	£	£	£	£	£
Passengers ...	60,439	14,238	6,928	6,606	2,099
Goods ...	25,553	18,634	16,925	17,647	12,253
Tramway ...	24,000	26,348	17,166	19,283	8,537
Total ... £	110,032	59,220	41,019	43,536	22,889

MOTOR AND OTHER LICENSED VEHICLES.

The use of motor transport vehicles is subject to special laws and restrictions in order that the risk of accidents may be minimised and the flow of traffic regulated where necessary; also to facilitate the collection of taxes for the upkeep of roads, etc. Motor vehicles and drivers must be registered and the registrations must be renewed annually. Persons who apply for a license to drive are required to pass a test as to their ability and they hold their licenses subject to the observance of the motor traffic regulations. Public vehicles, whether motor or horse-drawn, and persons driving them must be licensed if they ply or stand in a public street for hire.

In transport districts the licensing and regulation of public vehicles and drivers and conductors thereof are functions of the transport trusts. The Commissioner of Road Transport is charged with the registration of other motor vehicles, the licensing of drivers under the Motor Traffic Act and the collection of taxes and fees in respect of all motor vehicles.

The services of the police are utilised, by arrangement between the Commissioner of Police and the Commissioner of Road Transport, to issue the licenses and to collect the taxes and fees in all parts of the State. They regulate the street traffic, vehicular and pedestrian, in the metropolitan area, and they have general authority to take action against dangerous or disorderly traffic.

In municipalities and shires outside the transport district the local councils are authorised by the Local Government Act to control public vehicles and to enact by-laws for the regulation of street traffic. In other areas, i.e., in the unincorporated portion of the western division of New South Wales, vehicles used to convey passengers for hire must be licensed under the Stage Carriages Act.

The proceeds of the registration and taxation of vehicles and the licensing of drivers, etc., are paid into the Road Transport and Traffic Fund, or the Public Vehicles Fund, or the Main Roads Funds for the purposes shown hereunder.

The fees for the registration of motor and public vehicles, drivers, etc. (except service license fees in respect of motor omnibus services) are payable into the Road Transport and Traffic Fund at the Treasury to meet the cost of police supervision of road transport, administrative and other costs under the Transport Act (except expenses of the transport services conducted by a trust), and expenses relating to traffic facilities, and to provide certain contributions to local authorities towards the maintenance of roads used by trams, etc. The credit balance of the Road Transport and Traffic Fund at the end of each financial year is payable to the Country Main Roads Fund.

Annual service license fees payable in respect of motor omnibus services in the transport districts and the taxes on public motor vehicles are paid into the Public Vehicles Fund, which is subject to the control of the Commissioner of Road Transport. The taxes on motor omnibuses and half the service license fees are payable from this fund to the Main Roads Board

and to councils of municipalities and shires for the maintenance of roads used by motor omnibuses. The balance of the service licenses fees is applied to the reduction of the capital indebtedness of the Trust.

The tax on public vehicles other than motor omnibuses is to be expended on resumptions and traffic facilities, and a proportion of the tax on tourist motor service vehicles operating partly within and partly outside a transport district may be paid to the Country Main Roads Fund. The proceeds of taxation of motor vehicles, other than public vehicles, after a deduction of 5 per cent. to cover cost of collection, are paid into the Main Roads Funds, viz., half the taxes paid on vehicles owned by residents of the county of Cumberland to the County of Cumberland Main Roads Fund and the balance to the Country Main Roads Fund.

The State Transport (Co-ordination) Act passed in August, 1931, contains provisions which came into force on 2nd November, 1931, by which owners of public motor vehicles and those used in the course of trade or business may be required to obtain licenses under this Act in addition to registration under the Motor Traffic and Transport Acts. Such licenses are not required in respect of vehicles or classes of vehicles exempted by the Board, or used for carrying passengers over specified routes or in specified districts under permits issued by the Board. As the main object of the legislation is the co-ordination of the rail and road transport services with a view of preventing wasteful competition, the Board has been given discretionary powers as to the conditions under which licenses may be issued. The Board may impose charges in respect of the transport of passengers and goods by public motor vehicles, the maximum in respect of passengers being 1d. per passenger for each mile or part thereof, or for each section or part thereof (whichever is the greater sum). The maximum rate for goods is 3d. per ton of the aggregate weight of the vehicle unladen and its carrying capacity for each mile or part thereof. The charges on goods are not imposed where a vehicle is used solely for carrying goods to the nearest railway station, and they may be remitted by the Board for any reason. Where a vehicle is used solely for journeys which do not exceed 20 miles, the Board may grant exemption from the special charges on passengers and goods. Agents for persons operating public motor vehicles and agents in respect of the carriage of persons or goods, otherwise than by ship, are required to obtain licenses and to renew them annually.

The charges imposed in respect of the transport of passengers and goods by public motor vehicles and fees for licenses and permits are paid into the State Transport (Co-ordination) Fund at the Treasury, from which may be paid costs of administration and subsidies for motor services which are feeders to railways or tramways. With the Minister's approval payments may be made from the fund to the Government Railways Fund or to the general funds of the transport trusts.

REGISTRATION OF MOTOR VEHICLES.

A comparative statement of the number of motor vehicles on the register at various dates is shown below. The figures in the table do not represent the total number of motor omnibuses nor of taxi-cabs as those plying outside or beyond the Metropolitan district are included with cars. Moreover, at the end of the year 1930 a number of motor omnibuses actually in use in the Metropolitan district were not included in the registrations. The sections of the Transport Act, 1930, which relate to motor omnibus services had been brought into operation on 1st October, 1930, and the issue of the licenses was delayed in some cases as a result of the additional obligations

which this law placed upon the owners of the vehicles, *e.g.*, insurance against passenger and third-party risk. This accounts for the apparent decrease in these registrations during the December quarter.

End of year or month.				Registrations in force.									
				Public vehicles registered in Metropolitan District.			Other Motor Vehicles.			All Motor vehicles.	Per 100 of population.		
				Cab.	Van.	Omni-bus.	Car.	Lorry.	Cycle.		Cars only	All motor vehicles.	
1911	175	3	4	3,975			2,788	6,945	0.23	0.41
1916	...	...	...	268	32	12	14,175	845	7,070	22,402	0.75	1.19
1921	...	...	...	407	376	180	28,665	3,524	11,291	41,443	1.35	2.09
1926	...	...	...	779	1,723	486	104,675	22,986	25,424	156,073	4.46	6.64
1927	...	...	...	997	2,016	525	129,985	30,517	28,054	192,094	5.41	8.00
1928	...	...	...	1,173	2,126	565	155,403	37,129	30,882	227,278	6.35	9.29
1929	...	...	...	1,364	2,274	612	170,039	42,594	30,655	247,538	6.86	9.98
1930	Mar.	...	...	1,351	2,272	628	171,492	43,371	30,198	249,312	6.90	10.03
	June	...	...	1,340	2,235	640	169,495	43,074	29,410	246,194	6.82	9.90
	Sept.	...	...	1,233	2,194	643	167,812	42,821	28,514	243,217	6.73	9.75
	Dec.	...	...	1,221	2,186	435*	164,160	42,278	27,258	237,547	6.56	9.49
1931	Jan.	...	...	1,218	2,165	471*	161,776	41,886	26,815	234,331	...	...
	Feb.	...	...	1,161	2,145	522	160,248	41,480	26,593	232,149	...	...
	Mar.	...	...	1,159	2,152	552	158,833	41,088	26,345	230,129	6.34	9.19
	April	...	..	1,125	2,130	551	156,580	40,552	25,938	226,876	...	...
	May	...	...	1,113	2,101	572	154,421	39,897	25,584	223,688	...	...
	June	...	...	1,078	2,092	588	154,096	39,696	25,453	223,003	6.14	8.89
	July	...	...	1,077	2,061	627	151,760	39,055	24,955	219,535	...	...
	Aug.	...	...	1,071	2,039	637	151,117	38,710	24,770	218,344	...	...
	Sept.	...	...	1,052	2,011	649	148,874	38,123	24,330	215,039	5.92	8.55
	Oct.	...	...	1,058	2,003	701	147,331	37,831	24,047	212,971	...	...

* Exclusive of some registrations under consideration (see context above).

The figures show that a remarkable development occurred in motor transport, the number of vehicles per 100 of population in March, 1930, being five times the proportion in 1921. The number of vans and lorries rose from 3,900 to 45,643, the number of motor-cars from 28,665 to 171,492, and the motor cabs in the Metropolitan area from 407 to 1,351. The annual increase was greatest in 1927 when the net addition to the number of motor vehicles was 36,021. In the following year the rate of increase became much slower, and in the second quarter of 1930 the number began to decline. The net increase in 1929 was 20,260, and there was a decrease of 9,991 in the year 1930, and 24,576 in ten months January to October, 1931. Excluding cycles, the number of new motor vehicles registered was 35,601 in 1929, 15,460 in 1930, and 3,879 from 1st January to 3rd November, 1931.

The fees for the registration of motor vehicles, etc., to be paid on the issue of a license and on each renewal are as follows:—Motor cycle 2s. 6d., other motor vehicle £1, driver 10s., motor cycle rider 5s. For a learner's permit to drive 5s. is charged. Annual fees for traders' plates are £2 for motor cycles and £8 for other motor vehicles.

The maximum fee which may be charged by local councils in respect of the license of a public vehicle is £1 per annum, and for a driver's license 5s. per annum.

MOTOR DRIVERS' LICENSES.

The increase in motor transport facilities is shown also by the following statement of the number of persons holding licenses to drive motor vehicles at the end of the years specified:—

Year.	Licenses in force at 31st December.					
	Public motor vehicles registered in Metropolitan District.				Other motor vehicles.	
	Cab drivers.	Van drivers.	Omnibus.		Car drivers.	Cycle riders.
			Drivers.	Conductors.		
1911	248	9	6	9	5,517	3,323
1916	387	47	21	5	22,598	9,444
1921	627	523	441	200	52,538	16,115
1926	2,174	2,194	1,926	1,118	183,680	32,228
1927	2,087	2,401	1,065	1,756	224,575	34,267
1928	2,053	2,591	1,886	1,081	266,708	36,780
1929	1,997	2,714	2,107	1,077	297,491	36,784
1930	1,989	2,693	1,981	958	302,472	33,935
1931*	1,744	2,631	1,977	913	291,378	31,946

* At 30th June.

The organisation of taxi-cab companies caused a notable increase in 1926 in the number of licenses issued to drivers of taxi-cabs, and there was a slow decline in later years.

TAXATION OF MOTOR VEHICLES.

A tax is levied on every motor vehicle and it must be paid annually by the person in whose name the vehicle is registered, when the certificate of registration is issued or renewed. The rates of tax are based upon the weight of the vehicle and the type of tyre used, except in the case of motor cycles. Prior to 1st January, 1925, they were fixed in relation to horse-power.

The rates per $\frac{1}{2}$ cwt. imposed upon vehicles with solid tyres are as follows:—Car, 3s. 3d., lorry 3s. 6d., omnibus 5s. 6d. If the tyres are pneumatic, semi-pneumatic rubber, or super-resilient, the rate for a car or lorry is 2s. 9d. per $\frac{1}{2}$ cwt., and for an omnibus 4s. 3d. per $\frac{1}{2}$ cwt. The tax on a motor cycle is 22s. 6d., or if a side car is attached £2. For tractors the rate is 3s. 6d. per $\frac{1}{2}$ cwt. up to a maximum of £15. Trailers and other motor vehicles are taxable at the rate of 3s. 6d. per $\frac{1}{2}$ cwt. Tractors, motor lorries, and other motor vehicles owned by farmers and used solely for carting the produce of their farms are taxable at half-rates. A reduction of 6d. per $\frac{1}{2}$ cwt. is allowed on vehicles of British manufacture.

The following are exempt from taxation, viz.:—Ambulance motor vehicles; those used by manufacturers or dealers for trial purposes; and so much of the weight of a motor vehicle used solely for mining purposes in the Western Division of the State as exceeds 5 tons; motor vehicles owned by the council of a municipality or shire and used solely for the purposes of road construction, maintenance, or repair; trailers and motor vehicles used solely for work on farms; trailers owned by farmers and used solely for carting the produce of their farms, or owned by timber-cutters and used solely for carting their timber from forest to mill.

The total receipts under these Acts during each year since 1921 from the registrations, licenses and taxation of motor vehicles, as recorded by the Police Department and the Commissioner of Road Transport, are shown below:—

Year.	Metropolitan Traffic Act.	Motor Traffic Traffic Act.	Motor Vehicles Taxation Act.	Search fees and Exchange.	Total.
	£	£	£	£	£
1921 ...	4,834	51,712	131,025	...	187,571
1922 ...	5,418	62,673	161,874	...	229,965
1923 ...	6,017	85,874	219,952	...	311,843
1924 ...	6,659	117,993	300,248	...	424,900
1925 ...	8,267	200,033	657,979	901	867,180
1926 ...	9,120	252,939	856,354	1,647	1,120,060
1927 ...	9,175	311,213	1,035,639	2,002	1,358,029
1928 ...	9,621	372,260	1,246,424	2,682	1,630,987
1929 ...	10,595	408,425	1,386,565	3,147	1,808,732
1930 ...	9,445	396,706	1,345,801	3,194	1,755,146

The rates of taxation in respect of motor vehicles were raised on 1st January, 1925, and the revenue in 1930 was more than twice the tax in 1925.

MOTOR OMNIBUS SERVICES.

The transport trusts regulate the motor omnibus services in the Metropolitan and Newcastle Districts. The vehicles, drivers and conductors are registered annually, and by means of an annual service license, which must be obtained for each service, the Trusts determine such matters as routes, fares, etc. Where a service would come into competition with railway or other transport services, conditions may be imposed with a view to preventing undue competition or overlapping. The registration of each omnibus is conditional upon fitness, the observance of regulations regarding design and construction, and provision for the safety and comfort of passengers. Owners of motor omnibuses are required to insure against liability by way of damages in the case of injury to persons or property. The amount of insurance is fixed at £5,000 in respect of each omnibus, but the Trust may reduce the amount to £1,000 where there are special circumstances, or may accept from an owner, as a sufficient compliance with the law, a comprehensive policy for £15,000 in respect of all his omnibuses.

The annual fee for each service license is fixed by the Trust with regard to the nature and extent of the benefit enjoyed by the holder of the license, the nature of the route traversed and the effect on services provided by the Trust, the maximum being an amount equivalent to £4 for each passenger each omnibus is authorised to carry. The fee for experimental or developmental or unprofitable services may be fixed at a nominal rate.

On 2nd November, 1931, the omnibus services became subject to the Transport Co-ordination Act (see pages 145 and 174).

Particulars of the motor omnibus traffic in the metropolitan district were collected for the first time in 1929, and a summary relating to the years

ended 30th June, 1929 to 1931, is shown below, also particulars relating to the Newcastle district for the year ended 30th June, 1931:—

Year.	Licensed Omnibuses at end of Period.			Omnibus Miles Run.	Passengers Carried.	Revenue.	Expenditure.	
	Number in Service.	Number in Reserve.	Carrying Capacity (Persons).					
Metropolitan District.								
1928-29	...	480	92	13,665	16,911,793	89,845,001	£ 1,446,876	£ 1,293,437
1929-30	...	492	132	15,376	19,227,383	94,481,982	1,540,456	1,256,773
1930-31	...	483	107	17,908	19,548,162	92,125,207	1,357,505	1,352,649
Newcastle District.								
1930-31	...	83	10	2,551	3,113,477	8,248,000	140,110	139,914

The number of persons employed in connection with the metropolitan motor omnibus services at 30th June, 1931, was 2,079, viz., 69 clerks, etc., 1,642 drivers and conductors, and 368 other employees. The employees in the Newcastle district numbered 212.

An analysis of the expenditure of the metropolitan services during the year ended June, 1931, shows that management and general expenses amounted to £205,522, operating expenses to £836,402, and repairs, depreciation and interest to £310,725. Similar details for the Newcastle district were £19,269, £92,136 and £28,509 respectively.

TRAFFIC ACCIDENTS.

The following table shows particulars of accidents which occurred in public streets within the Metropolitan Traffic District and were reported by the police during recent years:—

Year.	Accidents in which no persons were injured.	Persons Killed or Injured in Accidents caused by—				Total Number of Persons.	
		Trams.		Motor Vehicles.			
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1911	963	10	633	5	130	28	1,212
1921	1,199	10	318	36	792	62	1,616
1926	7,360	11	303	144	3,660	187	4,861
1927	8,029	17	339	157	4,443	206	5,644
1928	9,399	9	415	185	5,612	212	6,881
1929	10,864	10	374	239	6,243	272	7,299
1930	8,825	7	335	220	5,627	238	6,388

The number of persons killed or injured in tram accidents, as shown above, does not include accidents due to persons getting on or off trams in motion.

During the year 1930 the motor accidents reported by the police in localities outside the Metropolitan Traffic District numbered 2,548. In such accidents 138 persons were killed and 1,576 were injured.

AVIATION.

Civil aviation in Australia is subject to the Air Navigation Act, 1920, which authorises the Governor-General of the Commonwealth to make regulations to control air navigation, applying the principles of the Convention for the Regulation of Aerial Navigation signed in Paris on 13th October, 1919.

The Federal Government has surveyed routes and established landing places in various parts of Australia, and has afforded assistance to private organisations for the encouragement of civil aviation. A service for the carriage of aerial mails and passengers between Sydney and Adelaide was established in 1924. Subsequently the route was altered, and a contract was arranged for a service between Cootamundra and Adelaide, with branch services between Hay and Melbourne and between Broken Hill and Mildura. The contract expired in June, 1930.

A daily service between Sydney and Brisbane was commenced on 1st January, 1930, and extended during the year to Melbourne and Tasmania. Surcharged mails were conveyed at poundage rates until the services were suspended in June, 1931.

Certain provisions of the State Transport (Co-ordination) Act, 1931, for the regulation of transport services by public motor vehicles, as described on page 174, are applicable to aircraft.

Particulars relating to aircraft in each of the five years ended June, 1931, are shown below. The figures refer only to aircraft registered in New South Wales, and owing to interstate flying they do not cover all the aviation which has taken place within its boundaries.

Particulars.	Year ended 30th June.				
	1927.	1928.	1929.	1930.	1931.
Companies or persons owning aircraft ...	10	14	39	53	49
Aircraft	12	18	53	78	70
Licensed Pilots—					
Private	*	*	96	145	164
Commercial	*	*	45	70	77
Flights—Number	5,913	35,829	51,301	46,225	33,383
Hours	1,726	5,470	10,480	14,801	18,933
Mileage (approximate)	120,740	375,055	758,246	1,118,704	1,640,130
Passengers carried	5,358	20,995	29,110	34,811	26,967
Accidents—Persons killed ... ..	...	...	3	9	11
Persons injured	1	...	6	10	9

* Not available.

It is evident that the great majority of the flights are pleasure trips of short duration, the average time being less than 20 minutes and the average length 24 miles per flight in 1929-30. The corresponding averages in the following year were 35 minutes and 49 miles.

Aero clubs have been established in Sydney and Goulburn for the advancement of civil aviation. The Federal Government subsidises the clubs in respect of licenses issued to qualified pilots.

POSTS AND TELEGRAPHS.

The postal, telegraph, and telephone services of New South Wales have been controlled by the Commonwealth Government since 1st March, 1901. The services are administered by a Minister of the Crown, with a permanent salaried officer in charge of the central executive office, and a deputy in each State.

POSTAL SERVICES.

Post offices have been established throughout the State, even in localities where there are few residents. If the volume of business does not warrant the establishment of a full service, receiving offices are opened for the collection of mail matter for conveyance to and from the nearest post office. The transport of mails in outlying districts has been expedited considerably in recent years by reason of an extended use of motor vehicles and by a few aerial services. The number of inland mail services in operation in New South Wales in 1929-30 was 2,106. The cost of road services amounted to £312,765, and of railway services to £196,875.

Ocean mail services are conducted in accordance with arrangements made between the Commonwealth Government and the steamship owners. Some of the services between Australia and the Pacific Islands are subsidised by the Commonwealth, and the Orient Steamship Company receives £120,000 per annum for a four-weekly service with Europe. Mails are conveyed along other routes at poundage rates. They are despatched at least once a fortnight to Europe, *via* Suez, and there is regular communication with America and with Eastern ports.

Particulars regarding the volume of postal business, viz., letters, newspapers, and packets, are not available. In 1929-30 the parcels posted in New South Wales for delivery in the Commonwealth numbered 6,757,100, and 112,100 were for delivery in other countries, the number received from overseas being 193,900. The number of registered articles (other than parcels) posted in New South Wales for delivery in Australia was 2,792,117; and 190,953 were despatched to and 252,320 were received from other countries.

A system of value-payable parcel post has been established, mainly for the convenience of people who reside at a distance from the trading centres. The Department accepts for transmission within the Commonwealth parcels or letters sent in execution of orders, and collects from the addressees on behalf of the senders the charges due thereon. The system applies also to registered articles transmitted to or from Papua. During the year ended 30th June, 1930, the number of such articles posted in New South Wales was 299,930, and the value collected was £436,025, the revenue, including postage, commission on value, registration, and money-order commission, being £38,518.

Postage rates for letters to places within the British Empire were increased in August, 1930, from 1½d. to 2d. per oz.

TELEGRAPHS AND CABLES.

The telegraph system embraces the whole Commonwealth. It has been extended steadily since January, 1858, when the system was opened to the public in New South Wales, and modern equipment has been installed in the chief centres to expedite the transmission of messages.

Cable communication with Europe and other countries is supplied by four main routes. One cable lands in Fremantle (Western Australia) and

in Durban (South Africa), and two land in Banjoewangie (Java), viz., one from Roebuck Bay (Western Australia) and the other, which is duplicated, from Darwin (Northern Territory). The fourth route is by the Pacific Cable from Southport (Queensland), via Norfolk Island, Fiji, and Fanning Island to Bamfield (Canada). A branch cable runs from Norfolk Island to New Zealand, and there are two direct cables to New Zealand, which land near Sydney, one at La Perouse, and the other at Bondi. Lines have been laid also between the Australian mainland and Tasmania and New Caledonia. The Pacific cables are maintained by the Governments of the United Kingdom, Canada, New Zealand, and Australia.

For cable messages to Great Britain, the ordinary rate is 2s. per word. Deferred cablegrams written in plain language and subject to a delay not exceeding twenty-four hours may be exchanged at half the ordinary rates with Great Britain and with a number of other British and foreign countries. Week-end cable letters may be transmitted between Australia and the United Kingdom and British North America, the rate to and from Great Britain being 12s. 6d. for twenty words and 7½d. for each additional word. Daily letter telegrams with normal delivery after 48 hours may be exchanged with a number of countries at rates which are much below the ordinary rates, the minimum charge between Australia and the United Kingdom being 15s. for twenty words and 9d. for each additional word. Special conditions, with cheap rates, have been arranged for the transmission of press messages by telegraph or cable.

The following table shows the number of telegrams despatched in New South Wales for delivery within the Commonwealth and the number despatched to and received from countries outside Australia, in various years since 1901. Messages to and from Tasmania are classified as Australian telegrams and not as cablegrams. The total number of telegrams handled in New South Wales cannot be stated, as full particulars are not available regarding messages received from other States nor those in transit.

Year.	Telegraph Stations.	Telegrams despatched for delivery in Australia.	Cablegrams.		Revenue Received.
			Despatched.	Received.	
1901	978	2,669,724	59,360	72,735	186,135
1911	1,406	4,314,252	129,809	123,910	253,398
1920-21	2,252	5,906,243	249,705	263,482	489,805
1925-26	2,894	6,214,370	350,146	350,129	516,176
1926-27	2,985	6,090,777	357,860	360,572	503,682
1927-28	3,041	5,942,912	385,179	376,491	508,914
1928-29	3,069	5,972,606	415,813	388,093	526,508
1929-30	3,093	5,653,070	399,653	382,323	485,094

WIRELESS TELEGRAPHY.

During the years 1912 to 1914, a chain of stations was erected around Australia by the Commonwealth to give wireless communication with shipping, three of the stations, including the Sydney station, being capable of long distance communication. The stations were controlled by the Department of the Navy during the years 1915 to 1920. In May, 1922, the commercial radio stations were transferred, under an agreement with the Federal Government, to the Amalgamated Wireless (Australasia), Limited, in which the Commonwealth has a controlling interest. The company undertook to erect a high-power station in Australia for communication

with Great Britain and Canada, where corresponding stations were to be established. In consequence of the development of the beam system the agreement was altered in 1924, and instead of high-power stations, services under the beam system have been provided. The service between Australia and Great Britain was opened on 8th April, 1927, and between Australia and Canada on 16th June, 1928. The rate for ordinary messages is 1s. 8d. per word to Great Britain, and 1s. 5½d. to Canada. Deferred messages are cheaper.

The radio traffic during 1929-30 consisted of 70,616 paid messages, 1,100,273 words; 544 service messages, 19,608 words; and 4,061 weather messages, 100,169 words.

Private installations for wireless communication and for broadcasting are operated under license, but they are not permitted to engage in commercial traffic unless authorised to do so. A national broadcasting service was inaugurated in July, 1929, and two private stations were transferred to the control of the Commonwealth Government. In July, 1931, there were also 15 licenses for private broadcasting stations in the State.

The wireless licenses issued in New South Wales during the last five years were as follows:—

Licenses.	Year ended 30th June—				
	1927.	1928.	1929.	1930.	1931.
Station—					
Coast	1	1	1	2	2
Ship	32	24	11	10	9
Land	4	4	6	6	7
Broadcasting	9	9	9	9	15
Broadcast listeners	56,995	79,931	100,798	111,080	122,061
Dealers' listening	860				
Experimental	283	266	214	173	278
Portable	5	6	6	5	7
Aircraft ... ..	...	...	1	...	...
Special ... ..	...	16	20	18	3
Total	58,189	80,257	101,066	111,303	122,382

An overseas telephone service was established in April, 1930, when a commercial service was opened between Australia and Great Britain. It has been extended to other European countries and to America.

TELEPHONES.

The telephone system was established in Sydney in 1880, and the system has been installed in a large number of country districts. In the Metropolitan district a number of automatic exchanges are in operation. Trunk lines serve a wide area of the State, and a line between Sydney and Melbourne was brought into use in 1907, and between Sydney and Brisbane in 1924. During the years 1930 and 1931 the services were extended to Northern Queensland and to Western Australia. The "carrier wave" system of operating long-distance telephone traffic was introduced in September, 1925. By this means a number of conversations may be conducted simultaneously over one pair of wires.

The following table shows the growth of the telephone service in New South Wales since 1901:—

Year.	Exchanges.	Number of Lines Connected.	Public Telephones.	Telephone Instruments connected.
1901	48	9,864	72	13,773
1911	268	34,551	722	43,032
1920-21	921	74,490	1,693	96,710
1925-26	1,621	117,249	2,379	152,969
1926-27	1,740	127,784	2,555	167,301
1927-28	1,811	137,602	2,651	181,484
1928-29	1,893	146,492	2,779	193,718
1929-30	1,951	150,606	2,879	199,007

The number of exchanges as stated above for 1925-26 and later years represents the number of offices with one or more lines connected. The figures for earlier years do not include offices with only one line.

The annual ground rent for an exclusive telephone service ranges from £3 in respect of exchanges where the number of subscribers' lines does not exceed 300, to £5 10s. where there are over 10,000 lines. For each effective outward call where the number of lines connected with the exchange does not exceed 300, a charge of 1d. per call is made; at other exchanges the charge is 1½d.

FINANCIAL RESULTS OF POSTAL SERVICES.

Particulars regarding the financial results of operations in the various branches of the post office in New South Wales during the year ended 30th June, 1930, are shown below:—

Branch.	Earnings.	Working Expenses.	Surplus.	Interest on Capital.	Net Profit.
	£	£	£	£	£
Postal	2,404,176	2,121,367	282,809	71,304	211,505
Telegraph	524,750	551,757	(-) 27,007	53,475	(-) 80,482
Telephone	2,361,924	1,660,982	700,942	566,429	134,513
Total, All Branches ...	5,290,850	4,334,106	956,744	691,208	265,536

(-) Denotes loss.

The services earned a substantial surplus over expenses in the whole Commonwealth, as well as in New South Wales, during the two years ended June, 1929 and 1930.

A comparative statement of the financial results for the whole Commonwealth is shown in the following statement:—

Year. ended 30th June.	Earnings.	Working Expenses.	Surplus.	Interest on Capital.	Net Profit.
	£	£	£	£	£
1921	8,511,494	6,724,543	1,786,951	643,183	1,143,768
1926	10,802,917	9,829,065	973,852	1,259,189	(-)285,337
1927	11,650,265	10,411,508	1,238,757	1,410,818	(-)172,061
1928	12,325,082	11,028,632	1,296,450	1,527,113	(-)230,663
1929	12,933,835	11,190,467	1,743,368	1,686,844	56,524
1930	13,391,008	11,310,481	2,080,527	1,882,644	197,883

(—) Denotes loss.

AGRICULTURE

AREA OF AGRICULTURAL LANDS.

A brief historical note on the growth of agriculture was published on page 709 of the Official Year Book, 1921, and a comparison of the areas cultivated in divisions of the State since 1905 appeared on page 712.

The progress of cultivation since 1891, in quinquennial periods, is shown in the following table:—

Years ended June—	Annual Average Area under—		Acres per Inhabitant under—	
	Cultivation and Sown Grasses.	Crops.	Cultivation and Sown Grasses.	Crops.
	acres.	acres.		
1891-95	1,398,199	1,048,554	1.18	0.88
1896-00	2,252,649	1,894,857	1.73	1.46
1901-05	2,942,506	2,436,765	2.10	1.74
1906-10	3,575,873	2,824,253	2.34	1.84
1911-15	5,187,850	4,025,165	2.93	2.27
1916-20	6,011,049	4,615,913	3.09	2.37
1921-25	6,599,048	4,665,362	3.04	2.15
1926-30	7,149,119	5,014,364	2.98	2.09
1921	6,280,517	4,464,342	3.01	2.14
1922	6,451,363	4,445,848	3.03	2.09
1923	6,619,538	4,694,088	3.05	2.11
1924	6,738,958	4,808,046	3.05	2.18
1925	6,904,866	4,911,148	3.06	2.18
1926	6,559,272	4,541,423	2.85	1.98
1927	6,632,602	4,595,711	2.82	1.96
1928	7,175,367	4,994,515	2.99	2.08
1929	7,641,853	5,440,762	3.12	2.22
1930	7,736,500	5,490,408	3.12	2.22

More than 80 per cent. of the area under crop is sown with wheat, and as other individual crops are of relatively small extent, the fluctuations in the area under crops are due mainly to variations in the extent of wheat-growing. The area of land under sown grasses (2,237,092 acres in 1929-30) consists principally of lands in the coastal districts, cleared and sown with grasses for the maintenance of dairy stock.

Particulars obtained in 1930 indicated that there were approximately 23,565,000 acres of alienated land (inclusive of that required to depasture working horses and milking cows necessary on the farm) which, in the opinion of the occupier, was suitable for cultivation after the removal of standing timber. A small proportion of the land included in this area (which represented one-third of the total alienated land) is situated in

districts where the rainfall has not yet been found adequate for agricultural production on a commercial scale. Included in the designation "alienated land" are lands in course of alienation and certain lands held under perpetual lease. The area of Crown lands suitable for cultivation has not been ascertained, but is extensive. The area of holdings 1 acre or more in extent used directly or indirectly for agriculture was returned as 8,958,264 in 1930.

The following table shows the divisional distribution of agricultural lands during the season 1929-30. The divisions referred to are shown on the map forming the frontispiece of this Year Book:—

Division.	Total Area of Division.	Area of Alienated and Crown Lands under—			Area of Alienated Land Occupied in Holdings of 1 acre and over—*		
		Occupation in Holdings of 1 acre and over.	Crops.	Sown Grasses.	Suitable for Cultivation.	Under Crops, 1929-30.	Proportion of Suitable Area Cultivated.
	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	000 acres.	per cent.
Coastal—							
North Coast	6,965	4,778	105	1,665	489	105	21·5
Hunter and Manning ..	8,395	5,335	98	297	420	98	23·3
Metropolitan	958	303	31	1	132	31	23·2
South Coast	5,968	2,529	51	146	312	51	16·4
Total	22,286	12,950	285	2,109	1,353	285	21·0
Tableland—							
Northern	8,060	6,585	71	10	357	71	18·3
Central	10,716	7,638	333	20	1,547	329	21·
Southern	7,062	5,697	4	6	346	40	11·5
Total	25,847	19,920	444	36	2,280	440	19·3
Western Slopes—							
North	9,219	8,176	891	4	1,470	386	26·3
Central	7,723	6,823	951	13	3,877	940	24·2
South	11,222	9,705	1,267	27	4,843	1,244	25·7
Total	28,164	24,704	2,609	44	10,190	2,570	25·2
Central Plains—							
North	9,580	7,474	123	6	913	116	12·7
Central	14,811	13,504	322	1	2,377	317	13·3
Riverina	17,021	16,096	1,700	41	6,324	1,589	25·1
Total	41,412	37,074	2,145	48	9,614	2,022	21·0
Western	80,319	77,888	16	..	123	9	6·9
All Divisions ..	198,028	172,536	5,490	2,237	23,565	5,326	22·6

* Total area of alienated land in holdings of 1 acre and over used for pastoral and farming purposes was 73,231,375 acres, including lands in course of alienation and certain lands under perpetual lease.

In addition to the area of alienated land under crops in 1929-30 (shown above) an area of 337,287 acres of new land was cleared and grubbed for ploughing, 1,359,805 acres were worked under a full year's fallow, 422,222 acres were worked for summer fallow and 2,964,765 acres previously cropped land were not ploughed in that season. Similar particulars in respect of Crown lands are not available, but the areas of such lands under cultivation of any kind are relatively small.

NUMBER OF AGRICULTURAL HOLDINGS.

A consideration of the number of holdings on which land was cultivated, and the number of crops grown, affords guidance as to the popularity of the various crops.

The number of such holdings, and the number of crops cultivated on them at intervals since 1900-01 are shown in the following statement.

Kind of Crop.	Number of Holdings upon which Crop was grown.					
	1900-01.	1905-06.	1915-16.	1925-26.	1928-29†.	1929-30.†
Wheat	20,149	19,049	22,453	17,074	17,134	16,382
Maize	17,569	17,475	14,869	15,196	14,151	14,787
Barley	2,246	1,755	2,538	1,916	1,250	1,529
Oats	11,547	10,740	13,723	16,851	15,927	16,969
Rice ... ..	...	...	...	...	221	238
Potatoes	9,521	8,552	4,643	3,679	2,428	2,302
Tobacco	31	98	97	111	89	61
Sugar-cane	1,214	1,113	694	955	926	891
Grapes	1,832	1,530	1,388	1,809	1,678	1,628
Orchards†—Citrus	1,905	2,385	5,787	5,718	5,368	5,110
Other	8,064	6,846	8,760	7,218	6,224	5,854
Market Gardens ...	2,266	2,842	3,301	2,398	1,459	1,750
Total Cultivated Holdings*	45,828	46,349	50,728	49,668	48,000†	47,653†

* Holdings on which more than one crop was grown are included once only. of less than 1 acre, which were included in 1925-26 and earlier years.

† Excluding crops of less than 1 acre, which were included in 1925-26 and earlier years.

† Orchards are included in both groups if citrus as well as other fruits are grown. The number of orchards of 1 acre or more were 8,279 in 1928-29, and 8,284 in 1929-30.

The number of farms on which wheat is sown has declined notwithstanding a large increase in the area devoted to this crop. Small areas of maize and oats are cultivated by many farmers for use on their farms. Consequently, the holdings with these crops are nearly as numerous as those on which wheat is produced, though the area under wheat is many times greater than the area under maize or oats. Moreover, portion of the area under wheat—varying from one-fourth to one-seventh—is cultivated on the “shares” system, by which a number of growers may be engaged in cultivating one holding.

The total number of holdings of 1 acre and upwards used for agricultural and pastoral purposes in 1929-30 was 76,158, and areas 1 acre or more in extent were cultivated on 47,653 holdings. Only 10,188 holdings were used exclusively for agricultural purposes. In addition, 16,206 holdings were used for agricultural and pastoral pursuits combined, 3,170 for agriculture with dairying, 1,034 for all three pursuits combined, and a limited amount of cultivation of a non-commercial character was conducted in connection with other activities. There were, in all, 28,505 holdings without any cultivated land.

AGRICULTURAL PRODUCTION.

The area and production of the principal crops of New South Wales are shown below. The year ended 30th June, 1916, in which, as the result of special war-time appeal, the area cultivated was greater than in any other season until 1930-31, has been included for comparative purposes:—

Crop.	1915-16.	1925-26.	1927-28.	1928-29.	1929-30.
Wheat (grain)—					
Area acres	4,188,865	2,925,012	3,029,950	4,090,083	3,974,064
Total yield bush.	66,764,910	33,805,500	27,042,000	49,257,000	34,407,000
Average yield p.a. ... bush.	15.9	11.6	8.9	12.0	8.7
Maize—					
Area acres	154,130	120,955	148,801	106,835	108,219
Total yield bush.	3,773,600	3,278,350	3,930,570	2,506,470	3,035,850
Average yield p.a. ... bush.	24.5	27.1	26.4	23.5	28.1
Oats (grain)—					
Area acres	58,636	101,097	114,988	126,743	181,354
Total yield bush.	1,345,698	1,615,650	1,654,560	2,183,880	2,528,610
Average yield p.a. ... bush.	23.0	16.0	14.4	17.2	13.9
Rice—					
Area acres	...	1,556	9,891	14,027	19,780
Total yield bush.	...	61,098	879,113	1,307,520	1,829,173
Average yield p.a. ... bush.	...	39.3	88.9	93.2	92.5
Hay†—					
Area acres	1,108,919	750,605	630,919	684,730	698,395
Total yield tons	1,573,938	866,275	754,176	793,255	686,962
Average yield p.a. ... tons	1.42	1.15	1.11	1.16	0.98
Green Crops—					
Area acres	162,945	479,464	848,042	264,699	356,903
Potatoes—					
Area acres	19,589	22,731	21,578	14,830	12,755
Total yield tons	44,445	43,137	47,397	26,339	23,907
Average yield p.a. ... tons	2.27	1.90	2.19	1.78	1.87
Sugar-cane—					
Area cut acres	6,030	8,688	8,556	6,783	7,967
Total yield tons	157,748	297,335	208,612	147,414	174,110
Average yield p.a. ... tons	26.16	34.22	24.38	21.70	21.85
Fruit—					
Area acres	63,823	89,003	91,879	91,209	93,121
Market Gardens—					
Area acres	10,967	8,985	7,729	7,709	8,380
Total yield £	400,860	682,726	619,017	689,440	621,212
Average yield p.a. ... £	36.6	76.0	80.1	89.4	74.1
All other Crops—					
Area acres	26,843	35,445	35,939	35,334	39,978
Total Area* ... acres	5,800,747	4,543,541	4,998,272	5,442,982	5,500,946

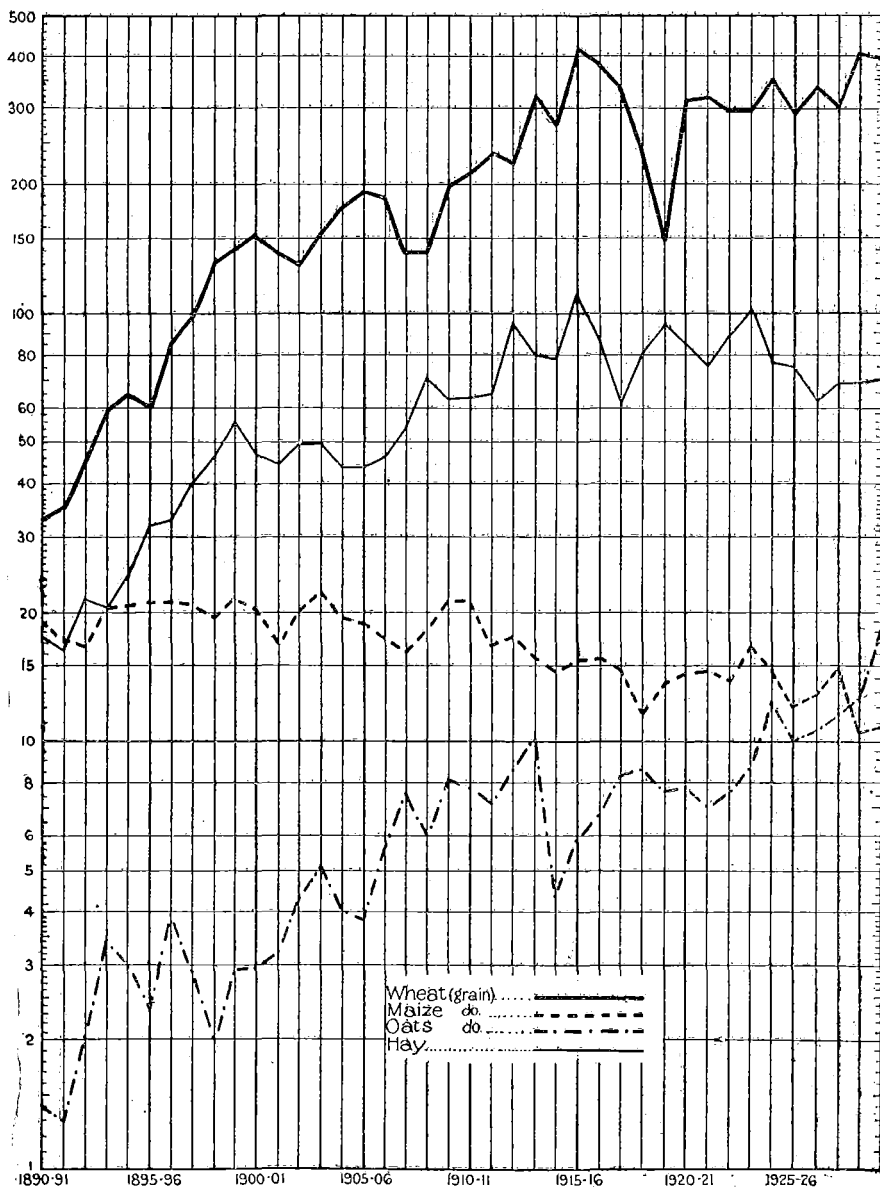
* Including area double-cropped. † Mainly wheaten, oaten, and lucerne.

It will be observed that wheat is the only crop extensively grown. The larger part of the area cut for hay is sown with wheat, but considerable proportions are used for the production of oaten and lucerne hay.‡ Reference to the graphs on the next following pages show that the cultivation of wheat and oats over the past 40 years has been generally increasing while maize growing has decreased. Details of each of these crops are shown on later pages.

‡ See pages 228 and 235.

AREA UNDER PRINCIPAL CROPS, 1890-91 to 1929-30.

Ratio Graph.

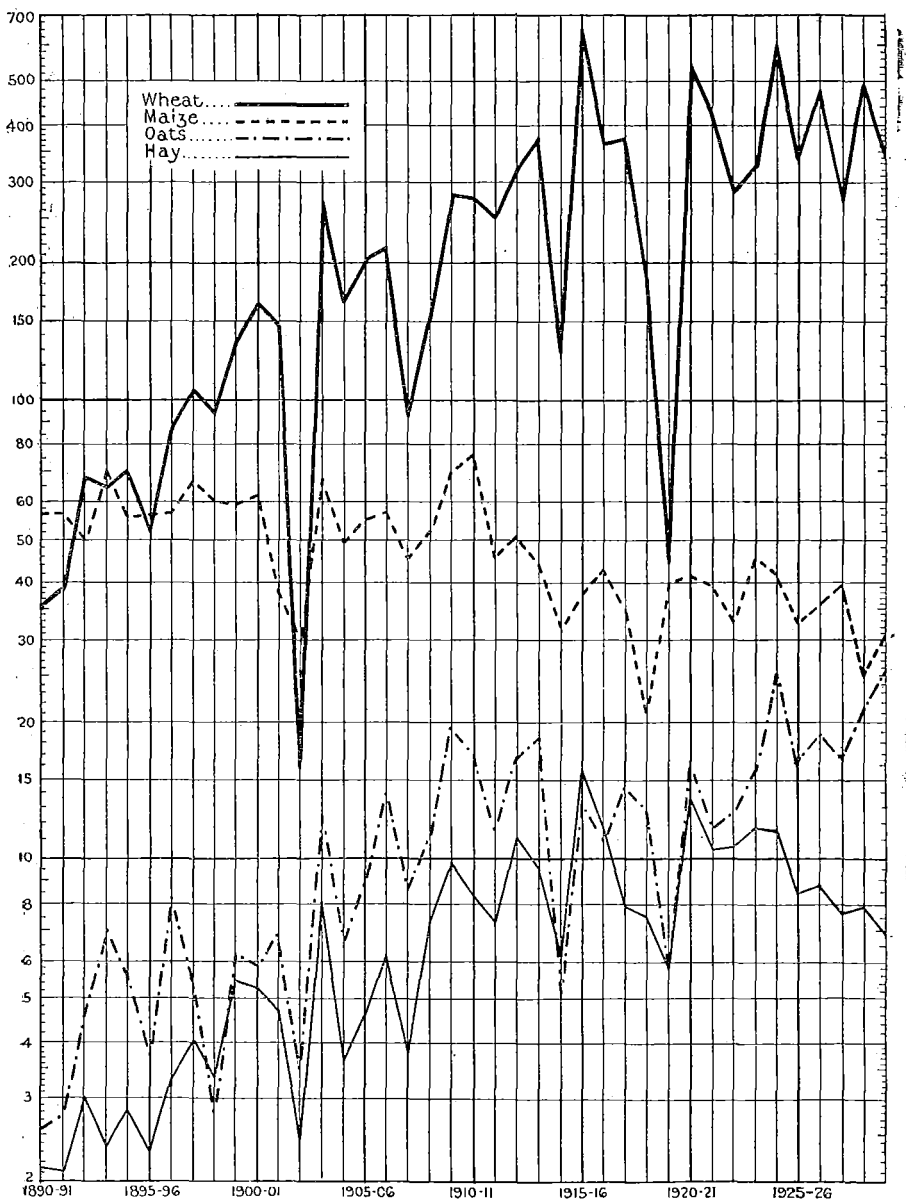


The numbers at the side of the graph represent 10,000 acres.

The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual areas are shown by means of the numbers on the side of the graph.

PRODUCTION OF PRINCIPAL CROPS, 1890-91 to 1929-30.

Ratio Graph.



The numbers at the side of the graph represent 100,000 bushels of wheat, maize, and oats and 100,000 tons of hay.

The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual quantities are shown by means of the numbers at the side of the graph.

In addition to the area shown as cultivated, there were 2,237,092 acres under sown grasses at 30th June, 1930; 26,401,777 acres of occupied Crown lands were ringbarked, partly cleared, and under native grasses.

Value of Agricultural Production.

The estimated value of the agricultural production of the State during the last five seasons and the proportionate value of each crop to the total value are shown in the following table, the values being based on prices realised on the farm or at nearest railway siding:—

Crop.	Value.					Proportion per cent.				
	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	£	£	£	£	£					
Wheat (grain)	8,589,380	10,606,730	6,197,220	9,851,400	5,447,770	41·4	48·4	30·4	49·4	35·3
Maize „	505,820	1,004,710	622,330	543,150	753,960	3·9	4·6	3·7	2·7	4·9
Barley „	23,070	20,050	14,350	15,260	21,440	0·1	0·1	0·1	0·1	0·1
Oats „	383,720	330,880	324,010	254,800	316,080	1·8	1·5	1·9	1·3	2·0
Hay and Straw	5,915,940	5,194,070	4,896,530	4,139,400	3,266,400	28·5	23·5	28·8	20·8	21·2
Green Food	939,752	729,005	995,950	811,930	952,190	4·5	3·3	5·8	4·1	6·2
Potatoes	517,640	341,040	182,430	325,950	159,880	2·5	1·5	1·1	1·6	1·0
Sugar-cane	397,690	385,080	333,520	215,590	291,000	1·9	1·7	1·9	1·1	1·9
Grapes	199,170	322,700	171,890	320,080	208,580	1·0	1·5	1·1	1·6	1·4
Wine, Brandy, etc. ..	97,140	168,030	141,810	96,830	112,020	0·5	0·5	0·8	0·5	0·7
Fruit—Citrus	742,650	762,360	765,240	913,110	1,176,400	3·6	3·5	4·5	4·6	7·6
Other	915,714	913,780	1,021,520	929,660	1,126,910	4·4	4·1	6·0	4·7	7·3
Market-gardens	682,726	661,443	619,020	689,440	621,210	3·3	3·0	3·6	3·4	4·0
Other Crops	533,943	618,622	732,300	818,690	978,980	2·6	2·8	4·3	4·1	6·4
Total.. ..	20,740,960	22,098,100	17,018,170	19,923,350	15,437,880	100	100	100	100	100

No deduction has been made from the values shown above for cost of materials used in production. Seed wheat is included in the production of grain and the fodder used for farm stock is included at its market value. Exclusive of materials used in maintenance of buildings, fences, etc., and of depreciation of stock used for draught purposes, the cost of materials in 1929-30 was approximately £5,126,000. The principal items were: Fodder for stock, £2,140,000; seed, £895,000; depreciation of machinery, £1,088,000; fertilisers, £730,000; sprays, etc., £148,000; and water, £96,000. After deducting these the net value of production was £10,312,000 to the farmer.

The agricultural income of New South Wales at present depends mainly on the return from wheat crops, the value of wheat, grain and hay, in 1929-30 being £6,786,090, or nearly 44 per cent. of the total. Maize is next in importance, but the returns from other individual crops, except fruit, are comparatively small.

In 1924-25 the wheat crop was abundant and marketing conditions favourable, so that the aggregate value of the harvest was very high. In 1925-26 there was only an average wheat crop and prices declined slightly. The production of hay, maize and oats diminished also, but the prices of maize and oats improved. The yield of the principal crops increased in 1926-27, but, except for maize, prices were generally lower. In 1927-28 the wheat harvest was only two-thirds of the average of the previous five years, there was a marked decline in the return from hay and prices of agricultural produce showed another general decline. Although the decline in prices continued in 1929, the value of production increased in consequence of larger harvests except in the case of maize.

Value of Production per Acre.

The following table, showing the value of agricultural production, together with the average per acre, affords an interesting summary of the expansion of agricultural pursuits and a measure of the condition of the industry:—

Years ended June—	Average Annual Area Cultivated.	Average Annual Value of Production.	Average Value per Acre.
	acres.	£	£ s. d.
1887-91	858,367	4,030,611	4 13 11
1892-96	1,147,733	3,812,393	3 6 5
1897-1901	2,114,250	5,592,620	2 12 11
1902-06	2,515,268	6,302,903	2 10 1
1907-11	2,933,021	8,565,164	2 18 5
1912-16	4,507,748	12,867,474	2 17 1
1917-21	4,349,814	16,986,250	3 17 8
1922-26	4,680,110	22,328,630	4 15 5
1927	4 595,711	22,098,100	4 16 2
1928	4 994,515	17,018,170	3 8 2
1929	5,440,762	19,923,350	3 13 3
1930	5,499,408	15,437,880	2 16 2

The comparatively high value of production per acre shown in the ten years prior to 1897 was due to the fact that agriculture was on a smaller scale; crops produced by intense cultivation were a larger proportion of the total than in recent years. The increased values shown between 1912-16 and 1929 was due mainly to the higher level of prices received for produce concurrently with the general rise in prices, but the influence of this factor is affected by variations in the yield per acre.

The average value per acre of various crops is shown below:—

Crop.	Average Values per Acre.						
	Ten years ended 1913-14.	Ten years ended 1923-29.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wheat for Grain...	1 17 1	3 4 5	2 18 9	3 3 10	2 0 11	2 8 2	1 7 5
Maize for Grain ...	4 6 11	6 5 11	6 13 3	7 16 4	4 3 8	5 1 8	7 0 3
Oats for Grain ...	2 4 9	2 16 8	3 15 11	3 4 8	2 16 4	2 0 3	1 14 10
Hay ...	3 8 9	7 15 0	7 17 5	8 5 10	7 3 6	6 0 8	4 13 2
Potatoes ...	11 2 5	15 10 8	22 15 5	15 10 10	8 9 1	21 19 7	12 10 1
Sugar-cane†	21 9 4	45 2 10	45 15 6	38 1 7	38 19 7	31 15 8	36 10 6
Vineyards†	16 12 4	33 10 6	25 4 10	34 11 4	24 2 9	31 17 7	23 15 0
Orchards†	10 17 9	26 19 9	30 5 10	30 1 0	29 12 0	30 8 11	37 0 1
Market-gardens ...	31 7 5	72 16 8	75 19 8	80 7 5	80 1 10	89 8 8	74 2 7

† Productive area only.

The average value of production per acre measures the effect from year to year of yield obtained and prices realised, therefore it may be said to furnish an index of the combined effect of market and season on the average returns obtained by farmers from their holdings. To make the analysis a complete reflex of the condition of agriculture, modifying factors, such as the cost of production, drought, and other causes of loss, should be taken into consideration. In 1929-30, partly on account of lower yields but mainly because of lower prices, the average values per acre of wheat and oats were substantially below the pre-war averages, while the value of potatoes was very little above it.

Gross and Net Values of Agricultural production.

In the absence of actual records of farm sales and purchases there is considerable difficulty in valuing agricultural production, and the best estimates with available data can be regarded only as approximations. Valuations, however, are shown below for each of the five years ended 30th June, 1930, on various bases:—

Year ended 30th June.	Gross Production valued at Metropolitan Wholesale Prices.	Difference between Metropolitan and Country Prices.	Gross Production valued at Farm (†).	Seed used and Fodder for Farm Stock.	Net Production valued at Farm.‡	Value of Principal Materials used and Depreciation.†	Net Value of Production after deducting Materials and Depreciation.‡
(Thousand £.)							
1926	25,714	4,973	20,741	3,165	17,576	1,734	15,842
1927	26,247	4,149	22,098	3,441	18,657	1,735	16,922
1928	20,433	3,415	17,018	3,284	13,734	1,941	11,793
1929	24,310	4,387	19,923	3,025	16,898	2,117	14,781
1930	19,016	3,578	15,438	3,035	12,403	2,091	10,312

† Fertilisers, sprays, water (purchased), etc., and depreciation on machinery.

‡ In some cases values are as at nearest railway siding.

The first column provides a relative measure of the importance of agricultural production to the community by valuing all items on a common basis. It is inclusive of the value of transport, handling and marketing services rendered after the products leave the farm and up to the point of sale in metropolitan markets. It has, however, the disadvantage of including values for such services on products which remain on the farms or which are sold to neighbouring landholders. The second column includes what may be called "costs of marketing" (freights, handling charges, commissions, etc.) that would have been paid if all products had been sold in metropolitan markets; the ratio to the totals in the first column varies under the influence of changes in the volume and composition of agricultural production as well as changes in price levels, freights, commissions, etc. The figures in the third column are those published in the preceding table and are inclusive of the estimated value of seed and fodder used in the course of production. The value placed on these is shown in the fourth column and the effect of deducting them is shown in the fifth column, which represents, as nearly as may be with existing data, the approximate money return to farmers for agricultural products, though it is inclusive of agricultural products valued at nearly £3,000,000 used in other rural industries in 1929-30. The sixth column represents approximately the value of the principal non-rural materials used in agricultural production and of depreciation of machinery only, and the seventh is the net value of agricultural production excluding the approximate value of the principal goods and services provided by non-rural industries.

WHOLESALE PRICES OF AGRICULTURAL PRODUCE.

The prices realised for agricultural produce in New South Wales, when not regulated by any authority, vary with the seasons, or, as in the case of wheat, with world markets, and, therefore, show very great fluctuations. Wheat and flour, in which alone there is an external trade, were closely regulated in price between 1914 and 1922. The prices of flour, bran, and pollard, are generally determined by the Flour Mill Owners' Association of

New South Wales, but as from 30th March, 1931, a charge of £2 15s. per ton was added on account of a levy under the Flour Acquisition Act. In the case of other produce, local production falls short of the requirements of the State, importation is usually necessary, and prices for these commodities are determined partly by external market conditions.

The quotations here given represent the average prices obtained for farm products (local and imported) in the various Sydney markets; for country districts due allowance must be made for cost of transportation, etc. The average for the year represents the mean of the prices ruling during each month, and does not take into account the quantity sold during the month. The prices ruling in each month, *i.e.*, the mean of the daily quotations, are shown in the "Statistical Register." The figures are those quoted by the middleman, and not those obtained by the producers:—

Commodity.	1911.	1921.	1927.	1928.	1929.	1930.	1931.*
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wheat (f.a.q. bagged) .. bush.	0 3 6	0 8 8	0 5 5	0 5 11	0 4 10½	0 3 10½	0 2 3
Flour ton	8 9 10	19 6 7	13 0 2	12 7 2	11 19 11	10 1 1	8 16 8
Bran bush.	0 0 11½	0 1 7½	0 1 5	0 1 3½	0 1 5	0 1 3½	0 0 8½
Pollard "	0 0 11½	0 1 8½	0 1 6	0 1 5½	0 1 6	0 1 7½	0 0 9½
Oats "	0 2 7½	0 3 5½	0 4 8	0 4 8½	0 4 8	0 4 2	0 2 8½
Malze "	0 3 0	0 5 3½	0 6 0	0 3 11½	0 5 9	0 5 4	0 3 10½
Potatoes (local) ton	5 11 4	6 0 2	8 1 0	5 13 10	16 13 6	7 11 6	5 10 0
Onions "	5 15 10½	5 12 1	6 9 0	12 7 0	12 19 6½	6 17 4	6 18 7
Hay—							
Oaten "	4 14 5	7 11 10	9 16 8	7 3 4	7 10 4	7 1 9	5 18 2
Lucerne "	3 5 0	5 18 5	8 0 3	5 17 0	6 17 0½	6 10 0	4 11 3
Chaff—							
Wheaten "	4 0 11	6 8 8	9 0 11	6 5 8	6 17 2	6 3 5	4 0 11

* January to June.

† Nominal.

The combined price variations since 1901 of agricultural produce in Sydney markets, weighted according to the average consumption in New South Wales in the three years 1911-13, are shown below. The prices in 1911 have been adopted as base and called 1000.

Year.	Index Number.	Year.	Index Number.	Year.	Index Number.
1901	834	1912	1339	1922	1638
1902	1265	1913	1069	1923	1720
1903	1181	1914	1135	1924	1475
1904	789	1915	1648	1925	1680
1905	972	1916	1163	1926	1892
1906	929	1917	1127	1927	1767
1907	1003	1918	1377	1928	1456
1908	1343	1919	1990	1929	1707
1909	1134	1920	2430	1930	1428
1910	1012	1921	1750	1931*	1049
1911	1000				

* First six months.

In December, 1921, the index number reached 1,434—the lowest point touched since 1918. Subsequent turning points were December, 1922, when it had risen to 1,895; February, 1923, when it had fallen to 1,639; June, 1923, when it reached 1,860. In April, 1924, it had fallen to 1,393, followed by an improvement with some fluctuations to 2,064 in December, 1926. Then occurred a decline to 1,634 in June, 1927, a temporary rise to 2,004 in October, and a rapid decline to 1,360 in September, 1928, followed by a recovery to 1,968 in October, 1929, a decline to 1,515 in March, 1930, and a sharp rise to 1,583 in May, 1930, when there occurred a collapse in the

wheat markets of the world unprecedented in the period of 34 years in which there has been an oversea trade in wheat from New South Wales. The heavy fall was fully reflected in the local price of wheat, which in turn affected the prices of wheat products and of other grains. Seasonal factors and general depression affected the prices of other commodities, and the index of agricultural prices fell rapidly to 997 in March, 1931, and remained in the vicinity of the level of 1911.

AGRICULTURAL MACHINERY.

For harvesting grain crops the reaper and binder, the stripper, and the harvester are used, and there is considerable difference of opinion regarding the relative efficiency of each of these implements. The reaper and binder is employed almost exclusively in moist districts, but over the greater portion of the wheat areas conditions are favourable to the use of the harvester. A modern type of harvester, particularly adapted to Australian conditions, produced and developed locally, has contributed largely to the expansion of wheat cultivation, since it has enabled grain to be garnered with a considerable saving of time and labour.

The following statement shows the area cropped, the total value of the agricultural machinery used, and the value of the machinery used per acre, in divisions of the State in the year 1929-30:—

Division.	Area under Crop, 1929-30.	Value of Agricultural Machinery and Implements.		Average value per Acre of Machinery used 1929-30.
		1919-20.	1929-30.	
	acres.	£	£	£ s. d.
Coastal	285,532	816,874	1,139,488	4 0 1
Tableland	443,714	778,834	1,165,960	2 12 7
Western Slopes	2,609,461	2,255,066	4,937,540	1 17 10
Central Plains and Riverina.	2,144,606	2,229,760	3,653,248	1 14 1
Western	16,095	48,219	59,687	3 14 2
Total	5,499,408	6,128,753	10,955,923	1 19 10

In the coastal and tableland districts the areas under cultivation are small, including many small holdings highly developed for fruit-growing, dairying and market gardening, while on the slopes and plains the implements used serve large wheat farms. In the Western Division are a number of small irrigation settlements, but the area farmed there is too small to give an average which might be considered satisfactory for purposes of comparison.

Increased use of agricultural machinery has been a feature in the development of agriculture in New South Wales during the past twenty years.

Power-driven Machinery on Farms.

The following statement shows particulars of the power-driven machinery on farms in New South Wales as at the 30th June, 1930. The information

was collected to conform with the Standard Schedule of Agricultural and Pastoral Statistics prepared by the International Institute of Agriculture at Rome for the World Agricultural Census.

Division.	Tractors.				Stationary Engines.*	
	Wheel Type.		Crawler Type			
	Number	Horse-power	Number	Horse-power	Number.	Horse-power.
Coast—						
North	104	2,000	8	106	4,009	9,341
Hunter and Manning ...	165	3,094	10	194	1,789	7,574
Metropolitan	88	1,349	7	93	466	2,006
South	58	1,078	7	121	1,626	6,015
Total	415	7,521	32	514	7,890	24,936
Tablelands—						
Northern	107	1,651	7	139	908	3,770
Central	396	6,600	28	282	1,915	8,494
Southern	73	1,433	6	96	810	3,631
Total	576	9,684	41	517	3,633	15,895
Western Slopes—						
North	713	11,102	18	312	2,033	8,918
Central	1,075	18,619	22	349	1,778	11,261
South	1,082	17,301	27	350	3,399	17,788
Total	2,870	47,022	67	1,011	7,210	37,967
Plains—						
North	208	3,400	4	54	978	3,903
Central	299	5,196	5	87	1,089	5,009
Riverina	1,559	25,467	33	510	2,558	16,357
Total	2,066	34,063	42	651	4,625	25,269
Western Division ...	114	1,892	19	442	1,009	5,220
Total	6,041	100,182	201	3,135	24,367	109,287

* Includes 5,904 engines or electric motors, with 15,344 horse-power, driving 5,654 separators and 2,683 milking machines.

Other Farm Machines and Implements.

Detail as to various types of farm machines and implements in New South Wales as at 30th June, 1930, were as follows, obsolete and unused machinery being excluded:—

	No.		No.
Ploughs	88,714	Wheat harvester	6,627
Harrows	57,958	„ header	12,399
Cultivators—Springtooth ...	22,777	Grain grader	3,599
Rigid tine	8,888	„ pickler	4,911
Disc	13,281	Chaff-cutter	20,663
Combines (combined wheat drill		Mower	12,947
and cultivator)	12,084	Maize planter	8,547
Reaper and binder	15,280	„ cultivator, tine	7,654
Wheat drill	11,152	„ „ disc.	1,532

PERSONS ENGAGED IN AGRICULTURE.

The following table provides an interesting comparison of the number of persons returned by land-holders as being constantly engaged on rural holdings with agriculture as their principal activity. The particulars include working proprietors, unremunerated members of the family working on the holding, and permanent employees.

Year.	Persons Per- manently En- gaged.*	Area under Crop.	Value of Machinery Used.*	Year.	Persons Per- manently En- gaged.*	Area under Crop.	Value of Machinery Used.*
	No.	acres.	£		No.	acres.	£
1912-13	59,840	3,737,269	4,633,800	1921-22	47,268	4,445,848	7,884,713
1913-14	59,813	4,568,841	5,029,938	1922-23	48,154	4,694,088	8,536,164
1914-15	58,020	4,808,627	5,159,959	1923-24	46,823	4,808,046	8,799,353
1915-16	56,904	5,794,835	5,362,067	1924-25	46,278	4,911,148	9,427,730
1916-17	52,758	5,163,030	5,449,657	1925-26	43,365	4,541,423	9,588,318
1917-18	48,384	4,460,701	5,615,995	1926-27	41,650	4,595,711	9,837,193
1918-19	43,823	3,890,844	5,696,916	1927-28	42,293	4,994,515	10,849,513
1919-20	47,392	3,770,155	6,128,753	1928-29	38,275	5,440,762	11,045,551
1920-21	48,896	4,464,342	7,120,381	1929-30	38,049	5,499,408	10,955,923

* Principally in cultivating the soil.

The decline in the number of persons engaged in agriculture during the first seven years shown above was probably due mainly to enlistments for military service, although the adverse conditions ruling in the industry exercised a depressing influence. This latter cause doubtless operated to a marked extent during the severe drought which prevailed between 1918 and June, 1920. The number increased as a result of the demobilisation of large numbers of the expeditionary forces after the cessation of hostilities, although in 1919-20 there was an almost complete failure of the wheat crops of the State, and agricultural operations were considerably restricted.

Subsequently another decline occurred and the number of persons engaged permanently in agriculture is now about 36 per cent. less than in the years immediately preceding the war although the area under crop is greater. The explanation apparently lies in the more extensive use of tractors and in the improvements in agricultural machinery by which the capacity of the ploughs, harvesters, reapers and binders and other plant has been increased in such a way that less man power is required to cultivate the greater area of land devoted to agriculture. Moreover, the speedier means of transport by reason of the substitution of motor vehicles for the horse-drawn and the extension of railway facilities have enabled the farmers to effect a considerable saving in labour.

Data as to the number of casual and itinerant workers are not obtainable and it is impossible to say to what extent, if at all, the decrease in the number of persons permanently engaged in cultivating the soil is offset by an increase in number of casual employees. Reference to data as to wages paid to casual employees, however, shows that the proportion of rural work performed by casual employees is relatively small and, although there has been a steady increase in the earnings of casual employees in rural industries, it does not indicate any large degree of substitution of casual for permanent labour.

Particulars of the classes and total wages of persons engaged in rural industries are shown in the chapter "Rural Industries" of this Year Book,

and in the section "Rural Industries" of the Statistical Register of New South Wales. Reference to the number of persons recorded at the Census of 1921 as being engaged in agriculture was published on page 566 of the Year Book for 1928-29.

FERTILISERS.

In New South Wales superphosphate is the only artificial fertiliser used extensively, the soils in the wheat areas being generally deficient in phosphoric acid. Tests of manure conducted on the farmers' experiment plots indicate that benefits derived from the application of superphosphate to wheat-lands, as a general rule, are most marked in the southern portion of the wheat-belt, viz., the South-western Slopes and the Riverina. The beneficial results gradually diminish throughout the western districts which form the central portion of the wheat-belt, and in the north-western districts no advantage is gained by the use of this fertiliser. The results may be affected, however, by the fact that in the south fallowing is more common than in the west, and much more common than in the north.

The average quantity of superphosphate used on lands fertilised with this manure only in 1929-30 was 66 lb. The number of farms on which superphosphate was used in 1929-30 was 17,389.

The following table shows the area of land and the quantity of manure used on crops during the year 1929-30:—

Division.	Area under Crop.	Total Area of Crops Manured.	Manures Used.			
			Natural (only).	Natural and Artificial, in Combination.		Artificial (only).
				Natural.	Artificial.	
	acres.	acres.	loads.	loads.	cwt.	cwt.
Coastal	285,532	74,833	58,260	57,875	118,832	186,852
Tableland	443,714	167,053	5,679	619	385	119,700
Western Slopes	2,609,461	1,786,156	2,713	537	600	988,864
Central Plains	444,849	296,713	538	295	105	160,352
Riverina	1,699,757	1,563,880	2,342	580	37	933,707
Western	16,095	8,057	399	172	393	8,642
Whole State	5,499,408	3,896,692	69,931	60,078	120,352	2,403,117

The greater part of the natural manures is used in the metropolitan division. The total area treated with natural manures was relatively small, being only 13,672 acres, inclusive of the area on which both natural and artificial manures were used.

The quantities of the principal kinds of artificial fertilisers used in 1929-30 were 2,266,930 cwt. of superphosphate and 90,693 cwt. of bone-dust, in manuring 3,849,528 acres and 22,403 acres respectively. In addition, small quantities of artificial fertilisers were used in conjunction with natural manures.

The application of manures to agricultural lands is practised most extensively in the southern districts. In the relatively inextensive agricultural areas in coastal districts a little more than 25 per cent. of the area sown was manured in 1929-30. The proportions in respective divisions range from less than 9 per cent. on the North Coast to over 40 per cent. on the South Coast. A summary in respect of the use of artificial manures in the

northern, central, and southern sections of the hinterland (excluding the Western Division) is provided below. These are mainly wheat-growing districts:—

Sections of the Tablelands, Slopes, and Plains.*	Total area under crop.	Area treated with artificial fertiliser.	Artificial fertiliser used.	Proportion of area fertilised to area under crop.	Average amount of of fertiliser used per acre.
	acres.	acres.	cwt.	per cent.	cwt.
Northern	585,931	9,139	5,448	1.56	0.59
Central	1,604,588	1,054,505	548,053	65.72	0.52
Southern	3,007,259	2,747,776	1,754,118	91.37	0.64

* See map in frontispiece of volume.

The following table shows the total area cultivated, the total area manured, and the nature of the manures employed, in various years:—

Season.	Total Area under Crop.	Total Area of Crops Manured.	Manures Used—	
			Natural.	Artificial.
	acres.	acres.	loads.	cwt.
1907-08	2,570,137	423,678	144,021	276,120
1913-14	4,568,841	2,226,742	166,753	1,010,596
1915-16	5,794,835	2,753,431	177,788	1,132,446
1920-21	4,464,342	1,998,429	160,361	998,191
1921-22	4,445,848	2,104,329	176,327	1,053,710
1922-23	4,694,088	2,404,066	181,656	1,243,129
1923-24	4,811,891	2,313,602	196,697	1,327,771
1924-25	4,914,485	2,627,308	181,007	1,539,712
1925-26	4,541,423	2,635,483	268,930	1,709,557
1926-27	4,595,711	2,863,771	197,898	1,863,088
1927-28	4,994,515	3,398,795	168,912	2,240,337
1928-29	5,440,762	3,761,118	157,686	2,457,937
1929-30	5,499,408	3,896,692	130,009	2,533,469

The quantity of superphosphate used on the areas sown with wheat in 1930-31 was 2,260,744 cwt. Particulars of the area manured are not available.

The figures in the table do not indicate the exact ratio between the area under crop in any season and the area manured to produce that season's harvests. For some crops the soil is prepared, and the crop is harvested during the period from 1st July to 30th June, which is taken as the season in compiling agricultural statistics. But for other products, e.g., wheat the most extensive crop—the land under crop in any season was manured

between January and June of the preceding period. Nevertheless the table supplies convincing evidence that the practice of manuring the soil is increasing steadily.

In 1929-30 information was collected regarding the use of manures for pastures, and it was reported that a total area of 61,797 acres was treated on 603 holdings, the quantity of artificial manures used being 58,061 cwt.

The sale of artificial manures is regulated by the Fertilisers Act of 1904, and under its provisions the vendor is required to furnish to the purchaser a statement as to their nature and chemical composition. Further legislation has been proposed for the adequate protection of farmers.

SHARE-FARMING.

The system of share-farming is as follows:—The owner provides suitable land and sometimes seed and fertiliser, and the farmer generally provides the necessary plant and labour. The contract usually is that the land be operated for a specified purpose and a fixed time. Various arrangements are made for sharing the product. Sometimes the parties to the agreement take equal shares of the produce up to a specified yield, and any excess goes to the farmer as a bonus. In other cases the owner takes one-third and the farmer two-thirds of the total product.

The following table shows particulars regarding the areas used for cultivation or dairying on shares during the past ten years:—

Season.	Holdings used for Share Farming.	Share-farmers.	Area Farmed on Shares.		
			Cultivation.	Dairying.	Total.
	No.	No.	acres.	acres.	acres.
1920-21	1,668	2,761	614,351	121,976	736,327
1921-22	2,246	3,449	677,197	183,878	861,075
1922-23	2,457	3,970	718,488	237,069	955,557
1923-24	2,374	3,636	673,593	226,804	900,397
1924-25	2,510	3,828	695,092	234,736	929,828
1925-26	2,493	3,667	645,395	226,362	871,757
1926-27	2,919	4,043	706,025	274,030	980,055
1927-28	3,227	4,457	845,397	303,274	1,148,671
1928-29	3,281	4,402	840,972	343,942	1,184,914
1929-30	3,458	4,672	898,863	356,147	1,255,010

Of the 3,458 holdings used wholly or in part for share-farming in 1929-30, share-farming was in operation for agriculture only on 2,382 holdings, dairying only on 346 holdings, and agriculture and dairying combined on 730 holdings, including dairy farms on which only fodder crops for the dairy cattle were grown.

Practically the whole of the area cultivated on the share-system is devoted to wheat-growing. The system reached its maximum development in 1915-16, when the area cultivated under it exceeded one-fifth of the total area under crop in the State. Up to 1919-20 the returns from wheat-growing were bad on account of droughts and market difficulties, and share-farming diminished more rapidly than other systems of cultivation. Subsequent experience was largely affected by seasonal conditions, but there was an appreciable increase in share-farming between 1925 and 1930.

Of the areas cultivated in 1929-30 on the share system, 430,265 acres were in the Western Slopes Division and 324,711 acres were in the Riverina.

THE DEPARTMENT OF AGRICULTURE.

The development and activities of the Department of Agriculture were described on pages 569 and 570 of the Year Book for 1928-29. Further particulars are contained in the Annual Reports of the Department.

The principal headings of expenditure by the Department of Agriculture from Consolidated Revenue Account for the year ended 30th June, 1930, were as follow:—

Item.	1929-30.
	£
Head Office	27,744
Educational and Scientific Activities	81,969
Agricultural College Experiment Farms, &c. ...	132,449
Export and Import Branch	24,499
Stock Branch—Head Office	21,166
Tick Quarantine Area	134,011
Queensland Border Area	13,132
Dairy Branch—General	19,018
Grade Herd Testing... ..	28,064
Rural Industries Branch	16,464
State Marketing Bureau	7,480
Grain Elevators Bulk Handling	46,904
Botanic Gardens, Parks, &c.	49,502
Total	£602,402

In addition, sums amounting to £34,102 in 1929-30 were disbursed by various other Departments on account of the Department of Agriculture. The total net revenue and receipts of the Department were £218,473 in 1929-30, made up as follow:—

Item.	1929-30.
	£
Head Office	3,721
Export and Import Branch	20,767
Agricultural College and Experiment Farms ...	55,798
Stock Branch	11,602
Tick Control—Commonwealth Contribution ...	48,525
Dairy Branch	583
Herd Recording Fees	8,554
Grain Elevators	68,923
Total	£218,473

DATES OF PLANTING AND HARVESTING.

The usual dates of planting and harvesting the principal crops of the State in the main districts in which they are sown are as follow:—

Crop.	Most Usual Months of—	
	Planting.	Harvesting.
Wheat	May-June	November-December.
Maize	September-December ...	January-August.
Oats	May	December.
Barley	May	December.
Potatoes—early ...	July-August	November-December.
„ late	November	July.
Sugar-cane	September	July-December.
Tobacco	November-December ...	March-April.
Broom Millet	September-October ...	January-February.

It should be noted that the foregoing statement shows only the most usual dates and that both planting and harvesting occur before and after the periods specified, divergences being due to the variety of seed planted, the geographical position of the district, and variations in seasonal conditions.

INDIVIDUAL CROPS.

WHEAT.

Wheat is the staple agricultural product of New South Wales, and its cultivation provides a means of livelihood for a large section of the population. It is the principal activity on probably one-eighth of the rural holdings of the State, and three-quarters of the average area under crop are devoted to wheat. The farm value of wheat-crops (other than those used as green fodder) in 1929-30 was £6,786,090, including £5,447,770 from grain and £1,338,320 from wheaten hay.

The mild climate of New South Wales makes it possible to work the soil on scientific lines throughout the year, and admits of the utilisation of paddocks for pastoral purposes after the crop has been harvested. The time of sowing varies according to district and seasonal conditions, but is seldom earlier than March or later than August. Harvesting generally begins in November and may extend until February.

The Wheat Belt.

A description of the nature and extent of the wheat belt of New South Wales was published on pages 573 and 574 of the Year Book for 1928-29.

The extension of the limits of wheat-growing in New South Wales formed the subject of special reports by the Government Statistician in 1905, 1913, and 1923.

Development of Wheat Growing.

Wheat growing as an industry in New South Wales has progressed steadily during a period of thirty years, but at present less than one-sixth of the area suitable for wheat is cultivated each year.

The following statement shows the area under wheat for grain and for hay, together with the total production, average yield per acre, and quantity exported since 1897-98, when a surplus of wheat for export was first produced :—

Season.	Area under Wheat.				Yield.		Average yield per acre.		Wheat and Flour exported overseas in calendar year following harvest.
	For Grain.	For Hay.	Fed-off.*	Total.	Grain.	Hay.	Grain.	Hay.	
	acres.	acres.	acres.	acres.	thousand bushels.	thousand tons.	bushels.	tons.	thousand bushels.*
1897-98	993,350	213,720	††	1,207,070	10,560	182	10·6	·85	582
1898-99	1,319,503	312,451	††	1,631,954	9,276	177	7·0	·67	437
1899-00	1,426,166	414,513	††	1,840,679	13,604	341	9·5	·32	865
1900-01	1,530,609	332,143	††	1,862,752	16,174	348	10·6	1·05	4,788
1901-02	1,392,070	312,558	††	1,704,628	14,809	287	10·6	·92	2,914
1902-03	1,279,760	320,588	††	1,600,348	1,585	76	1·2	·24	154
1903-04	1,561,111	280,702	††	1,841,813	27,334	452	17·5	1·68	9,772
1904-05	1,775,955	234,267	††	2,010,222	16,464	207	9·3	·73	5,661
1905-06	1,939,447	313,532	††	2,252,979	20,737	305	10·7	·97	5,938
1906-07	1,866,253	316,945	16,744	2,199,942	21,818	403	11·7	1·27	6,246
1907-08	1,390,171	365,925	129,813	1,885,909	9,156	198	6·6	·54	962
1908-09	1,394,056	490,823	104,202	1,989,086	15,483	427	11·1	·87	4,866
1909-10	1,900,150	380,784	5,825	2,376,789	23,532	566	14·3	1·49	12,111
1910-11	2,128,826	422,972	61,453	2,613,256	27,914	468	13·1	1·11	14,423
1911-12	2,380,710	440,243	50,731	2,901,684	25,088	423	10·5	·96	10,172
1912-13	2,221,514	704,221	31,657	2,967,292	32,487	780	14·6	1·11	17,116
1913-14	3,205,397	534,226	23,393	3,763,016	38,020	533	11·9	1·10	20,038
1914-15	2,758,024	569,431	815,561	4,143,016	12,831	355	4·7	·62	785
1915-16	4,188,865	879,678	53,702	5,122,245	66,765	1,212	15·9	1·38	23,514
1916-17	3,806,604	633,605	58,101	4,498,310	36,508	814	9·6	1·23	21,262
1917-18	3,329,371	435,180	63,855	3,828,436	37,712	485	11·3	1·11	12,650
1918-19	2,409,669	613,544	204,161	3,227,374	18,325	517	7·6	·84	19,694
1919-20	1,474,174	716,770	377,596	3,068,540	4,338	355	3·0	·49	427
1920-21	3,127,377	520,555	15,420	3,663,352	55,625	822	17·8	1·58	41,746
1921-22	3,194,949	467,363	24,735	3,637,047	42,767	575	13·4	1·23	21,708
1922-23	2,942,857	503,184	350,968	3,892,009	28,668	649	9·7	1·09	8,904
1923-24	2,945,235	695,622	233,305	3,924,262	33,176	703	11·3	1·01	11,976
1924-25	3,550,078	388,479	21,917	3,960,204	59,767	537	16·8	1·38	38,741
1925-26	2,925,012	449,803	286,552	3,661,367	33,806	444	11·6	·99	10,951
1926-27	3,352,736	311,213	36,160	3,700,109	47,541	394	14·2	1·27	18,697
1927-28	3,029,950	369,960	622,985	4,022,295	27,042	343	8·9	·93	15,516
1928-29	4,080,033	375,270	19,605	4,434,968	49,257	390	12·0	1·04	21,063
1929-30	3,974,064	331,071	48,914	4,404,049	34,407	311	8·7	·82	14,621
1930-31†	5,123,100	519,900	21,600	5,664,600	65,811	671	12·8	1·29	†39,584

* Flour has been expressed at its equivalent in wheat. † To November. †† Information not available.
 ‡ Includes area sown for green food. § Subject to revision.

The average yield in twenty-six out of the thirty-four years shown, was between 7 and 15 bushels per acre. In each of four years it was below 7, and in a like number of years it was above 15 bushels per acre. The average annual area harvested for hay has decreased heavily during the period from 625,560 acres in the five years ended 1916 to 391,483 acres in the five years ended 1931. In 1928-29 and subsequent years areas with a fed-off value of less than 15s. per acre have been classified as failed, and included with the areas sown for hay or grain.

The fluctuations in the development of wheat-growing since 1915 were discussed on pages 575 and 576 of the Year Book for 1928-29. Unfavourable rainfall during the ploughing and sowing periods apparently caused a temporary decline in the area sown in 1925-26 and 1926-27, although the low price of wheat probably influenced the position in the latter year. Very favourable rainfall almost throughout the wheat belt in the months of February, March, and April in both 1928 and 1929 probably encouraged farmers to increase the areas sown in each of those seasons despite the prevalence of low prices. In 1930 the Federal Government encouraged

farmers to grow more wheat and despite the fact that in many districts the early rainfall was deficient, the area sown with wheat exceeded the previous record (1915-16) by over half a million bushels.

Rainfall Index for Wheat Districts.

The following summary provides a monthly index of rainfall in the wheat districts of the State for each year since 1921. The index is derived from the ratios of the average rainfall of each of eleven individual districts to the normal rainfall for the same districts weighted in accordance with the average area sown with wheat in each district. The normal rainfall for each month is represented by 100, and the index shows, therefore, the percentage of actual to normal rainfall each month:—

Month.	Rainfall Index—New South Wales Wheat Districts.										
	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.
January..	83	63	44	72	194	59	111	197	20	44	69
Feb. ...	96	59	4	212	130	28	22	411	148	36	37
March ...	129	9	21	62	58	256	38	162	99	48	270
April ...	159	115	9	133	16	267	71	137	141	67	204
May ...	178	49	62	57	205	153	60	54	33	82	312
June ...	142	51	237	77	128	75	39	76	36	111	227
July ...	102	147	171	78	89	79	53	119	27	103	90
August	91	58	52	146	80	97	69	27	111	124	50
Sept. ...	124	74	111	131	42	101	63	100	95	43	91
October	95	71	102	89	46	61	153	88	79	234	46
Nov. ...	53	7	67	338	129	15	135	32	102	95	123
Dec. ...	168	156	133	91	36	136	57	19	118	248	...
Average yield of wheat per acre bushels...	13.4	9.7	11.3	16.8	11.6	14.2	8.9	12.0	8.7	12.8	...

The significant months as regards the effect of rainfall on wheat yields are from April to October—more especially April, May, and September. The wheat districts extend over practically the whole length of the hinterland, and seasonal conditions vary widely as between districts. These circumstances, together with the incidence of fallowing and fertilising, temperatures and winds, play a large part in modifying the effects of rainfall on yields.

While the foregoing summary is useful for general reference as to the relationship of wheat yields to seasonal conditions, a more discriminating

analysis is necessary. In the following table the rainfall index for the northern, central, and southern sections of the wheat belt is shown in comparison with the average yields per acre from fallowed and stubble lands in the season 1930-31:—

Month.	Rainfall Index 1930—Wheat Districts Normal for each month=100.				Rainfall Index 1931—Wheat Districts Normal for each month=100.			
	North- ern.	Central.	South- ern.	Total.	North- ern.	Central.	South- ern.	Total.
January	94	81	17	44	52	67	73	69
February	26	36	38	36	33	41	36	37
March	97	69	28	48	250	241	286	270
April	82	53	70	67	171	213	207	204
May	43	82	89	82	247	305	329	312
June	228	155	68	111	193	174	256	227
July	123	128	88	103	89	94	88	90
August	86	111	137	124	56	38	54	50
September	62	30	44	43	65	81	100	91
October	198	238	240	234	35	39	51	46
November	68	95	101	95	113	104	134	123
December	47	169	322	248	...	...	...	...
Average yield of wheat per acre—								
Fallowed land bus..	16.3	15.8	15.2	15.4	...	...	...	...
Stubble land bus....	14.7	12.8	9.9	11.8	...	...	...	...

Wheat Districts.

The statistical divisions of New South Wales are shown on the map on the frontispiece of this Year Book.

The principal wheat-producing divisions of the State, arranged in order of importance, are the Riverina, the south-western slopes, the central-western slopes, the north-western slopes, the central tableland, the central plain, and the northern plains. The average area harvested for grain and the average yield in each division for the period of eight years 1922-23 to 1929-30 are shown in the following summary:—

District.	Northern.		Central.		Southern.		Total.	
	acres.	bus.	acres.	bus.	acres.	bus.	acres.	bus.
Coastal	*	*	*	*	*	*	1,606	16,045
Tableland	9,328	122,071	172,661	2,215,910	4,355	64,544	180,265	2,402,803
Slopes	232,918	3,364,044	767,806	7,561,710	890,988	11,708,174	1,941,212	22,633,929
Plains	81,329	844,122	155,659	1,225,747	973,545	12,019,438	1,210,532	14,089,305
Western Division	*	*	*	*	*	*	20,591	68,042
Total	373,575	4,330,237	1,095,626	11,003,367	1,868,888	23,792,456	3,360,296	39,210,124

* Comparable divisions not available.

Although the proportions vary seasonally, on the average approximately 56 per cent. of the area harvested for grain is in the southern districts, 33 per cent. in the central districts, and 11 per cent. in the northern districts. Comparison on this basis has the merit of dividing the wheat belt into three portions, of which the northern normally receives the greater part of its rainfall in the summer, and the southern in the winter, while the rainfall of the central districts is non-seasonal in character. Differences of soil, geographical features, cultural methods, and other factors also play a considerable part in determining the yields of the various divisions.

The following statement shows that wheat is most extensively and successfully grown in the southern districts.

Divisions.	Area Harvested for Grain.		Yield of Grain.		Yield of Grain per Acre.					
	Average, 1920-21 to 1929-30.	1930-31. *	Average, 1920-21 to 1929-30.	1930-31. *	Average 1920-21 to 1929-30.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31. †
	acres.	acres.	bus.	bus.	bus.	bus.	bus.	bus.	bus.	bus.
Coastal ...	2,055	973	22,029	11,841	10.7	15.6	7.1	11.2	15.4	12.2
†Northern	371,284	577,547	4,646,237	8,482,677	12.5	14.4	4.2	14.3	15.0	14.7
†Central ...	1,102,829	1,737,185	12,266,333	23,179,530	11.1	13.3	7.0	11.4	5.5	13.3
†Southern	1,834,771	2,793,358	24,262,578	34,080,039	13.2	14.6	10.6	11.9	9.2	12.2
Western	2,305	14,072	8,373	56,160	3.6	8.7	1.5	4.8	1.1	4.0
Total.....	3,313,244	5,123,135	41,205,550	65,810,247	12.4	14.2	8.9	12.0	8.7	12.8

* 1930-31 figures are subject to revision.

† Includes Tablelands, Slopes, and Central Plains.

Generally speaking, the use of fertilisers and the practice of fallowing are most extensive in the southern districts, and there the average yield is usually greatest. This is due in a large part to the more dependable nature of the winter rains. In the three seasons ended 1930-31, however, the northern areas yielded a much higher average than any other division because of the occurrence of favourable rains during the growing period in the northern wheat belt and of comparatively dry weather conditions in the southern and central districts.

Average Yield of Wheat.

Viewed over a long period of years, the average yield of wheat in New South Wales is subject to marked fluctuations by reason of the widely divergent nature of the seasons, but reference to the table on page will show that these fluctuations have been much less marked since 1920-21 than formerly. The highest yields have usually been recorded in seasons following the worst droughts, and besides giving dramatic proof of the advantages of fallowing have gone far to make immediate compensation for the losses sustained. The lowest yield on record—that of the 1902 season—was only 1.2 bushels per acre. It was followed by a yield of 17.5 bushels per acre; which was surpassed only in 1920-21, when, after the severe drought of 1918-20, a record average of 17.8 bushels per acre was obtained.

The average annual yield has shown definite improvement since the commencement of wheat-growing for export in 1897. The fact that the average is still considerably below that which was obtained prior to this expansion is due probably to the fact that only some of the best wheat lands were tilled prior to the increase in the area sown. In decennial periods the average yields of New South Wales have compared as follows with the average for the nine seasons ended 30th June, 1930:—

Period.	Average Yield per acre.	Period.	Average Yield per acre.
	bushels.		bushels.
1872-1881	14.71	1902-1911	11.04
1882-1891	13.30	1912-1921	11.62
1892-1901	10.02	1922-1930	11.88

In calculating these averages the area which was sown for grain but failed is included, while the area fed off or used for green fodder is excluded. Since the year 1928-29 areas with a fed-off value of less than 15s. per acre have been included as failed areas.

The yield of wheat in New South Wales does not compare favourably with the yields usually obtained abroad in some of the large wheat-producing countries. Smaller producing countries, particularly those situated in the colder climates, show far greater average yields. Representative averages for the five years 1924-1928 are shown below:—

Country.	Average Yield per acre.	Country.	Average Yield per acre.
	bushels.		bushels.
Great Britain ..	31·9	Argentina	12·5
New Zealand...	32·6	Australia	12·5
Canada	18·6	New South Wales ...	12·7
United States ..	15·0	Russia (Soviet) ..	11·0

Although the yield in New South Wales is largely influenced by the nature of the seasons, it is apparent that, as scientific methods of cultivation are becoming more widely adopted and land is properly fallowed, tilled, and manured, the average yield per acre is increasing. Another favourable factor exists in the improvement of wheat types by plant-breeding. However, it is anticipated that the warm climate and the prevalence of hot winds during the ripening period will always militate against a high average yield being obtained in New South Wales, such as is obtained in more humid countries.

Fallowing and the Wheat Yield.

Since 1923-24 statistics have been collected of the yield of grain from the areas of new land, fallowed land, and unfallowed land sown with wheat. It was intended that land should not be classed as fallow unless it had not been cropped for at least twelve months, but it is doubtful whether the collection has been made on this basis in all cases. Summer fallow is practised to some extent.

The following table provides a comparison of the yields obtained from the various classes of land in 1930-31 in each of the divisions described on page 205:—

Division.	Area.†			Total Yield.			Average Yield per Acre.		
	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land.	Stubble Land.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bushels.
Coastal	47	655	271	804	8,211	2,820	†	12·5	10·4
Northern* ...	39,032	49,786	488,729	507,711	812,409	7,162,557	13·0	16·3	14·7
Central* ...	106,265	384,401	1,246,519	1,139,034	6,054,951	15,985,545	10·7	15·8	12·8
Southern* ...	145,313	1,272,692	1,375,353	1,122,798	19,401,930	13,555,311	7·7	15·2	9·9
Western	6,961	570	6,541	26,166	3,564	26,430	3·8	6·3	4·0
Total	297,618	1,708,104	3,117,413	2,796,513	26,281,065	36,732,669	9·4	15·4	11·8

*Includes Tablelands, Slopes, and Central Plains.

† Average is not of value on account of smallness of operations. ‡ Including areas which failed.

The average yields on fallowed land were far in excess of those from other land throughout the wheat belt. There are, however, other factors

such as rainfall, cultural methods, and soil, which necessarily play an important part in determining the results. The climatic conditions prevailing in the various wheat districts and the methods adopted by farmers differ in a marked degree, consequently the results shown above do not represent fully the benefits which accrue from fallowing. Still, it is apparent that even with present methods of fallow the improvement in the wheat yield has been appreciable.

The average yields per acre from fallowed and unfallowed lands respectively in the northern, central, and southern districts of the State in each year for which records have been obtained are as follows:—

Year.	Northern Districts.*		Central Districts.*		Southern Districts.*		Whole State.	
	Fallowed.	Stubble.	Fallowed.	Stubble.	Fallowed.	Stubble.	Fallowed.	Stubble.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1923-24 ...	8.3	6.8	10.4	8.5	15.3	12.2	14.1	9.6
1924-25 ...	19.4	16.1	19.1	14.7	19.9	13.9	19.7	14.8
1925-26 ...	9.3	7.5	15.3	10.7	13.2	10.1	13.5	10.0
1926-27 ...	16.1	14.8	16.4	12.7	15.2	12.3	16.0	13.0
1927-28 ...	5.8	3.6	9.0	5.7	11.7	7.5	11.2	5.9
1928-29 ...	16.7	14.3	14.5	9.7	13.7	9.2	13.9	10.6
1929-30 ...	19.2	15.0	7.9	4.2	11.7	6.5	10.8	7.3
1930-31 ...	16.3	14.7	15.8	12.8	15.2	9.9	15.4	11.8

* Includes Tablelands, Slopes, and Plains.

The following statement shows the approximate areas of new land, fallowed land, and stubble land, sown with wheat harvested for grain, including that which failed entirely in New South Wales during each of the past seven seasons:—

Season.	New Land.	Fallowed Land.	Remainder Stubble Land.	Total.*
	acres.	acres.	acres.	acres.
1924-25	149,894	1,583,047	1,780,069	3,513,010
1925-26	81,243	1,464,686	1,307,334	2,853,263
1926-27	123,730	1,746,822	1,465,903	3,336,455
1927-28	115,971	1,771,208	1,119,586	3,006,765
1928-29	192,865	2,010,751	1,872,938	4,076,554
1929-30	190,715	1,638,683	2,072,380	3,901,778
1930-31	297,618	1,708,104	3,117,413	5,123,135

* Approximate.

On the average about half the total area cropped for grain is fallowed land, but in response to the "grow more wheat" campaign of the Federal Government in 1930 a large proportion of stubble land was again cropped in lieu of being fallowed.

Size of the Wheat Farms.

If it be considered that, in normal seasons, an area of less than 250 acres devoted to wheat will not provide subsistence for a farmer and his family, it is apparent, in view of the small average area devoted to wheat, that wheat-growing in many cases must be conducted in conjunction with other pursuits, and that many wheat-growers derive portion of their living from other sources.

The following table illustrates the recent development of wheat-growing in respect of number and average size of areas sown:—

Year.	Wheat sown for Grain, Hay, and Green Food.			Holdings on which wheat was sown for hay or for green food only, or on which area sown failed entirely.	Wheat sown for Grain.		
	Holdings	Total Area sown with Wheat.	Average Area per Holding devoted to Wheat.		No. of Holdings.	Areas sown for grain,†	Average area per holding.†
	No.	acres.	acres.	No.	No.	acres.	acres.
1900-01	20,149	1,862,752	92	*	*	*	*
1905-06	19,049	2,253,029	118	*	*	*	*
1915-16	22,453	5,122,245	224	*	*	*	*
1920-21	17,790	3,663,352	206	2,132	15,658	3,127,377	200
1921-22	18,216	3,687,047	202	1,921	16,295	3,194,949	196
1922-23	18,632	3,892,009	209	3,727	14,905	2,942,847	197
1923-24	18,036	3,924,262	217	3,441	14,595	2,945,335	202
1924-25	17,690	3,960,204	224	1,623	16,067	3,550,078	221
1925-26	17,074	3,661,367	214	2,797	14,277	2,925,012	205
1926-27	17,135	3,700,109	216	1,204	15,931	3,352,736	210
1927-28	16,817	4,022,295	239	2,710	14,107	3,029,950	215
1928-29	17,134	4,484,958	262	1,125§	16,006	4,090,083	256
1929-30	16,382	4,404,049	269	1,177§	15,205	3,974,064	261

* Not available.

† Excluding area cropped for hay.

§ Areas with a fed-off value less than 15s. per acre were classified as failed entirely.

Consideration of the above table in conjunction with statistics of average yield suggests that there is a considerable number of growers who sow wheat and crop it for grain, hay or green food, according to seasonal conditions.

The following table provides a summary of the areas of holdings on which wheat was grown for grain in the season 1929-30, arranged in groups according to the area cropped for grain. The average yield per acre in each group in preceding years is shown for comparison:—

Area cropped for Grain.	Holdings.	Wheat-grain.							
		Area cropped for grain.	Production of grain.	Average Yield per acre.					
				1929-30.	1928-29.	1927-28.	1926-27.	1925-26.	1924-25.
acres.	No.	acres.	bushels.	bus.	bus.	bus.	bus.	bus.	bus.
1-49	1,835	41,293	505,497	12·2	12·2	10·0	12·0	10·3	16·4
50-299	8,369	1,379,185	14,454,678	10·5	13·3	9·7	14·0	11·3	17·2
300-999	4,750	2,204,056	16,831,659	7·6	11·5	8·1	14·5	11·9	16·6
1,000-1,999	228	280,736	2,007,444	7·2	10·2	8·8	15·8	11·7	16·8
2,000-and over.	23	68,794	607,722	8·8	9·8	12·2	13·6	12·3	14·7
Total	15,205	3,974,064	34,407,000	8·7	12·0	8·9	14·2	11·6	16·8

In this table wheat-farms are divided somewhat arbitrarily into five classes, graded according to the size of the area cultivated for grain. Those

where less than 50 acres are cultivated for grain may be considered to be held by growers earning their livelihood principally in other directions. In 1929-30 these numbered 1,835, or 12.1 per cent. of the total. Where the areas cultivated range from 50 acres to 299 acres growers may be considered to draw their subsistence from wheat-growing in a degree ranging from partial to complete dependence—those numbered 8,369, or 55.0 per cent. of the total. Where the area cultivated exceeds 300 acres it may be considered generally that hired labour is employed in connection with the whole of the operations, or that more than one grower is involved. Areas of this kind numbered 5,001, and represented 32.9 per cent. of the total.

In all, areas of less than 30 acres in extent were sown with wheat for grain on 1,167 farms. The total number of areas under 100 acres in extent sown with wheat for grain was 3,449; from 100 to 199 acres, 3,656; from 200 to 299 acres, 3,099; from 300 to 399 acres, 1,975; and from 400 to 499 acres, 1,165; the number in successive groups of 100 diminished rapidly thereafter. In 1929-30 there were 23 wheat crops exceeding 2,000 acres in extent. A number of large crops, however, are farmed on the shares system, and in some cases more than one share-farmer is engaged.

The disparities between the average yields in area series are not always very pronounced. The most productive groups of areas in the various years were as follow:—In 1927-28 and in 1925-26, areas over 2,000 acres in extent; in 1926-27, areas from 300 to 999 acres in extent; 1928-29, 1924-25 and 1923-24, areas from 50 to 299 acres; 1922-23 and 1929-30, areas under 50 acres.

A table showing the number, area and production from wheat crops in area series in each division of the State is published in the section "Agriculture" of the Statistical Register of New South Wales. This shows that the 23 crops exceeding 2,000 acres in extent were distributed divisionally as follows:—In Riverina 13, South-western Slopes 4, Central Plain 1, North-western Slopes 1, Central-western Slopes 4.

Consumption of Wheat in New South Wales.

Estimates of the average annual consumption of wheat in New South Wales in periods from 1892 to 1929 were published on page 552 of the Year Book for 1929-30. These were based upon total recorded production, less net exports, with due adjustment for recorded stocks and for seed wheat.

Additional data have been obtained since the year 1927 which enable estimates to be made of consumption exclusive of seed wheat and of wheat retained for use in the locality in which it is grown. Direct returns are now collected as to the quantity of seed wheat used; these show an average of approximately 1 bushel per acre.

For the purpose of the estimates, the wheat year is considered to extend from 1st December to 30th November at which dates returns of stocks are obtained. As, however, in some years considerable quantities of new season's wheat arrive on the market in the latter half of November and as records of wheat in transit are difficult to obtain it is not possible to estimate closely the consumption of individual years.

On the basis of returns of the total quantity of wheat sent forward by farmers it is estimated that the average annual consumption in New South Wales in the four years ended 30th November, 1930, was 13,600,000 bushels, inclusive of an annual average of 11,800,000 bushels converted into flour for

home consumption. In addition, the average annual quantity used for seed was 4,600,000 bushels (inclusive of the large requirement for 1930-31), making a total average annual requirement of 18,200,000 bushels for New South Wales in the four years embraced in the estimate.

Marketing Wheat.

As interstate trade in wheat and flour is comparatively small, the maintenance and further development of the wheat industry in New South Wales are dependent largely on world demand, on the efficiency of production, and of the facilities for gaining access to oversea markets, and on the maintenance of such internal conditions that it will pay local farmers to grow wheat. The price of wheat for export is determined by world's parity, which fluctuates with the world supply and demand. The market for the exportable surplus of local wheat is found chiefly in Europe, but quantities of flour are sent to the countries and islands of the Pacific and Indian Oceans, and in 1931 large quantities of wheat were shipped to Eastern countries. The maintenance and extension of the market for local wheat in Europe is affected by the competition of great wheat-producing countries near the market—the United States, Canada, the Argentine, and Russia—which derive advantages from shorter distances and lower ocean freights. These advantages, however, are counteracted to some extent by the greater land haulage necessary from the interior to the coast of some of these countries.

The movement of wheat and flour oversea and interstate from New South Wales is shown below. The particulars for the respective years relate to the twelve months ending 30th November, and therefore represent the movement following each harvest. Flour is expressed at its equivalent in wheat, viz., 48 bushels of grain to 2,000 lb. flour.

Year ended 30th Nov.	Export Oversea.		Net Export Interstate.*		Total Net Export.			Stocks at 30th Nov.	
	Wheat.	Flour.	Wheat.	Flour.	Wheat.	Flour.	Grand Total.	Wheat and Flour.	
Expressed in thousand bushels of wheat.									
1923	...	2,020	6,844	2,065	1,170	4,085	8,014	12,099	2,299
1924	...	5,433	6,103	3,985	1,246	9,418	7,349	16,767	2,233
1925	...	31,824	7,299	3,013	1,286	34,837	8,585	43,422	1,863
1926	...	9,250	6,370	1,878	1,387	11,128	7,757	18,885	1,676
1927	...	12,813	7,703	4,957	1,859	17,770	9,562	27,332	4,870
1928	...	4,306	6,165	1,386	1,257	5,692	7,422	13,114	2,750
1929	...	17,120	7,879	2,912	1,848	20,032	9,727	29,759	5,159
1930	...	4,633	7,141	2,128	1,626	6,761	8,767	15,528	5,356

* Partly estimated.

This table shows the comparative regularity in the export flour trade and the marked fluctuations in the quantity of wheat exported.

Further particulars of the flour trade are shown in the following table relating to financial years which do not, however, correspond very closely to wheat seasons:—

Year ended 30th June.	1926.	1927.	1928.	1929.	1930.	1931.
Wheat gristed ...	bus. 20,674,708	bus. 20,598,188	bus. 19,133,823	bus. 21,478,082	bus. 20,572,332	bus. ‡
Flour expressed in tons (2,000lb.)						
Flour produced ...	434,407	431,532	400,363	449,011	432,472	‡
Flour exported—						
Oversea* ...	165,790	153,971	101,646	183,995	131,885	182,706
Interstate† ...	38,800	37,416	40,820	48,364	47,510	‡
Flour imported—						
Oversea ...	7	6	18	42	15	29
Interstate† ...	7,739	8,782	7,739	8,089	7,342	‡

* Including ships' stores.

† Approximate.

‡ Not available.

The average quantity of flour consumed in New South Wales in the period was approximately 246,000 tons per annum. The estimated consumption per head of population is shown in chapter entitled "Food and Prices," and some further details regarding flour-milling are shown in chapter "Factories" of the Year Book.

Grading of Wheat.

The Wheat Act passed early in 1927 provided for the establishment of grades and standards of wheat in accordance with the recommendations of a Wheat Standards Board, but definite action to establish grades has not yet been taken.

Wheat for export is marketed on the basis of a single standard known as f.a.q. or fair average quality. In New South Wales the standard is fixed annually by a committee of members of the Sydney Chamber of Commerce and two Government representatives. Samples obtained from each of the wheat districts are weighed, and an average struck, which is used as a standard in all wheat export transactions. Distinction is maintained between white and red wheats and no mixtures of white and red varieties are accepted for bulk handling.

The following comparison shows the standard adopted in New South Wales for each of the past ten seasons, and the date on which it was fixed in each year:—

Year.	Date Fixed.	Weight of Bushel of Wheat. f.a.q.	Year.	Date Fixed.	Weight of Bushel of Wheat. f.a.q.
1921-22	7th Feb., 1922	lb. 61	1926-27	31st Jan., 1927	lb. 61½
1922-23	25th Jan., 1923	61	1927-28	19th Jan., 1928	60½
1923-24	14th Feb., 1924	60½	1928-29	12th Jan., 1929	63
1924-25	10th Feb., 1925	60½	1929-30	31st Jan., 1930	61½
1925-26	22nd Jan., 1926	62½	1930-31	2nd Feb., 1931	59½

A "second grade" standard of 56½ lb. was fixed on 9th February, 1931, for bagged wheat of the 1930-31 season, and a second grade of 56 lb. and over was observed in respect of about 1,050,000 bushels of bulk wheat.

The weights shown above are those used for guidance in determining whether particular lots of wheat are at or above fair average quality, but not as a measure of quantity. Wheat is normally sold in New South Wales by weight (bushel of 60 lb.), and not by volume.

At present about two-thirds of the wheat is bagged on the farm and brought to the nearest railway station, whence that intended for export is carried in bags by rail to Sydney for shipment. At some of the stations the Railway Department has erected sheds, and a small charge is made for storage, but portions of large harvests have at times to be stored with scant shelter. At Darling Harbour, Sydney, where all the grain ships, except bulk carriers, are loaded, sheds and bag elevators have been provided.

The remainder or approximately one-third of the crop is handled in bulk as described below.

Wheat Arrivals.

As a rule small quantities of new season's wheat become available towards the end of November, the actual time varying under seasonal influences. Usually, most of the crop intended for sale has been sent to rail for transport before the end of February. The following comparison shows the quantity of wheat received at country railway stations in bags and in bulk during the season 1930-31:—

Week ended—	Quantity of Wheat Received during Week.	Total Quantity of Wheat Received to end of Week.	Four Weeks ended.	Quantity of Wheat Received during Four Weeks.	Total Quantity of Wheat Received to end of Four Weeks.
1930.	bushels.	bushels.	1930-31.	bushels.	bushels.
November ... 29	4,039,083	4,039,083	December... 20	18,363,357	18,363,357
December... { 6	4,862,703	8,901,786	January ... 17	20,515,638	38,878,995
{ 13	5,231,970	14,133,756	February ... 14	10,350,168	49,229,163
{ 20	4,229,601	18,363,357	March ... 14	2,898,456	52,127,619
{ 27	3,763,581	22,126,938	April ... 12	1,129,716	53,257,335
1931.			May ... 9	1,098,792	54,356,127
January ... { 3	5,638,347	27,765,285	June ... 6	498,669	54,854,796
{ 10	6,108,558	33,873,843	July ... 4	291,075	55,145,871
{ 17	5,005,152	38,878,995	August ... 1	340,815	55,486,686
{ 24	3,968,820	42,847,815	September.. 29	475,497	55,962,183
{ 31	2,955,996	45,803,811	October ... 26	401,199	56,363,382
{ 7	1,805,571	47,609,382	November.. 21	389,763	56,753,145
February... { 14	1,619,781	49,229,163		484,752	57,237,897
{ 21	1,074,813	50,303,976			
{ 28	718,077	51,022,053			

* Net after deducting withdrawals.

Bulk Handling.

The circumstances leading to the erection of bulk handling facilities were described at page 584 of the Year Book for 1928-29.

Grain elevators have been constructed at 99 of the more important wheat receiving stations of New South Wales, with direct access to rail. These country elevators have a storage capacity at one filling of 16,373,000 bushels. A modern concrete and steel shipping elevator has been erected in Sydney, with a storage capacity of 6,750,000 bushels at one filling. It is connected with the railway system of the State by four lines of rail, and has a receiving capacity of 6,000 tons (approximately 224,000 bushels) per day, and a shipping capacity of 12,000 tons (approximately 448,000 bushels) per day of eight hours.

The loan expenditure on the works constructed to 30th June, 1931, was £4,044,667. The system was first put into operation in 1920-21, and has been steadily developing, as shown by the following table:—

Season.	Number of Plants Available in Country Districts.	Storage Capacity of Plants Available in Country Districts.*	Wheat Received.			Proportion of Wheat Received in Elevators.	
			In Country Elevators.	In Terminal Elevators from Non-Silo Stations.	Total.	To Total Crop.	To Total Quantity Received at Rail.
		bushels.	bushels.	bushels.	bushels.	per cent.	per cent.
1920-21	28	5,450,000	†	†	2,000,000	3·6	4·2
1921-22	28	5,450,000	†	†	4,335,000	10·1	12·7
1922-23	54	11,550,000	†	†	4,290,000	14·6	21·2
1923-24	58	12,550,000	5,410,574	1,028,232	6,438,806	19·4	25·4
1924-25	61	13,250,000	16,334,813	1,437,058	17,771,871	29·7	35·1
1925-26	62	13,500,000	8,295,436	841,185	9,136,621	27·0	34·9
1926-27	66	14,100,000	12,244,726	515,772	12,760,498	27·0	34·5
1927-28	73	15,180,000	6,177,720	169,459	6,347,179	23·5	32·3
1928-29	84	15,630,000	14,777,954	385,561	15,163,515	30·8	36·7
1929-30	90	15,863,000	8,739,874	146,869	8,886,743	26·2	34·2
1930-31	99	16,373,000	22,948,114	697,295	23,645,409	35·9	41·3

*At one filling.

†Not available.

The quantity of wheat handled in bulk naturally fluctuates under the influence of the marked seasonal variations in the size of the wheat crop.

The quantities of wheat shipped in bulk during recent seasons were:— 12,767,589 bushels in 1924-25; 4,313,816 bushels in 1925-26; 5,701,761 bushels in 1926-27; 1,788,966 bushels in 1927-28; 5,988,459 bushels in 1928-29; and 1,474,996 bushels in 1929-30. To 30th November, 1931, a total of 16,164,457 bushels of bulk wheat had been exported oversea. On the average about 40 per cent. of the quantity of grain shipped oversea is shipped in bulk.

Wheat of three kinds was received at the elevators in 1930-31, viz., white (22,506,868 bushels f.a.q. and 1,057,255 bushels second grade) and red (81,286 bushels). A fee of 2d. per bushel was charged for receiving, fixing quality, handling, storing and delivering wheat in trucks at country elevators, with an additional ½d. per bushel for receiving such wheat from trucks at terminal elevator, weighing in and weighing and loading out through shipping or truck spouts. Wheat was received at the terminal elevator from non-silo stations at a charge of ¾d. per bushel if in bulk trucks and 1½d. per bushel if in bags. These charges all included storage to 31st July, 1931, after which date an additional ½d. per bushel per week was charged. The silo management pays rail freight incurred by it in handling the grain, and this, together with all fees and other charges, is paid by the holder of the warrant upon delivery of the wheat from the silo. Wheat of second grade was received at a number of elevators subject to its being fit for milling with chondrometer weight of 56 lb. or more per bushel.

The financial operations in connection with the silos in the years ended 30th June, 1930, and 1931, were as follows:—

Receipts.			Expenditure.		
	1930. £	1931. £		1930. £	1931. £
Handling fees	68,485	244,578	Maintenance and work- ing expenses	47,537	80,573
Repayments to previous years' Votes	290	120	Rates	2,818	2,630
Sundry receipts... ..	68	...	Wheat adjustments	2	46
Sales of damaged grain	444	1,736	Refund of handling fees	20	1,900
Railway freight repay- ments	14,212	314,708	Railway freight	31,298	273,238
			Miscellaneous		1,373
Total	83,499	561,142	Total	81,675	359,760

The amounts shown refer to cash received and expended in the periods covered. Excluding payments for railway freight, for which the silo management is agent only, the receipts in 1929-30 were £69,287 and the expenditure £50,377, leaving a cash balance of £18,910 net earnings available to meet interest charges and depreciation, etc. In 1930-31 the corresponding items were receipts £246,434, expenditure £86,522, and the balance £159,912.

Upon delivery of his wheat at the silo the owner receives a bulk wheat warrant showing particulars of the quantity and quality of the wheat and the place of delivery. It is a negotiable document, transferable by endorsement of the owner.

At present wheat is generally transported from the farms to the silos in bags fastened by clips or sewn, the bags being emptied and returned to the farmer for use in subsequent seasons. As the system is becoming more firmly established, farmers are acquiring bulk waggons. For conveyance from country stations to the terminal, the Railway Commissioners have provided special trucks.

The question of bulk handling of wheat in New South Wales, with special reference to the transition from bag handling, was the subject of inquiry by a Select Committee of the Legislative Council in November, 1920. An analysis of the findings of this committee appears in the Year Book for 1920. The system in operation in New South Wales was investigated and reported upon by a Victorian Parliamentary Committee in 1925.

Wheat Freights.

In the conditions governing the marketing of wheat abroad, the freight offering and its cost are very important factors.

A comparative statement is given below of the freights ruling for bagged-wheat cargoes carried by steam vessels from Sydney to London in pre-war and recent years:—

Year ended 30th June.	Freight.				Yea ended 30th June.	Freight.			
	Per ton.		Equivalent per bushel.			Per ton.		Equivalent per bushel.	
	s. d.	s. d.	d.	d.		s. d.	s. d.	d.	d.
1912 ...	17 6	to 30 0	5½	to 9½	1929 ...	20 0	to 40 0	6½	to 12½
1913 ..	10 0	to 35 0	3½	to 11½	1930 ...	20 0	to 33 9	6½	to 11
1914 ...	25 0	to 37 6	8	to 12	1931 ...	20 0	to 32 6	6½	to 10½

The average rates of ocean freight from Australia to the United Kingdom in the principal exporting months of successive recent seasons have been as follow:—

Season.	Average Ocean Freight per Bushel of Wheat.							
	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.
	d.	d.	d.	d.	d.	d.	d.	d.
1926-27 ...	16 $\frac{3}{4}$	16 $\frac{1}{2}$	15	15 $\frac{1}{2}$	15	12 $\frac{3}{4}$	12 $\frac{1}{2}$	13
1927-28 ...	12	13	11	10	10	11	11 $\frac{3}{4}$	11 $\frac{1}{2}$
1928-29 ...	13 $\frac{3}{4}$	13 $\frac{1}{2}$	13	12 $\frac{1}{2}$	11	9 $\frac{1}{2}$	8 $\frac{1}{2}$	8
1929-30 ...	8 $\frac{3}{4}$	8 $\frac{1}{2}$	8 $\frac{1}{2}$	7 $\frac{1}{2}$	7 $\frac{1}{2}$	8 $\frac{1}{4}$	8 $\frac{1}{2}$	9
1930-31 ...	10	10 $\frac{1}{4}$	10 $\frac{1}{4}$	10 $\frac{1}{4}$	10	9 $\frac{1}{2}$	9 $\frac{1}{4}$	9 $\frac{1}{2}$

The rates of freight shown represent the mean of the weekly quotes for complete cargoes as shown in the International Crop Report. The rates per ton are converted into rate per bushel and all are expressed in sterling.

Wheat Pools.

An account of the compulsory wheat pools and of the basis upon which they were organised is contained in issues of the Year Book for 1921 and previous years. A summary of the final returns is published in the Year Book for 1923 at page 489. Ballots of wheatgrowers on the question of establishing compulsory wheat pools under the Marketing Act were conducted during September in each of the years 1928, 1929 and 1930, the proportion of affirmative votes in the respective years being 44.69 per cent., 60.53 per cent. and 62.84 per cent. In July, 1931, a new ballot was conducted under an amendment of the Act requiring an absolute majority in lieu of a two-thirds majority to carry the proposal. A total of approximately 17,000 valid votes were cast, and of these 42.64 per cent. favoured the proposal.

Voluntary wheat pools were initiated in 1921-22, and a summary of the results of the various voluntary pools is furnished below.

Season.	Quantity Pooled.			Net Amount Realised by Sales.		Average Charges per bushel.*		Average Net Amount Received by Farmers at Country Sidings.	Net Amount Received by Farmers.
	Total.	Proportion to—		Total.	Average per bus.	Rail Freight.	Other.		
		Total Crop.	Quantity received at Rail.						
	bus.	per cent.	per cent	£	s. d.	d.	d.	s. d.	£
1921-22	22,785,560	53.4	66.7	3,179,027	5 5.17	5.40	3.96	4 7.81	5,298,812
1922-23	11,655,800	40.8	57.6	2,956,739	5 1.35	5.37	4.66	4 3.32	2,492,129
1923-24	9,680,854	28.9	38.2	2,444,329	5 0.59	5.46	4.13	4 3.00	2,059,800
1924-25	13,639,003	22.8	26.9	4,215,853	6 2.17†	5.40	4.23	5 4.54†	3,667,733
1925-26	740,600	2.2	2.8	230,820	6 2.7†	5.38	4.28	5 5.06†	200,772
1926-27	8,849,851	18.7	23.9	2,454,439	5 6.56†	5.02	4.86	4 8.08†	2,067,838
1927-28	1,042,122	3.8	5.3	233,629	5 7.62†	5.67	4.87	4 9.06	247,763

* Including deductions for inferior wheat. † Average: 1d. more was paid for bagged than for bulk in 1924-25; 1d. in 1925-26; 1½d. in 1926-27. ‡ Approximate.

No pool was conducted in the 1928-29 or 1929-30 seasons in New South Wales. The amount and date of each payment for the various pools is stated on page 558 of the Official Year Book for 1929-30 and on page 660 of the Year Book for 1926-27. In 1930-31 the Wheat Growers' Pooling and Marketing Co. Ltd. received for marketing as pool wheat 16,008,488 bushels, comprising 15,314,267 bushels of first grade and 694,221 bushels of second grade.

Prices of Wheat.

The following table gives the average prices per bushel ruling in New South Wales in each year since 1898. The figures for earlier years, published in the Year Book for 1919, exhibit clearly the tendency towards a gradual reduction in the value of the cereal down to 1895, when the price was the lowest of the series. In 1896, however, owing to a decrease in the world's supplies, the price rose considerably, and led to an extension of cultivation throughout Australia. In the early years, when local production was deficient, the price in Sydney was generally governed by the prices obtained in the markets of Australian States where a surplus had been produced. Since the development of the export trade, however, it has been determined largely by the prices ruling in the world's market, although marked deficiencies in the local crop (such as occurred in 1920) at times have a determining influence on prices.

Year ended Dec. 31	Price of Wheat, Sydney.			Estimated Net Return to Farmer. \$§	Year ended Dec. 31.	Price of Wheat, Sydney.†‡			Estimated Net Return to Farmer. \$§
	February.	March.	Average Value for Year. ††			February.	March.	Average Value for Year. ††	
	per bushel.	per bushel.	per bushel.	per bushel.		per bushel.	per bushel.	per bushel.	per bushel.
	s. d.	s. d.	s. d.	s. d.		s. d.	s. d.	s. d.	s. d.
1898	4 0	4 0	3 8	.....	1915	5 6	5 6	5 5	5 1
1899	2 7½	2 9	2 9	.....	1916	5 1¼	5 0½	4 10	4 0
1900	2 9	2 8	2 8½	.....	1917	4 9	4 9	4 9	2 10
1901	2 7	2 7	2 8	.....	1918	4 9	4 9	4 9	4 1
1902	3 2	3 2½	4 5	.....	1919	5 0	5 0	5 1½	4 5
1903	5 11½*	5 9¼*	5 1¾*	.....	1920	8 5*	8 10*	8 7½*	7 6
1904	3 0½	3 0½	3 2	.....	1921	9 0	9 0	8 8	7 0
1905	3 4½	3 3¾	3 5	2 11	1922	5 2	5 11	5 8	4 8
1906	3 1¾	3 2¼	3 3½	2 10	1923	5 8	5 7	5 3½	4 3a
1907	3 0½	3 1½	3 10	2 8	1924	4 7½	4 7	5 5	4 3a
1908	4 4	4 5½	4 3½	4 0	1925	6 9½	6 3¾	6 2½	5 7
1909	4 0½	4 6½	4 9	3 7	1926	5 11¼	5 8¾	6 2	5 1
1910	4 1½	4 1	3 10	3 7	1927	5 1½	5 0¾	5 5	4 6
1911	3 5	3 3	3 6	3 1	1928	5 2	5 5½	5 1½	4 7
1912	3 9½	3 8½	4 1	3 3	1929	4 8½	4 7½	4 10½	4 0
1913	3 6½	3 7	3 7½	3 3	1930	4 8½	4 5	3 10½	3 2
1914	3 8	3 9½	4 1½	3 2	1931	2 1¾	2 1¾	2 4½§	1 7

*Imported wheat. ††Unweighted average of daily quotes. ‡Price officially fixed on trucks Sydney of bagged wheat for flour for home consumption, 1915-1921. ‡‡As from 1922 Shippers and Millers' prices bagged on trucks Sydney. § To November. §§ Weighted average price of wheat (harvested in season ending in year shown in first column) delivered at country railway sidings and elevators after deducting net cost of bags. a Voluntary pool price.

The Sydney prices quoted are per imperial bushel (60 lb.) of f.a.q. wheat in three-bushel bags. The bag is sold with the wheat and is included in the weight paid for as wheat. The monthly averages represent the mean of daily prices, and the annual average is the mean of the monthly averages. Formerly practically the whole of the wheat marketed was in buyers' hands before the end of March, but in recent years the practice of pooling, and more recently still the introduction of the wheat elevators and storage by farmers have extended the period of marketing. Sales effected by growers after March, however, are not usually large. As adequate data are not available it is very difficult to determine weighted average prices accurately, but latterly additional information has been obtained.

In the latter part of 1923 the price fell precipitately owing to the large surplus of production over world requirements, and the price remained for a time lower than in any year since the outbreak of war, although rather

higher than in pre-war years. A marked diminution in the world's production of wheat in 1924 led to a world-wide rise in price in July, which continued until February, 1925, when the high average level of 6s. 9½d. per bushel was reached in Sydney market. A steep decline followed to 5s. 10½d. in April, 1925, and the average monthly price moved between 5s. 9d. and 6s. 2½d. until after the close of the buying season in 1926. It attained 6s. 10d. in August, 1926, and fell to 5s. 1d. in March, 1927, fluctuating between that level and 5s. 8d. until the middle of 1928. In August, 1928, the price fell, in consequence of an unusually large world harvest, to 4s. 8d. and remained fairly constantly near that level until May, 1929, when it declined further. Early in June, 1929, the quotations were as low as 4s. 2d. per bushel. Under the influence of a diminution of world production and the holding of crops in the United States and Canada, the market recovered and before the end of July, 1929, the price had risen to 5s. 8d. per bushel. Although this price was not maintained, the monthly average price in Sydney exceeded 5s. per bushel until January, 1930, when markets became stagnant in consequence of continued heavy world production, a severe world-wide economic depression, and accumulation of stocks in the principal supplying countries of the world. The price in Sydney proved very weak until May, 1930, when it broke completely and fell rapidly to the level of 2s. 2d. per bushel on the last day of 1930. There was an unsustained recovery until 2s. 7d. per bushel was reached in the middle of May—thence a decline to 2s. 1d. in September.

Certain data relating to the prices of Australian wheat in local and over-sea markets have been brought together in the following table, which provides some interesting particulars of the course of prices in Australia and the United Kingdom. Owing to the variation of marketing conditions and the lapse of time between local sales and export and between export from New South Wales and import into the United Kingdom, the prices set against each month are not strictly comparable. The prices in all cases are per bushel of 60 lb.

Month.	Season 1929-30.					Season 1930-31.				
	Shippers and millers' quotes Sydney.	Average value declar'd to Customs, Sydney.	Average price c.i.f. Liverpool and London.	Average import value into United Kingdom.	Average rate of freight to United Kingdom.	Shippers and millers' quotes Sydney.	Average value declar'd to Customs, Sydney.	Average price c.i.f. Liverpool and London.	Average import value into United Kingdom.	Average rate of freight to United Kingdom.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
November ...	5 0½	5 8½	5 8½	6 0½	0 8½	2 7½	2 10½	3 5½	3 7½	0 10
December ...	5 2½	5 5½	6 0½	5 9	0 8½	2 5	2 8	3 4	3 7½	0 10½
January ...	5 2	5 2½	5 10	6 0½	0 8½	2 2	2 6	2 10½	3 4½	0 10½
February ...	4 8½	5 1½	5 2½	5 6½	0 7½	2 1½	2 0½	2 8½	3 1½	0 10½
March ...	4 5	5 6½	4 11	5 1	0 7½	2 1½	2 2½	2 8	2 10	0 10
April ...	4 7½	4 10	5 1	4 11½	0 8½	2 3½	2 2½	2 8½	2 8½	0 9½
May ...	4 6	4 10	5 1	5 0½	0 8½	2 6	2 6½	2 11½	2 9	0 9½
June ...	4 3½	4 2½	4 11	4 11½	0 9	2 3½	2 2	2 10	2 10½	0 9½
July ...	3 10½	4 0	4 6½	4 10½	0 8½	2 2½	2 0½	2 8	2 10	0 9
August ...	3 9½	3 11½	4 7	4 7	0 10½	2 2	2 4½	2 5½	2 8½	0 9
September ...	3 1½	3 6	3 11½	4 6½	0 11½	2 1½	2 1½	2 4½	2 6	0 8½
October ...	2 8½	3 1½	3 7½	4 1	0 10½	2 7½	2 3½	...	2 10	...

* Australian currency. † Sterling.

In considering the prices shown above regard should be paid to the following factors:—

(1) The average of shippers' and millers' quotes represents the mean of the daily prices for bagged wheat of fair average quality on trucks Sydney, and they are usually for wheat for prompt delivery.

(2) The average values declared to the Customs relate to wheat exported in bags and in bulk, and refer to the month of shipment. Owing to delay in transferring the exportable portion of the harvest to the seaboard and the incidence of forward buying the averages in this column are not closely comparable with the prices in the first column.

(3) The average prices c.i.f. Liverpool and London are those quoted for Australian wheat in the monthly Crop Reports of the International Institute of Agriculture. The quotations are generally those at the close of business for early delivery.

(4) The average import values into the United Kingdom also relate to Australian wheat, and represent the total value c.i.f. place of import or, when consigned for sale, the latest market price in England at time of import.

(5) The average rates of freight are those shown in the International Crop Reports.

The margins between the local and oversea prices are accounted for mainly by ocean freights, but also in part by cost of exchange, insurance, and handling charges, and in part by exporters' profits and overhead expenses. Rates of exchange (telegraphic transfers) varied as follow:—£102 Australian for £100 in London as from 28th January, 1930, rising, by steps, to £108 10s. in October, 1930, and to £130 by the end of January, 1931.

Cost of Growing Wheat in New South Wales.

The Select Committee on the Agricultural Industry in 1921 concluded from the data before it that proper harvesting and cultivation of wheat could not be carried out under conditions then existing, at a lower cost than £3 5s. per acre (excluding insurance), and that it would require an average of 14 bushels to the acre, with a minimum price of 4s. 8d. per bushel at the nearest railway siding, to recoup this cost to farmers within 10 miles, and "that profit over and above a labourer's wage" accrued to the wheat-grower only when the price realised exceeded that amount.

Various attempts have been made to secure the data necessary to form a satisfactory estimate of the average cost of producing wheat in New South Wales; but as, either for grain or for hay, this depends largely upon the methods of culture, the area cultivated, the distance from the railway, and the soil conditions, the experiences of individual farmers differ very greatly, and analysis of farmers' budgets has given a wide range of results.

The factor which is probably the main cause of these differences is the efficiency of the producers. Wheat being the product of a large number of farmers working independently, it is natural that there should be greater variation in regard to efficiency than in other industries, where the producers are assembled under the supervision of experts, and where there are greater facilities for improving methods of production and for utilising labour and materials on the most economical basis.

In 1931 the Director of Marketing published estimates of the cost of growing wheat in the season 1928-29. These showed a weighted average cost of 3s. 11½d. per bushel (including farmers' own labour) on an average yield of 17.9 bushels per acre for the farms from which returns were collected. Crops from both fallowed and unfallowed land were included. A committee of farmers at the producers and consumers' conference at Bathurst in May, 1931, estimated that on the basis of a 12-bushel yield, the average cost would be 4s. 0½d. per bushel at country sidings, inclusive of £250 for the farmers' own labour in the season 1931-32.

Hypothetical estimates have been made by Mr. A. H. E. McDonald, Director of Agriculture, of the cost of producing wheat on unfallowed and on fallowed land. For the purpose of the estimates the area cropped

annually is taken at 250 acres, viz., 230 acres for grain, and 20 acres for hay for horse feed; to crop this area in alternate seasons under the system for fallowing, the total area of the farm would be at least 500 acres. The value of the land was assumed to be £7 per acre, and the value of the plant £750.

In the case of fallowed land one crop is grown in two years, but the stubble and herbage on the land are available for at least six months, and where sheep are kept, as is usually the case, this land is used for pastoral purposes, and the interest for only half the year of fallow is placed against agricultural operations.

Interest on land and plant is allowed at the rate of 6 per cent. per annum, and depreciation on plant at $7\frac{1}{2}$ per cent. Annual allowances are made of £20 for repairs, etc., and 9d. per bag for cartage to rail. Wages for extra help are allowed at award rates for a period of twelve weeks at sowing and harvest. In addition, the cost of $6\frac{1}{4}$ tons of superphosphate and of the bags necessary for handling the wheat is included at market rates each year. A special allowance is made for seed wheat, and it is assumed that the whole of the harvest is sold at average market rates.

On these bases comparison may be made between the cost of producing wheat under the conditions set out above and the return to a farmer who obtained the average yield per acre. Approximately one-half of the area sown in the State is fallowed, and as particulars of the yield from this land are obtained, it is possible to publish separate estimates for fallowed and unfallowed land, though in view of the explanation given on page the results here published do not reflect accurately the relative profitability of the policy of fallowing.

The following table provides an indication of the financial results of the operations of a wheat-grower cropping annually an area of 230 acres for grain and 20 acres for hay for horse-feed, under the conditions described in the years shown:—

Item.		1926-27.		1927-28.		1928-29.		1929-30.	
Average yield per acre..	bushels	13·0§	16·0§§	5·9§	11·2§§	10·6§	13·9§§	7·3§	10·8§§
Costs—		£	£	£	£	£	£	£	£
Land—Interest		105	157·5	105	157·5	105	157·5	105	157·5
Plant—Interest		45	45	45	45	45	45	45	45
Depreciation		54	54	54	54	54	54	54	54
Repairs		20	20	20	20	20	20	20	20
Wages—Extra help		52	52	52	52	52	52	52	52
Fertiliser, $6\frac{1}{4}$ tons		34	34	37·5	37·5	36·5	36·5	26	36
Bags		54	66	26	50	37	49	25	37
Cartage to rail		37	46	17	32	27	36·5	21	31
Seed Wheat		62·5	62·5	62·5	62·5	62·5	62·5	62·5	62·5
Total cost of cropping 230 acres for grain†	£	463·5	537	419	510·5	439	513	420·5	495
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cost of cropper acre† ..	2 0 3	2 6 7	1 16 5	2 4 5	1 18 2	2 4 7	1 16 7	2 3 0	
Value at rail crop per acre	3 1 9	3 16 0	1 8 4	2 13 8	2 3 4	2 16 9	1 4 4	1 16 0	
Apparent Net Return to Farmer, including payment for his labour other than cartage to rail.	per acre	1 1 6	1 9 5	(—) 8 1	0 9 3	0 5 2	0 12 2	(—) 12 3	(—) 7 0
	230 acres	£247	£338	(—) £93	£106	£59	£140	(—) £141	(—) £30

† Omitting value of farmer's labour and abnormal costs occasioned by drought.

§ Unfallowed land.

§§ Fallowed land.

(—) Indicates a loss.

Certain of the foregoing costs were lower in 1930-31 and in 1931-32.

In considering the estimates shown above, it is necessary to remember that the calculations are based on the annual average yields for the whole State, which are probably below those usually obtained by skilled farmers engaged exclusively in agriculture. In many cases wheat-growing is

carried on in conjunction with other activities, and the profit arising from the production of grain is not the sole factor in the farmer's income, nor in determining whether he will grow wheat.

Again, in the southern districts, farmers generally use fertilisers and fallow their land extensively. Favoured by the natural advantage of operating in a belt of winter rainfall, they have until recent years obtained better average yields than the farmers in the central and northern districts.

A summary of the results of the foregoing calculations for the six seasons ended 1930 is made in the following table which is published as an index of fluctuations and not as a table of actual results:—

Season.	Unfallowed Land.				Fallowed Land.				Average price of Wheat to farmer at railway siding.†
	Average yield per acre.	Cost excluding payment for farmer's labour.		Net Return including pay-ment for farmers' labour.	Average yield per acre.	Cost excluding pay-ment for farmers' labour.		Net return including pay-ment for farmers' labour.	
		per acre.	per bus.			per acre.	per bus.		
	bus.	£ s.	s. d.	£	bus.	£ s.	s. d.	£	per bus. s. d.
1924-25	14·8	1 19	2 8	538	19·7	2 6	2 4	794	5 10
1925-26	10·0	1 18	3 10	173	13·5	2 4	3 3	316	5 4
1926-27	13·0	2 0	3 1	247	16·0	2 7	2 11	338	4 9
1927-28	5·9	1 16	6 2	(—) 93	11·2	2 4	3 11½	106	4 9½
1928-29	10·6	1 18	3 7	59	13·9	2 5	3 2½	140	4 1
1929-30	7·3	1 17	5 0	(—) 141	10·8	2 3	4 0	(—) 80	3 4

(—) Denotes loss. † Bagged wheat (including bag).

The net return to the farmer, as shown above, would be augmented, if he carted his wheat to rail. If he is the owner of the plant and land used, his income also embraces the interest allowed on these items, viz., £150 and £202·5, respectively, on unfallowed and fallowed land. These, however, are fairly charged against production. Additional costs of production which are not included in the statement are insurance and shire rates. Latterly the amount of these for unfallowed and fallowed land respectively were:—Fire insurance, £5 and £8; hail insurance, £23 and £31; shire rates, £10·5 and £15·75.

Where farmers have provided themselves with special bulk-handling facilities there should be an additional allowance *per contra* for interest and depreciation, and where the wheat is carried to silos in bags fastened by clips it is estimated that bags can be used a number of times. In the latter case the farmer's expenditure for bags would be only a fraction of that shown above. In addition there would be a saving of the cost of ramming and sewing, estimated at 2d. per bag. On the other hand, the farmer who sells in bags regains part of the difference because he is paid for the weight of the bags as wheat, which represents a return (at present prices) of nearly 2d. on the cost of his bag. In addition, bagged wheat is generally sold at slightly more per bushel than bulk wheat. Still, making allowance for all factors, it is estimated by the Director of Agriculture that farmers handling their wheat in bulk make a saving in their costs amounting to approximately, 8d. per bag. This should be allowed for in considering the foregoing tables.

Although this statement is expressed in terms of money, it does not purport to furnish any guide to the actual profits of individual farmers. It is hypothetical, and illustrates the combined effects of prices, yields, and costs of production on the operations of wheat-farmers in recent years, thereby providing an index of prosperity.

World Production of Wheat.

The world's production of wheat during recent years in comparison with the pre-war average is shown in the following table compiled from the publications of the International Institute of Agriculture:—

Year ended 30th June.	Northern Hemisphere.	Southern Hemisphere.	Total.	Total (excluding Russia).
Thousand Bushels.				
1909-1913 (average) ...	3,497,140	277,943	3,685,083	2,829,750
1923	2,991,238	340,626	3,331,864	3,173,743
1924	3,406,292	429,377	3,835,669	3,505,437
1925	3,033,451	404,089	3,437,540	3,106,953
1926	3,623,804	355,972	3,979,776	3,268,226
1927	3,756,095	433,119	4,189,214	3,381,264
1928	3,888,560	425,760	4,314,320	3,568,435
1929	4,135,203	534,369	4,669,577	3,876,293
1930	3,808,204	359,027	4,167,231	3,465,231
1931	4,302,812	556,804	4,859,616	3,775,616

The countries included in the above summary are those comprised in the total shown in the next succeeding table.

The following statement, based on information contained in the Reports of the International Institute of Agriculture, shows the quantity of wheat produced in the leading countries of the world during the past two seasons in comparison with the quinquennial average maintained before the war:—

Northern Hemisphere.	Annual Production of Wheat in Thousand Bushels.			Southern Hemisphere.	Annual Production of Wheat in Thousand Bushels.		
	Average, 1909-13. ‡	1929.	1930.*		Average, 1909-10-1913-14.	1929-30.	1930-31*
Europe—				South America—			
Russia (Soviet)† ...	\$755,333	702,000	1,084,000	Argentina ...	146,752	162,575	271,402
France	316,973	319,861	231,118	Other Countries ...	32,087	50,209	55,000
Italy	182,951	260,123	210,815	Total, S. America	178,839	212,784	326,402
Spain	129,174	154,244	145,991	Australasia—			
Germany	151,868	123,062	139,216	New South Wales ...	26,717	34,435	65,841
Roumania	87,608	99,752	130,769	Victoria	27,656	25,413	53,814
Great Britain and Ireland ...	59,850	49,757	42,225	South Australia ...	22,843	23,345	34,872
Hungary	169,289	74,985	73,334	Western Australia ..	5,671	39,081	52,892
Bulgaria	42,086	33,191	58,272	Queensland... ..	1,250	4,235	4,755
Czechoslovakia ...	...	52,902	53,077	Tasmania	806	376	455
Poland ... ..	...	65,861	79,733	Total, Australia...	84,943	126,885	212,629
Belgium	14,863	13,225	13,547	New Zealand ...	7,885	7,240	6,500
Austria	67,381	11,559	11,383	Total, Australasia	92,828	134,125	219,129
Yugo-Slavia ...	14,715	94,998	89,004	South Africa—			
Other Countries ...	41,468	77,895	86,095	Union of South Africa	6,264	11,140	10,273
Total, Europe† ...	2,033,559	2,133,415	2,448,579	Other	12	978	1,000
Asia—				Total, S. Africa ...	6,276	12,118	11,273
British India ...	351,103	320,731	386,512	Total, Southern Hemisphere ...	277,943	359,027	556,804
Japan	23,586	30,496	29,538	Total, The World, as far as Reported ...	3,685,083	4,167,231	4,859,616
Russia in Asia ...	†	†	†	Countries which have not reported since 1914?			
Other Countries ...	6,988	75,565	80,006	Turkey†	160,000	...	...
Total, Asia† ...	381,677	426,792	496,056	China§§	590,000	...	...
Northern Africa—				Other	200,000	...	...
Egypt	34,039	45,228	41,100				
Other Countries ...	60,415	77,588	58,834				
Total, N. Africa	94,454	122,816	99,934				
North America—							
United States ...	696,006	809,176	850,965				
Canada	130,042	304,520	395,854				
Other Countries ...	71,402	11,485	11,424				
Total, N. America	897,450	1,125,181	1,258,243				
Total, Northern Hemisphere ...	3,407,140	3,808,204	4,302,812				

* Preliminary. † The figures for Russia in Europe relate to territory comprised in the Union of Socialist Soviet Republics, including territory in Asia. ‡ Old boundaries. §§ Figures for one year only.

MAIZE.

Before the development of the wheat-exporting industry of New South Wales maize-growing was the most extensive single agricultural pursuit. It is now the second largest crop grown in the State, but the harvest is small in comparison with that of wheat, and is insufficient for local consumption.

Maize is cultivated chiefly in the valleys of the coastal rivers, where both soil and climate are peculiarly adapted to its growth. On the Northern Tableland also good results are obtained.

Maize-growing reached its highest development locally in 1910, and since then production has decreased. The following statement shows a comparison of the extent of maize-growing since the season 1900-01, with the total value and average value per acre for each crop:—

Season.	Area under Maize for Grain.	Production.		Farm Value of Crops.	
		Total.	Average yield per Acre.	Total.	Per Acre.
	acres.	bushels.	bushels.	£	£ s. d.
1900-01	206,051	6,293,000	30·5	839,032	4 0 6
1910-11	213,217	7,594,000	35·6	791,050	3 14 2
1915-16	154,130	3,774,000	24·5	723,270	4 13 10
1920-21	144,105	4,176,000	29·0	974,260	6 15 2
1921-22	146,687	3,976,000	27·1	894,670	6 2 0
1922-23	138,169	3,287,000	23·8	890,260	6 8 10
1923-24	166,974	4,623,000	27·7	847,550	5 1 6
1924-25	146,564	4,208,000	28·7	631,230	4 6 2
1925-26	120,955	3,278,000	27·1	805,820	6 13 3
1926-27	128,516	3,599,000	28·1	1,004,710	7 16 4
1927-28	148,801	3,930,570	26·4	622,330	4 3 8
1928-29	106,835	2,506,470	23·5	543,150	5 1 8
1929-30	108,219	3,035,850	28·1	758,960	7 0 3

The decline in the area sown with maize has been accompanied by a decrease in the average yield per acre. The average value per acre has risen, but the increase has not been sufficient to compensate for the decline in the purchasing power of money due to a generally higher level of prices.

The average farm value of the maize crops of the last five years shown above was only £6 1s. 10d. per acre, or approximately 38 per cent. above the average for the quinquennium ending in 1910. The general level of wholesale prices in the later period was 80 per cent. higher than in the former.

The following statement shows the area under maize for grain in New South Wales during the season 1929-30, with the production and average yield in each division:—

Division.	Area under Maize for Grain.	Yield.	
		Total.	Per Acre.
Coastal—	acres.	bushels.	bushels.
North	52,285	1,693,176	32·4
Hunter and Manning	18,990	489,291	25·8
Metropolitan	1,244	42,600	34·2
South	8,637	277,011	32·1
Total	81,156	2,502,078	30·8
Tableland—			
Northern	17,040	339,570	19·9
Central	3,418	86,541	25·3
Southern	140	1,935	13·8
Total	20,598	428,046	20·8
Western Slopes	6,169	103,542	16·8
Central Plains, Riverina, and Western Division.	296	2,184	7·4
All Divisions	108,219	3,035,850	28·1

The principal factors in the local supply of maize in recent seasons are shown in the following table. The particulars relate to calendar years, as the maize crops of the State are harvested between January and August. Complete records are not available of the interstate imports and exports, but it is considered that the quantity unrecorded is not large.

Year.	Production.	Import.		Export.		Available for Consumption. * †
		Oversea.	Interstate. †	Oversea.	Interstate. †	
	bus.	bus.	bus.	bus.	bus.	bus.
1924 ...	4,623,000	317,000	1,397,000	53,000	62,000	6,222,000
1925 ...	4,203,000	180,000	1,623,000	51,000	93,000	5,867,000
1926 ...	3,278,000	1,434,000	324,000	44,000	23,000	4,669,000
1927 ...	3,599,000	249,000	2,543,000	6,000	106,000	6,279,000
1928 ...	3,931,000	4,000	1,740,000	41,000	56,000	5,578,000
1929 ...	2,506,000	†	2,269,000	2,000	6,000	4,767,000
1930 ...	3,036,000	60,000	855,000	2,000	10,000	3,939,000

* Subject to adjustment for carry over.

† Records of interstate movement are incomplete.

‡ Negligible.

The annual requirement of maize is very variable, depending largely on the nature of the pastoral season and the price and size of available supplies. The large importation in 1927 and 1929 is attributed to the demand for fodder for sheep and other live stock during the acute though short drought. In 1930 supplies of maize in the Commonwealth were relatively small and dear, while wheat was relatively cheap. Pastoral conditions in the latter half of 1930 were bountiful.

The imports interstate are derived almost exclusively from Queensland, while the imports oversea are brought from South Africa. A general duty of approximately 2s. 0d. per bushel is imposed on maize imported oversea, except from New Zealand, on which the duty is approximately 1s. 5d. per bushel, together with an *ad valorem* primage duty of 10 per cent.

OATS.

Oats is sown in New South Wales mainly as a hay crop, the areas for respective purposes being as follow in 1929-30—Oats for hay, 226,025 acres; oats for grain, 181,354 acres; and oats for green food, 88,973 acres. The combined area—496,352 acres—is 92,785 acres greater than that of the previous season, and this total has not been exceeded previously.

The elevated districts of Monaro, Argyle, Bathurst, and New England contain large areas of land on which oats could be cultivated with excellent results, as it thrives best in regions which experience a winter of some severity.

The principal divisions in respect of the cultivation of oats for grain were the Riverina Division, with 80,917 acres producing 1,121,703 bushels, an average of 13.9 bushels per acre, the South-western Slopes, where 66,912 acres produced 947,595 bushels of grain, an average of 14.2 bushels per

acre, and the Central Tableland with 13,211 acres producing 207,609 bushels, or an average of 15.7 bushels per acre. These three divisions between them produced nearly 90 per cent. of the oats grown in the State.

The following table gives statistics of the cultivation of oats for grain since 1900-01:—

Season.	Acres under Oats for Grain.	Production.		Farm Value of Oats for Grain.	
		Bushels.	Bushels per Acre.	Total.	Per Acre.
				£	£ s. d.
1900-01	29,383	593,548	20.2	59,355	2 0 6
1910-11	77,991	1,702,706	21.8	177,360	2 5 6
1915-16	58,636	1,345,698	23.0	173,820	2 19 3
1920-21	77,709	1,642,700	21.1	241,480	3 2 2
1921-22	69,795	1,169,900	16.8	199,820	2 17 3
1922-23	74,006	1,250,300	16.9	234,530	3 3 5
1923-24	86,693	1,570,300	18.1	268,260	3 1 9
1924-25	123,517	2,511,400	20.3	293,000	2 7 5
1925-26	101,097	1,615,650	16.0	383,720	3 15 11
1926-27	105,115	1,898,750	18.1	339,880	3 4 8
1927-28	114,988	1,654,560	14.4	324,010	2 16 4
1928-29	126,743	2,183,880	17.2	254,860	2 0 3
1929-30	181,354	2,528,610	13.9	316,050	1 14 10

The oats crop is harvested in December, and therefore constitutes the local element of supply for the calendar year following. The sources from which the local crop has been supplemented, and the quantity available for consumption in each of the past seven years, is shown in the following table:—

Year.	Production.	Import.		Export, Oversea and Interstate.	Available for Consumption.†
		Oversea.	Interstate.‡		
	bus.	bus.	bus.	bus.	bus.
1924 ...	1,570,300	2,000	681,700	15,700	2,238,800
1925 ...	2,511,400	1,900	291,000	43,600	2,760,700
1926 ...	1,615,600	235,900	390,500	19,100	2,223,100
1927 ...	1,898,700	462,700	411,200	49,100	2,723,500
1928 ...	1,654,600	370,500	450,500	50,000	2,435,600
1929 ...	2,183,900	6,800	432,500	21,700	2,601,500
1930 ...	2,528,600	3,100	460,400	17,000	2,975,100

† Subject to adjustment for carry-over.

‡ Omitting considerable quantities imported interstate at Newcastle.

A duty of 1s. 6d. per cental, or approximately 7d. per bushel of 40 lb., is imposed on oats imported oversea, together with an *ad valorem* primage duty of 10 per cent. In 1924 and 1925 practically the whole local supply was produced in New South Wales and other Australian States, but in the three following years an appreciable part of the supply was obtained from other countries, mainly from New Zealand.

At present the market for oats is chiefly in the metropolitan and Newcastle districts, and the demand depends mainly upon the price of maize.

The local yield per acre is considerably below that of the important producing countries, and the total yield is insignificant compared with the world production, which usually amounts to more than 4,000,000,000 bushels per year.

BARLEY.

Barley is produced only on a moderate scale in New South Wales, and supplies for local consumption are imported from other States. Although there are several districts where the necessary conditions as to soil and drainage present inducements for cultivation, particularly with regard to the malting varieties, barley is grown mainly in the North-Western Slope, the South-Western Slope, and the Riverina Divisions. The areas under crop in other districts are small and do not call for special notice. The following table shows the area under barley for grain, together with the production at intervals since 1900-01.

Season.	Area under Barley for Grain.	Production.		Season.	Area under Barley for Grain.	Production	
		Total.	Average per Acre.			Total.	Average per Acre.
	acres.	bushels.	bushels.		acres.	bushels.	bushels.
1900-01	9,435	114,228	12.1	1924-25	6,638	118,300	17.8
1910-11	7,082	82,005	11.6	1925-26	6,614	105,150	15.9
1915-16	6,369	114,846	18.0	1926-27	5,629	100,260	17.8
1920-21	5,969	123,290	20.7	1927-28	5,600	65,850	11.8
1921-22	5,031	83,950	16.7	1928-29	5,024	80,910	16.1
1922-23	3,899	55,520	14.3	1929-30	7,947	113,850	14.3
1923-24	4,357	71,910	16.5				

Considerable fluctuation has occurred in the area cultivated, while the grain yield has varied greatly. The average crop during the last ten years has been about 14 bushels per acre.

Of the area cropped for grain in 1929-30, 4,803 acres yielded 74,460 bushels of malting barley and 3,144 acres yielded 39,390 bushels of other barley. In addition, 1,294 acres were cropped for hay and 7,162 acres for green food.

RICE.

Rice growing trials were made intermittently in New South Wales and other Australian States from 1891 to 1922 with indifferent success, but in the latter year encouraging results were obtained from trials on the Murrumbidgee Irrigation Area by the use of three varieties imported from America. Further successful trials were made in the 1923-24 season, and in 1924-25 commercial trials were made on 153 acres which yielded approximately 16,200 bushels or 304½ tons of "paddy" rice—an average yield of 106 bushels per acre. The favourable prices received for this harvest, coupled with the high average yield, encouraged many other growers to experiment with the crop, and in 1925-26 a total area of 1,556 acres was sown on the Murrumbidgee Irrigation Area, but a considerable portion of the crops failed wholly or in part owing to the adverse season and the experimental nature of many of the sowings. The yield was very low, viz., 61,100 bushels, or an average of 39.2 bushels per acre.

The progress in subsequent years was as follows:—

Year.	Number of Growers.	Area Harvested.	Yield (Paddy Rice).	Value of Yield to Farmer.	Average per acre.	
					Yield.	Value.
		acres.	bus.*	£	bus.	£
1926-27 ...	66	3,958	214,740	48,320	54.27	12.2
1927-28 ...	127	9,891	879,113	181,320	88.88	18.3
1928-29 ...	221	14,027	1,307,520	201,850	93.21	14.4
1929-30 ...	258	19,780	1,829,173	289,620	92.48	14.6

* 42 lb. per bushel.

The price received by growers f.o.r. Leeton was fixed by the rice milling firms at £10 10s. per ton in 1925-26, and £12 per ton in 1926-27, subsequent to the imposition of an import duty of 3s. 4d. per cental on uncleaned rice and 6s. per cental on cleaned rice. In 1927-28 the price was £11 per ton f.o.r. Leeton. The 1928-29 and subsequent harvests were marketed by a rice marketing board appointed under the Marketing of Primary Products Act. The 1928-29 crop, totalling 23,228 tons of marketable rice, was sold for consumption in Australia at £11 per ton. f.o.r. Leeton. The marketable quantities of the 1929-30 crop were 29,982 tons of A grade and 2,880 tons of second grade. Up to April, 1931, 20,807 tons of A grade rice had been sold for consumption within Australia at £11 per ton f.o.r. Leeton and 6,666 tons of A grade for export oversea at an average price of £5 12s. 5d. per ton. To the same date 244 tons of second grade rice had been sold as stock feed at an average price of £6 11s. 8d. per ton, but owing to the low price of wheat and the favourable seasonal conditions, the remainder was unsaleable, although offered at £2 16s. per ton. The quantity pooled from the 1930-31 crop was 26,000 tons.

Excluding the quantity used for seed, the consumption of rice in New South Wales is about 4½ lb. per head of population. Thus it would appear that the annual requirement is approximately 10,700,000 lb. of commercial rice, equivalent to approximately 410,000 bushels (42 lb.) of "paddy" rice as harvested by the grower. It is possible, however, that if local rice can be produced in regular supply at a price attractive to consumers, the local demand may be increased. The annual quantity of paddy rice required for consumption in Australia is estimated by the Rice Marketing Board at between 20,000 and 22,000 tons.

The volume of oversea trade of New South Wales in rice in each of the past six years is shown below. Until toward the middle of 1930 the proportion of Australian grown rice exported oversea was negligible:—

Year.	Import oversea.				Export oversea.			
	Cleaned or partly cleaned.		Uncleaned.*		Cleaned.		Uncleaned.*	
	cwt.	£	cwt.	£	cwt.	£	cwt.	£
1923-24 ...	257,364	204,432	131,156	90,725	89,741	94,702	...	...
1924-25 ...	59,837	58,824	116,695	68,655	96,579	100,734	17	19
1925-26 ...	67,752	60,271	116,015	76,873	74,027	76,624	2,034	1,384
1926-27 ...	129,191	103,814	123,899	77,215	59,385	60,564	29	32
1927-28 ...	77,953	66,192	10,450	6,739	44,580	47,131	...	...
1928-29 ...	57,227	51,211	6	6	53,771	54,877	30	35
1929-30 ...	74,222	60,867	3,088	2,126	62,145	62,283	1,214	1,152
1930-31 ...	28,251	18,376	10	10	80,155	58,144	12,343	4,330

* Stated to be after removal of husks, viz., 16 to 20 per cent. of weight of "paddy" rice.

In 1929-30 the quantities of local rice exported oversea were 4,190 cwt. cleaned and 1,214 cwt. uncleaned, the corresponding quantities in 1930-31 being 56,570 cwt. cleaned and 12,343 cwt. uncleaned.

In the evidence submitted to the Tariff Board at an investigation conducted in 1926 it was estimated that there were approximately 53,000 acres of land suitable for rice growing on the Murrumbidgee Irrigation Area, and that ultimately 40,000 acres would be used for the purpose, 20,000 acres being cropped annually with one year's fallow.

HAY.

The production of wheaten and oaten hay varies in accordance with the seasonal factors controlling yield, the prospects for grain crops and the market demand for hay. In favourable years considerable stocks are stacked for use in dry seasons. The production of lucerne hay, though subject to considerable fluctuation, is more constant than that of wheaten and oaten hay. The following table shows the production of hay in each of the last five years (July to June):—

Kind of Hay.				1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
				tons.	tons.	tons.	tons.	tons.
Wheaten	...	...	...	444,315	393,915	342,974	390,255	311,237
Oaten	...	...	...	244,520	293,659	212,535	242,740	223,847
Lucerne	...	...	...	176,336	189,070	197,599	159,158	149,862
Other	...	...	...	1,204	1,123	1,068	1,102	2,016
Total	...	...	...	866,275	877,767	754,176	793,255	686,962

GRAPES.

Between 1920 and 1924 there was rapid expansion in the area devoted to grape-growing in New South Wales, which was largely due to the establishment of the industry on the Murrumbidgee and Cuthwaite Irrigation Areas and to the settlement of returned soldiers on agricultural holdings adapted to grape-growing.

The following dissection of the total area cultivated for grapes shows that until 1927-28 the greatest absolute increase in area was in grapes of wine varieties, but that the area of grapes in bearing for drying has increased more than fivefold in a period of nine years:—

Varieties of grapes.				1920-21.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
				acres.	acres.	acres.	acres.	acres.	acres.
Table	...	...	...	2,087	2,464	2,545	2,576	2,644	2,620
Drying	...	...	...	699	2,298	2,865	2,965	3,357	3,860
Wine	...	...	...	4,589	6,977	7,051	7,456	7,077	7,019
Total, bearing	...	...	...	7,375	11,739	12,461	12,997	13,078	13,499
Not bearing	...	{ Wine Other }		3,408	2,726	{ 497 1,323 }	530 1,353	1,000 1,122	1,144 946
Grand Total	...	...	...	10,783	14,465	14,281	14,880	15,200	15,589

The production of the vineyards according to the purposes for which it was used is shown in the following comparison. The quantities do not relate in every case to the acreages as classified in the preceding table, as

the produce of some varieties of vines cultivated usually for a particular purpose may be used ultimately in a different way:—

Production.	1919-20.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
Table grapes ... cwt.	53,560	76,740	93,780	85,000	85,560	82,520
Dried grapes—						
Sultanas	4,987	19,386	35,857	25,601	55,330	78,329
Currants	2,465	6,132	9,106	4,536	9,755	10,282
Raisins & lexias ...	2,097	3,783	5,207	5,232	4,757	5,062
Grapes used for wine,,	105,360	203,940	263,840	313,840	250,880	298,680
Wine made ... gal.	717,893	1,240,893	1,625,507	2,295,030	1,481,846	1,933,709

The approximate quantities of dried grapes packed in 1930-31 were sultanas, 38,300 cwt., currants 8,000 cwt., raisins and lexias 2,000 cwt.

The volume of output shows some variation in accordance with the effect of seasonal conditions on average yields. The most striking feature of the table is the rapid increase in the production of sultanas.

Particulars of the production from vineyards in irrigation areas are shown in the section "Water Conservation and Irrigation" of this Year Book.

The most important viticultural district was formerly in the Hunter and Manning Division, the area cultivated for grapes in that Division in 1929-30 being 1,991 acres for wine-making, 247 acres for table use, and 60 acres of young vines. However, the area cultivated for grapes is now largest in the Riverina Division, where 3,854 acres were grown in 1929-30 for wine-making, 634 acres for table use, 2,366 acres for drying, and 1,227 acres of young vines. The greater part of these areas is in the Murrumbidgee Irrigation Area.

Considerable quantities of grapes for wine and dried fruits are grown on the irrigation areas of the Australian States, mainly in Victoria and South Australia. In recent years the production of dried fruits has largely exceeded the Australian demand, and on account of the low prices prevailing abroad, legislation was passed by the States concerned and by the Commonwealth to make provision for organised marketing. In this way the local and the less profitable export trade is distributed on an equitable basis amongst the producers in the various States, and the Commonwealth assists in the export and disposal of the dried fruits in the overseas markets. In 1930 packing sheds in New South Wales were required to export overseas 55 per cent. of the sultanas and currants produced and 85 per cent. of the lexias. The corresponding proportions in 1931 were 65 per cent. and 70 per cent. respectively.

The main provisions of the Dried Fruits Act, 1927, passed in New South Wales were submitted to a poll of the growers before they were brought into operation. The Act, which is similar to enactments passed in Victoria and South Australia, provides for the constitution of the New South Wales Dried Fruits Board to control the marketing of dried fruits (*i.e.*, currants, sultanas, and lexias) for consumption in the State, for the registration of growers, dealers, etc., and for the imposition of a levy on the growers to meet expenses of administration. The levy was fixed at the rate of $\frac{1}{16}$ d. per lb. of the dried fruits produced by each grower, but this was reduced to $\frac{1}{32}$ d. per lb. in the 1930 season.

The export trade in these dried fruits is controlled by the Dried Fruits Control Board constituted under Federal legislation. The Board consists of one representative of the Commonwealth Government, four representatives of the growers, and two members with commercial experience appointed by

the Commonwealth. A London agency has been established to arrange conditions governing export and to accept control of dried fruits for handling and distributing. For financing the activities of the Board a charge, not exceeding 4d. per lb., may be levied on dried fruits exported from the Commonwealth.

The export trade in wine is assisted by a bounty payable by the Commonwealth Government. Under the Wine Export Bounty Act of 1924 the rate of bounty was 4s. per gallon on fortified wine exported from the Commonwealth during the three years ended 31st August, 1927. It was reduced to 1s. 9d. per gallon as from 1st September, 1927, and further reduced to 1s. per gallon, except on wine exported to Canada for consumption there, as from 8th March, 1928. As from 13th March, 1930, the bounty was increased to 1s. 9d. per gallon. During the year ended 30th June, 1926, bounty amounting to £32,609 was paid on 163,043 gallons of wine exported from New South Wales; in 1926-27 £49,572 was paid on 247,858 gallons; in 1927-28 £30,330 on 168,213 gallons; in 1928-29 £1,784 on 31,206 gallons; and in 1929-30 £1,795 on 25,295 gallons.

BANANAS.

Banana culture developed rapidly in the Tweed River district of the North Coast division from 1914 to 1922, but subsequently it was almost extinguished by a disease known as "bunchy top." In August, 1923, the Governments of the Commonwealth, New South Wales and Queensland, began a joint investigation. Each contributed £1,500 to defray expenses, and a Bunchy-top Control Board was appointed. As a result of its investigations the Committee determined that bunchy top was a virus disease transmitted mainly by the banana aphid and by the transfer of diseased plants, also that there was no resistant or immune banana stock. The committee submitted recommendations for stringent action in controlling the disease, based mainly on the registration of banana plantations, the prompt destruction of all infected plants, the breeding of clean stock, the prevention of transmission of infected plants, and the destruction of deserted plantations.

The following table shows the area cultivated for and the production of bananas in each year since the industry reached its maximum development in 1922:—

Year ended 30th June.	Area.			Production.	
	Bearing.	Not bearing.	Total.	Cases.	Farm value.
	acres.	acres.	acres.		£
1922	4,570	898	5,468	433,533	260,120
1923	3,300	507	3,807	233,526	151,740
1924	1,604	250	1,854	94,983	95,410
1925	1,002	502	1,504	60,673	47,090
1926	1,071	658	1,729	68,167	50,550
1927	1,378	468	1,846	64,543	52,730
1928	1,229	763	1,992	74,703	56,030
1929	1,060	852	1,912	81,455	61,090
1930	1,806	1,534	3,340	117,120	107,840

Returns collected by the Director of Fruit Culture indicate that at 31st March, 1930, there were 4,149 acres under bananas and, at 31st March, 1931, 6,878 acres. At the latter date there were registered 1,195 growers with areas of 1 acre or more under bananas and 1,259 growers with less than 1 acre. In the year ended 31st March, 1931, 1,322 acres of bananas were destroyed.

The quantity of bananas imported oversea in 1930-31 was 17,309 centials, valued at £12,023. The duty on bananas imported oversea other than from Norfolk Island is 1d. per lb, together with an ad valorem primage duty of 10 per cent. In the year ended December, 1930, 333,814 cases of bananas were imported into New South Wales from Queensland.

FRUIT AND VEGETABLE GROWING.

In 1929-30 the area of land on which fruit (including grapes, bananas, and pineapples) was grown was 93,121 acres, and the value of production therefrom £2,623,910.

The importance of fruit and vegetable growing as industries is shown by the following comparison, which relates to the area and value of production of each of the principal classes of crop on holdings of 1 acre and upwards in extent:—

Kind of Crops.	1928-29.			1929-30.		
	Area not yet Bearing.	Area in Bearing.	Value of Crop.	Area not yet Bearing.	Area in Bearing.	Value of Crop.
	Acres.	Acres.	£	Acres.	Acres.	£
Orchards—Citrus ...	6,889	26,366	913,110	6,747	27,263	1,176,400
Other† ...	8,229	31,893	818,150	7,608	31,729	961,120
Total	15,118	58,259	1,731,260	14,355	58,992	2,137,520
Vineyards ...	2,122	13,078	416,910*	2,090	13,499	320,600*
Market Gardens ...	...	7,709	689,440	...	8,380	621,210
Separate Root Crops ...	...	16,621	374,720	...	14,948	231,080
Minor Crops of Fruit and Vegetables ..	1,038	14,458	442,610	1,705	17,178	505,540
Grand Total ...	18,278	110,125	3,654,940	18,150	112,997	3,815,950

* Includes value of wine and spirit made from grape juice.
pineapples, and berry fruits.

† Excludes passion-fruit, bananas,

The cultivation of many classes of fruit is capable of considerable expansion, and as there exist large areas of suitable soil with climatic conditions ranging from comparative cold on the highlands to semi-tropical heat on the North Coast, a large variety of fruits can be cultivated. In the vicinity of Sydney, citrus fruits, peaches, plums, apples, and passion-fruit are most generally planted. On the tablelands, apples, pears, apricots, and all the fruits from cool and temperate climates thrive well; in the west and in the south-west, citrus, pome and stone fruits, figs, almonds, and raisin-grapes are cultivated; and in the north coastal districts, bananas, pineapples, and other tropical fruits are grown. Citrus fruits are cultivated extensively, and form the largest element in local fruit production.

With the exception of oranges and mandarins, the fruit production of New South Wales is far below the demand. In the year ended December, 1930, approximately 2,000,000 cases of fresh fruit were imported into New South Wales from the States, including 950,000 cases from Victoria, 880,000 from Tasmania, 110,000 from Queensland and 65,000 from South Australia. The quantity of fruit used for jam and fruit-canning in factories in New South Wales during 1929-30 was 12,500 tons, valued at £156,284. Fresh fruit (other than citrus) to the value of £86,158 was exported overseas from New South Wales in 1930-31, in addition to preserved fruit and vegetables, pulp and juice of local origin valued at £112,543 and dried fruits of local origin valued at £25,065. Good seasons generally produce a glut of stone fruits, for which apparently there is no system of efficient handling.

The extent of cultivation of each important class of fruit on holdings of 1 acre and upwards during the past two seasons is shown in the following table:—

Fruit.	1923-29.			1929-30.		
	Number of Trees not yet Bearing.	Trees of Bearing Age.		Number of Trees not yet Bearing.	Trees of Bearing Age.	
		Number.	Yield.		Number.	Yield.
Oranges—			bushels.			bushels.
Seville	10,212	43,044	55,612	6,885	25,473	36,699
Washington Navel ...	182,969	493,051	582,734	169,438	533,790	609,135
Valencia	253,546	675,310	897,231	245,525	722,790	695,771
All other	39,906	425,323	547,484	34,674	408,910	378,625
Total oranges ...	486,633	1,636,728	2,083,061	456,522	1,703,963	1,720,230
Lemons	38,292	232,248	376,577	47,929	217,578	284,491
Mandarins	125,808	573,492	537,363	120,202	597,533	508,647
Other Citrus	7,929	27,730	34,819	12,110	25,869	28,313
Apples	307,711	965,816	639,720	322,113	954,008	931,486
Pears—						
Williams	31,434	165,618	156,979	25,985	165,504	179,414
All other	27,661	155,196	129,844	23,911	142,177	133,646
Peaches—						
Dessert and Drying...	54,726	348,527	257,905	51,934	319,410	249,220
Canning	46,837	176,007	172,725	50,699	165,965	226,095
Nectarines... ..	8,529	31,556	20,300	9,234	31,087	20,465
Plums	40,160	219,509	126,339	39,635	212,443	133,403
Prunes	71,865	217,310	104,673	33,686	258,991	164,684
Cherries	88,949	230,800	111,924	78,380	238,132	86,630
Apricots	17,823	161,222	153,113	16,491	155,570	166,653
Quinces	9,082	21,390	21,557	9,371	16,864	19,219
Persimmons	1,151	10,465	6,653	529	10,388	6,807
Passion Fruit	†66,082	†215,425	40,211	†75,651	†203,895	51,051
†All other ... ..	...	...	13,611	...	...	15,145

† Vines.

‡ Excludes bananas and pineapples.

The figures shown above include returns from private orchards, which are, however, of comparatively small extent.

Citrus Fruits.

Particulars of citrus orchards are shown in the following statement:—

Season.	Area under Cultivation (Citrus Fruits.)			Production.		Value of Production.*	
	Productive.	Not bearing.	Total.	Total.	Average per Productive Acre.	Total.	Average per Productive Acre.
	acres.	acres.	acres.	bushels.	bushels.	£	£ s. d.
1900-01	11,013	3,952	14,965	648,628	59	81,080	7 7 3
1910-11	17,465	2,643	20,108	1,478,306	85	199,300	11 8 3
1920-21	21,990	6,445	28,435	2,009,756	91	477,580	21 14 4
1922-23	20,412	8,036	28,448	1,984,707	97	628,100	30 5 8
1923-24	20,733	8,971	29,704	2,004,020	97	521,730	25 3 4
1924-25	22,709	9,284	31,993	2,292,062	101	609,420	26 16 9
1925-26	23,425	7,860	31,285	2,486,020	106	742,650	31 14 1
1926-27	23,853	7,854	31,707	2,273,529	95	762,360	31 19 2
1927-28	26,056	7,301	33,357	2,604,933	100	765,240	29 7 5
1928-29	26,366	6,889	33,255	3,031,820	115	913,110	34 12 8
1929-30	27,263	6,747	34,010	2,541,681	93	1,176,400	43 3 0

* At orchards.

The principal divisions for the cultivation of citrus fruits are as follow:—Metropolitan, 9,045 acres; Hunter and Manning, 9,640 acres; Riverina (which includes the Murrumbidgee Irrigation Area), 7,102 acres, and Central Tableland, 6,476 acres.

The number of orchards of 1 acre or more in extent in which citrus fruit was cultivated during the year 1929-30 was 5,110, and of these the average area was 6.7 acres.

The production of oranges and mandarins has attained such proportions that the growers are obliged to seek oversea markets. During 1929-30 the oversea export of citrus fruits from New South Wales was valued at £40,873, and in 1930-31 at £75,037. Practically the whole of this export was to New Zealand until 1930-31, when a substantial proportion was to Canada.

The system of packing and marketing inaugurated by the Central Citrus Association was described on page 602 of the Year Book for 1928-29.

Fruits other than Citrus.

The following table shows the area of orchards and fruit gardens, exclusive of citrus orchards, bananas, pineapples, and berry fruits, together with the total value of each season's yield, at intervals since 1900-01:—

Season.	Area under Cultivation (Fruits other than Citrus).			Value of Production.	
	Productive.	Not Bearing.	Total.	Total.	Average per Productive Acre.
	acres.	acres.	acres.	£	£ s. d.
1900-01	25,766	5,503	31,269	270,080	10 9 8
1910-11	20,498	6,748	27,246	271,930	13 5 4
1920-21	27,302	14,309	41,611	577,480	21 3 0
1921-22	27,838	14,031	41,869	547,930	19 13 8
1922-23	26,314	14,500	40,814	732,390	27 16 8
1923-24	27,220	13,525	40,745	645,820	23 14 6
1924-25	27,694	12,679	40,373	796,390	28 15 2
1925-26	29,621	11,818	41,439	857,880	28 18 11
1926-27	30,403	10,637	41,040	855,540	28 2 7
1927-28	32,492	9,038	41,530	957,550	29 9 6
1928-29	32,323	8,389	40,712	860,710	26 12 7
1929-30	32,284	7,767	40,051	1,006,640	31 3 7

More than one-quarter of the area under fruits other than citrus is situated in the Central Tablelands, where the area occupied in this way is 10,066 acres; 8,660 acres are situated in the south-western slopes, and 7,785 acres in the Riverina, which includes the Murrumbidgee Irrigation Settlement.*

In contrast with the headway made in organising the marketing of citrus fruits little had been done until recently to improve the system of marketing other fruits. However, an efficient cool store on co-operative lines was established at Batlow some years ago to provide growers with storage chambers which will enable them to store apples and pears during periods of plenty, for sale when supplies are scarce by reason of seasonal changes. In addition to the monetary gain, this system makes it possible for suppliers to guarantee continuity of supplies of fruit over a definite period, to make valuable trading connections, and to inaugurate sound marketing undertakings. Some details of the scheme were published on page 477 of the Year Book for 1924. During the year 1928 certain of the producers'

* See pages 283 and 289.

organisations opened retail stores in the city. A cool store has since been established at Orange, and a building for a similar purpose has been constructed at Young.

Fruit Canning.

The Commonwealth Government paid bounty on certain kinds of fruit canned in 1923-24, and on such fruit exported on or before 28th February, 1925. A sum of £4,594 was paid in 1925-26 on fruit canned in New South Wales, and a further sum of £3,102 in 1927-28. The export of canned fruit is supervised by the Canned Fruit Control Board constituted under Federal legislation.

The following statement shows the quantity and value of canned fruit produced in factories in New South Wales during each of the past seven years:—

Year.	Fruit Preserved.	
	Quantity.	Value at Cannery.
	lb.	£
1923-24 ...	10,521,701	242,255
1924-25 ...	17,019,569	408,101
1925-26 ...	11,325,850	264,794
1926-27 ...	8,261,091	182,436
1927-28 ...	13,922,386	242,537
1928-29 ...	14,213,747	258,037
1929-30 ...	17,133,226	271,360

Dried Fruits.

The quantity of dried fruit produced in New South Wales in 1929-30 was 127,992 cwt. The bulk of the fruit treated in this way consisted of grapes of which details are shown on page 228. The production of dried prunes increased from 1,890 cwt. in 1926-27 to 24,305 cwt. in 1929-30, and further expansion may be anticipated as the young trees reach full bearing capacity. The total production of dried fruits in each of the last five seasons is shown below:—

Dried Fruit.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.
	cwt.	cwt.	cwt.	cwt.	cwt.
Apricots ...	775	4,072	4,577	9,097	6,473
Grapes ...	29,301	50,170	35,369	69,842	93,673
Peaches ...	1,334	655	4,782	3,461	2,866
Pears ...	303	165	630	355	265
Prunes ...	3,111	1,890	12,657	17,633	24,305
Other ...	65	39	388	453	410
Total ...	34,889	56,991	58,403	100,841	127,992

Vegetables.

As agricultural and pastoral statistics are collected only in respect of holdings of one acre or more in extent, they do not provide a complete census of vegetable growing. Nevertheless the information obtained may be considered to provide reasonably complete particulars of operations conducted on a commercial basis.

A considerable proportion of the vegetables produced on holdings of 1 acre and over are grown in market gardens, and data as to individual crops are not available in respect of these. In 1929-30 market garden produce was grown on 1,750 holdings, in areas of 1 acre or more, the total

area being 8,380 acres; and the value of production was £621,212. The area and production of individual crops, exclusive of areas cultivated in market gardens or on holdings less than 1 acre in extent, were as follow:—

Vegetables.	1927-28.		1928-29.		1929-30	
	Area of Crop.	Production.	Area of Crop.	Production.	Area of Crop.	Production.
Potatoes—	acres.	tons.	acres.	tons.	acres.	tons.
Early (Summer) ...	5,455	13,928	4,468	7,458	3,536	6,988
Late (Winter) ...	16,123	33,469	10,362	18,881	9,249	16,919
Sweet ...	775	3,864	639	3,222	845	4,294
Onions ...	155	569	131	432	131	437
Turnips ...	693	1,906	775	1,589	1,008	3,260
Other Root Crops ...	121	702	196	524	179	717
Pumpkins and Melons	3,796	13,915	2,345	5,791	2,818	8,898
Tomatoes ...	1,990	Half-cases. 311,849	1,896	Half-cases. 273,118	2,186	Half-cases. 436,369
Peas ...	6,026	£ 102,760	6,803	£ 112,250	7,862	£ 100,144
Beans ...	872	25,360	996	29,550	930	18,936
Cabbages ...	374	18,920	501	21,340	634	10,695
Cauliflowers ...	256	11,260	240	7,170	228	5,177
Other ...	57	2,370	82	3,020	29	837

MISCELLANEOUS CROPS.

Particulars of miscellaneous crops of the State are shown below:—

Crop	Year ended 30th June, 1929.			Year ended 30th June, 1930.		
	Area.	Production.	Yield per acre.	Area.	Production.	Yield per acre.
Hay—	acres.	tons.	tons.	acres.	tons.	tons.
Wheaten ...	375,270	390,255	1.04	381,071	311,237	0.82
Oaten ...	214,137	242,740	1.13	226,025	223,847	0.99
Lucerne ...	94,275	159,158	1.69	89,385	149,862	1.68
Other ...	1,048	1,102	1.05	1,914	2,016	1.05
Green Fodder ...	264,699	£811,930	*	356,903	£952,186	*
Rye (Grain) ...	3,005	bushels. 53,700	bushels. 17.9	3,974	bushels. 56,970	bushels. 14.3
Broom Millet—						
Grain ...	2,018	8,100	4.0	2,521	12,930	5.1
Fibre ...		cwt. 6,623	cwt. 3.3		cwt. 13,095	cwt. 5.2
Root Crops—		tons.	tons.		tons.	tons.
Potatoes ...	14,830	26,339	1.8	12,785	23,907	1.9
Other ...	1,791	5,767	3.2	2,163	8,708	4.0
Miscellaneous Crops—		cwt.	cwt.		cwt.	cwt.
Tobacco (Dried Leaf)	762	5,194	6.8	446	1,934	4.3
Sugar Cane—		tons.	tons.		tons.	tons.
Crushed ...	6,783	147,414	21.7	7,967	174,110	21.9
Stand-over ...	9,055	...	...	7,458	...	...

* Comparative averages not available.

Details respecting each of these crops are shown in the "Statistical Register of New South Wales."

The greater part of the area cultivated for hay is sown with wheat, but cultivation for oaten hay is also very extensive. Lucerne is more or less a permanent crop, but the area cut for hay in 1929-30 decreased. The area of land cultivated expressly for green fodder is not known. The area shown above includes areas which failed to mature for grain or hay and were used as green fodder for stock.

Only about 10 per cent. of the tobacco and about 20 per cent. of the sugar consumed annually in New South Wales are grown within the State.

SILAGE.

New South Wales is liable at intervals of fairly regular recurrence to long periods of dry weather. It consequently lacks a permanent supply of natural fodder, and the necessity arises for conserving the abundant growth of herbage of good seasons, in the form of silage, for use when natural pastures are exhausted. To facilitate such conservation the Department of Agriculture offers free advice concerning material and method of constructing silos. Farmers may sink pits for the same purpose at small expense.

The possession of stocks of silage is highly advantageous to the prosecution of dairy-farming in the districts of the coast, where the climatic conditions are unfavorable to the growth of winter fodder.

The quantity of silage made in the State in 1929-30 was 28,155 tons, made on 338 farms, and valued at £51,102; 19,553 tons were made in coastal districts, and 4,186 tons on the Western Slopes. The quantity varies considerably from year to year.

Considering the liability of the State to periods of severe drought, the small efforts made to conserve the fodder of abundant seasons are disappointing. As a means of conserving fodder, the making of silage is of great potential value. Schemes of fodder conservation as insurance against drought have been considered from time to time, but no project has yet been initiated.

PLANT DISEASES ACT, 1924.

A brief description of this Act was published at page 606 of the Year Book for 1928-29.

Fruit Census, 1923.

In 1923 a special census was taken to ascertain the number of trees of each variety of each kind of fruit planted in New South Wales, in order to facilitate consideration of the problem of marketing.

The results were briefly summarised on page 504 of the Official Year Book for 1923, and were published in full in the *Agricultural Gazette* of February, 1925.

Registration of Farm Produce Agents.

A summary of operations under the Farm Produce Agents Act was published on page 607 of the Year Book for 1928-29.

WATER CONSERVATION AND IRRIGATION.

A brief outline of the problem of water conservation and irrigation and of the policy adopted in New South Wales was published in the Year Book for 1928-29 at page 608.

The Murrumbidgee, Hay, Curlwaa and Coomealla Irrigation Areas were described on pages 609 to 611 of the Year Book for 1928-29 and details of subsequent developments are contained in the Annual Reports of the Water Conservation and Irrigation Commission and in the Report of the Auditor-General.

A summary of the expansion of the Murrumbidgee Irrigation Scheme is provided below:—

Year ended 30th June.	Water Distributed.	Area Watered.	Value of Rural Production *	Revenue derived.			
				Water Rates and Charges	Land Lease Rentals	Interest on advances	Other Revenue.
	acre feet	acres.	£	£	£	£	£
1924	66,433	56,076	600,000	30,957	74,276	111,600	2,602
1925	68,785	58,698	720,000	34,778	74,985	125,452	1,821
1926	81,949	57,810	800,000	38,707	73,287	120,086	650
1927	104,158	59,795	884,000	45,976	73,994	118,794	1,667
1928	139,441	64,938	841,000	54,521	72,355	101,382	2,476
1929	214,170	75,254	970,000	69,227	74,670	83,211	806
1930	301,545	97,612	1,002,000	101,194	82,999	77,472	2,367

* Excluding value added in factories.

The capital expenditure connected with the irrigation areas was £9,242,951 as at 30th June, 1929, of which £9,035,960 was expended on Loan Account. This sum was reduced by £1,017,626 written off for various reasons, including £954,796 on account of Soldier Settlement.

PRODUCTION ON IRRIGATION SETTLEMENTS.

Comparative statistics of the irrigation settlements established and controlled by the State in New South Wales are shown in the following statement; the particulars for 1910-11 relate to the Hay and Curlwaa settlements

only, as farming operations on the Murrumbidgee area did not commence until the season 1912-13:—

Particulars.	1910-11.	1920-21.	1929-30.			
			Murrumbidgee.	Hay.	Curlwaa and Coomealla.	Total.
Cultivated Holdings No.	86	1,190	1,358	13	211	1,582
Area under—						
All Crops Acres	862	31,065	97,977	126	2,708	100,811
Grain "	2	2,860	59,780	...	1	59,781
Hay and Green Food "	399	16,085	17,985	122	57	18,164
Grape Vines—						
Bearing "	186	1,253	4,981	...	1,154	6,135
Not yet Bearing "	74	1,896	1,125	...	403	1,528
Orchards—						
Bearing "	58	4,154	9,882	4	611	10,497
Not yet Bearing "	139	4,414	3,559	...	430	4,039
Live Stock—						
Horses No.	239	5,264	5,281	124	302	5,707
Cattle—						
Dairy "	484	4,007	*1,687	*375	*8	*2,070
Other "	530	5,463	2,556	194	125	2,875
Sheep "	703	16,927	84,308	534	154	84,996
Swine "	134	2,564	1,443	74	21	1,538
Production—						
Wine gal.	...	64,000	1,526,659	...	...	1,526,659
Sultanas cwt.	...	2,923	24,847	...	30,699	55,546
Raisins and Lexias "	1,009	967	98	...	2,889	2,987
Currants "	...	2,188	2,649	...	4,205	6,854
Oranges—						
Washington Navel ... bush.	...	49,328	260,464	150	18,748	279,362
Valencia "	273	21,323	116,099	...	8,213	124,312
All other "	...	3,455	17,427	150	1,522	19,099
Lemons "	...	11,062	40,896	50	2,179	43,125
Peaches—						
Dessert and Drying "	...	40,433	42,555	106	19,704	62,365
Canning "	2,467	172,361	216,194	...	...	216,194
Nectarines "	...	3,751	4,778	...	1,975	6,753
Apricots "	2,905	58,136	124,896	3	10,685	135,584
Prunes "	...	10,829	87,541	...	1,220	88,761
Butter lb.	5,100	40,761	217,874	21,733	160	239,772
Bacon and Ham "	820	11,413	261,184	...	...	261,184
Grain—Wheat bush.	...	24,648	343,563	...	21	343,584
Rice ... .. "	...	...	1,829,173	...	...	1,829,173
Oats "	...	9,207	32,229	...	...	32,229
Other "	...	9,171	7,437	...	...	7,437

*Cows in registered dairies only.

The total area under crop has shown considerable increase in recent years because of the extension of grain crops (mainly rice and wheat). In 1929-30 however there was an expansion in the area of orchards and vineyards.

Oranges, peaches, apricots, and prunes are the principal kinds of fruit produced. The yields of these may be expected to increase rapidly as the young trees become increasingly productive.

The following statement shows the number of fruit trees of the principal varieties, distinguishing the productive from those not yet bearing:—

Fruit trees.	1910-11.		1920-21.		1929-30.	
	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.
Orange—						
Seville	202	3,606	1,150	6,283	2,367	1,432
Washington Navel ...			60,810	70,314	226,231	66,354
Valencia			27,425	40,028	119,790	99,614
All other	119	136	3,134	5,443	12,134	3,024
Lemon ... ..	...	...	13,766	17,881	29,873	8,922
Mandarin ... ..	...	...	1,888	3,571	14,683	6,558
Peach—						
Dessert and Drying ...	1,752	4,503	31,022	29,664	42,620	3,776
Canning			118,811	73,804	150,195	48,221
Nectarine			3,739	4,020	4,717	1,136
Apricot	2,033	2,969	51,624	37,901	109,573	8,088
Prune ... ..	...	...	14,832	62,353	106,761	5,391
Plum	98	282	8,475	6,812	10,444	686
Pear—						
Williams	165	1,096	10,908	15,596	15,467	1,841
Other			5,663	3,457	7,214	568
Apple	400	718	3,452	10,240	44,496	75,586
Fig	201	38	1,428	2,995	6,294	5,786
Almond ... ..	...	140	6,948	8,631	22,033	6,096

The growing of oranges is the most extensive activity, and large quantities of peaches are grown especially for canning, also apricots, prunes, pears, and apples. However, there was an appreciable decline in the growing of canning peaches, plums, pears and almonds in 1929.

Crops are cultivated under irrigation in various localities other than irrigation settlements established by the Government. A summary of all crops which were watered artificially—including those to which the foregoing tables relate—indicates that the total area irrigated in 1929-30 was 126,321 acres. The principal crops were as follows:—Wheat, 23,711 acres; lucerne, 19,958 acres; oats, 19,823 acres; rice, 19,780 acres; other fruit, 16,239 acres; grapes, 9,017 acres; green food, 8,322 acres; market gardens, 6,201 acres.

IRRIGATION PROJECTS.

An account of the irrigation projects connected with the Murray, Lachlan, Macquarie and Namoi rivers and the Warragamba scheme was published on pages 613 to 615 of the Year Book for 1928-29. Later particulars are contained in the annual reports of the River Murray Commission and the Water Conservation and Irrigation Commission of New South Wales.

WATERWORKS.

Provision is made by the Water Act, 1912-1930, that all waterworks constructed by private individuals in connection with natural sources of water must be approved and licensed by the State. During the year ended 30th June, 1931, new licenses numbered 159 and 24 were allowed to lapse, so that at 30th June, 1931, there were in force 2,607 licenses for pumps, dams, and other works, small fees being charged in each case. Usually the licenses are issued for a period of five years.

Bore, Irrigation and Water Trusts and Artesian Well Districts.

The Water Act, 1912-1930, empowers the State to construct works to provide supplies of water for irrigation, domestic and stock purposes, flood prevention and drainage. The capital cost of such works, with interest, is repaid by beneficiaries, in instalments over a period of years. The works are administered by trustees partly elected from among the beneficiaries and partly appointed by the State.

For the supply of water under these conditions trusts have been constituted as follows:—

Purpose.	No. of Trusts.	Cost of Works.	Area Benefited.
		£	acres.
Artesian Bore Water Supply.	78	267,760	4,624,327
Improvement of Natural Outtakes of Effluent Streams	8	22,855	1,950,606
Conservation or Diversion of Water by Dams and Weirs.	7	115,220	1,704,980
Impounding by Regulations	1	2,591	32,985
Pumping for Domestic and Stock	6	26,883	608,394
Pumping for Irrigation	7	7,924	16,000
Total	107	443,233*	8,937,292

* Works in connection with five of the above trusts are not yet complete. Estimates of cost have therefore been used in these cases.

Under the provisions of the Artesian Wells Act, 1897, now incorporated in the Water Act, 1912-1930, twelve artesian wells were sunk and 108 miles of distributing drains constructed at a cost of £22,758. The area of the districts benefited by these works totals 314,123 acres, and charges (which cannot exceed 6 per cent. per annum on the cost of the works) are assessed by the local Land Board in each instance and paid by the occupiers.

Artesian Bores.

That portion of the great Australian artesian basin which extends into New South Wales covers approximately 70,000 square miles, and is situated in the northern and north-western hinterland of the State.

The first artesian bore was sunk in 1879 on the Kallara pastoral holding, between Bourke and Wilcannia, and the first Government bore was completed in 1884 at Goonery, on the Bourke-Wanaaring road.

The following statement shows the extent of the work which has been successfully effected by the Government, and by private owners, up to the 30th June, 1931:—

Bores.	Flowing.	Pumping.	Total.	Total Depth.
				feet.
For Public Watering-places, Trust Bores, etc. ...	134	46	180	375,437
For Country Towns Water Supply	3	1	4	6,533
For Improvement Leases	19	7	26	38,621
Total, Government Bores ..	156	54	210	420,641
Private Bores... ..	241	136	377	529,898

The average depth of Government bores is 2,003 feet, and of private bores 1,405 feet, and they range from 89 to 4,338 feet.

The deepest wells in New South Wales are in the county of Stapylton, one at Boronga having a depth of 4,338 feet and an outflow at present of 793,093 gallons per day; another at Dolgelly has a depth of 4,086 feet, and a discharge of 437,318 gallons per day. The largest outflow at the present time is at the Angledool No. 2 bore, in the county of Stapylton, which yields 1,229,915 gallons a day, and has a depth of 1,809 feet.

Of the 639 bores that have been sunk, 397 are flowing, and give an approximate aggregate discharge of 74,496,906 gallons per day; 190 bores give a pumping supply, the balance of 52 being failures. The total depth bored is 1,013,638 feet.

The flow from 96 bores is utilised for supplying water for stock on holdings served in connection with bore-water trusts and artesian well districts under the Water Act, 1912-1930. The total flow from these bores amounts to 32,984,409 gallons per day, watering districts of an area of 4,624,327 acres by means of 3,041 miles of distributing channels. The average rating by the bore trusts is 2.265d. per acre, including the cost of maintenance and administration.

In the majority of cases the remaining bores are used by pastoralists for stock-watering purposes only, but in a few instances the supply is utilised in connection with country towns.

The watering of the north-western country by means of bore-water has largely increased the carrying capacity of the land; and, what is perhaps of greater importance, it has made practicable some pastoral settlement on small holdings in areas previously utilised by companies holding extensive areas.

It has been determined that the multiplicity of bores is the chief factor governing the annual decrease in bore-flows, also that the limitation of the discharge of water from a bore will prolong its existence as an efficient flow; action has been taken, therefore, to prevent any waste by the control of the bore-flow, and by its adjustment to actual needs.

Shallow Boring.

Arrangements were made by the Government in 1912 to assist settlers by sinking shallow bores. The scheme is administered by the Water Conservation and Irrigation Commission. The settler selects the site, and the Commission supplies the plant, materials and labour, and the cost is repaid by the settler on terms. Operations were commenced with one plant only, but the number has been increased gradually and 36 are now at work. During the year 1930-31 the Commission received 153 applications for the use of the plant, and 118 bores were completed.

Up to the 30th June, 1931, the number of bores sunk was 3,035, of which 566 were failures, the total charges for sinking being approximately £686,213. The total depth bored was 816,391 feet, the greatest depth of any bore being 1,307 feet. During the year £34,185 were expended from loan moneys on shallow boring operations, and £34,322 were repaid by settlers to the Government. The operations of the year resulted in a trading loss of £13,229.

In 1925 boring by private plants was sanctioned by the Government, who arranged to advance the necessary money to settlers for approved schemes, such advances being repayable by instalments with interest. Ninety-seven bores have been sunk under this scheme, the total depth being 49,333 feet at an average cost of from 15s. 5d. to 49s. 6d. per foot.

In addition to the work conducted under the shallow boring regulations, 22 bores have been sunk in the Pilliga Scrub and on Crown lands for the Lands Department and Forestry Commission.

Growth of Artesian and Shallow Boring.

The rapid development which has occurred in utilising the underground water resources of the State in recent years is evident from the fact that the number of successful bores of all kinds increased from 458 in 1911 to 3,079 at 30th June, 1931.

PASTORAL INDUSTRY.

IN New South Wales the pastoral industry has always been the greatest source of primary production, contributing more than 40 per cent. of the total value during the last ten years. In the year ended 30th June, 1930, the area of holdings in the State used for grazing was approximately 157,800,000 acres.

LIVE STOCK.

New South Wales does not possess any indigenous animals which would give rise to a large industry, and of those introduced, sheep only have developed into a prolific source of wealth. Indeed, the development of the sheep industries has been so remarkable that it has, in a sense, precluded the rise of other pastoral activities. Horses have been bred principally for their utility in various industries and for racing purposes, and there is a small oversea trade in remounts, but, generally speaking, horse-breeding is declining. For many years cattle were produced only to supply local requirements of meat and dairy produce, but later an export trade was established, and considerable expansion took place in the number of cattle depastured. Pigs are bred principally as a by-product of the dairying industry, and the number does not fully meet local requirements.

The following table shows the number of the principal kinds of live stock in New South Wales at the end of each decennial period, from 1861 to 1921, and annually thereafter:—

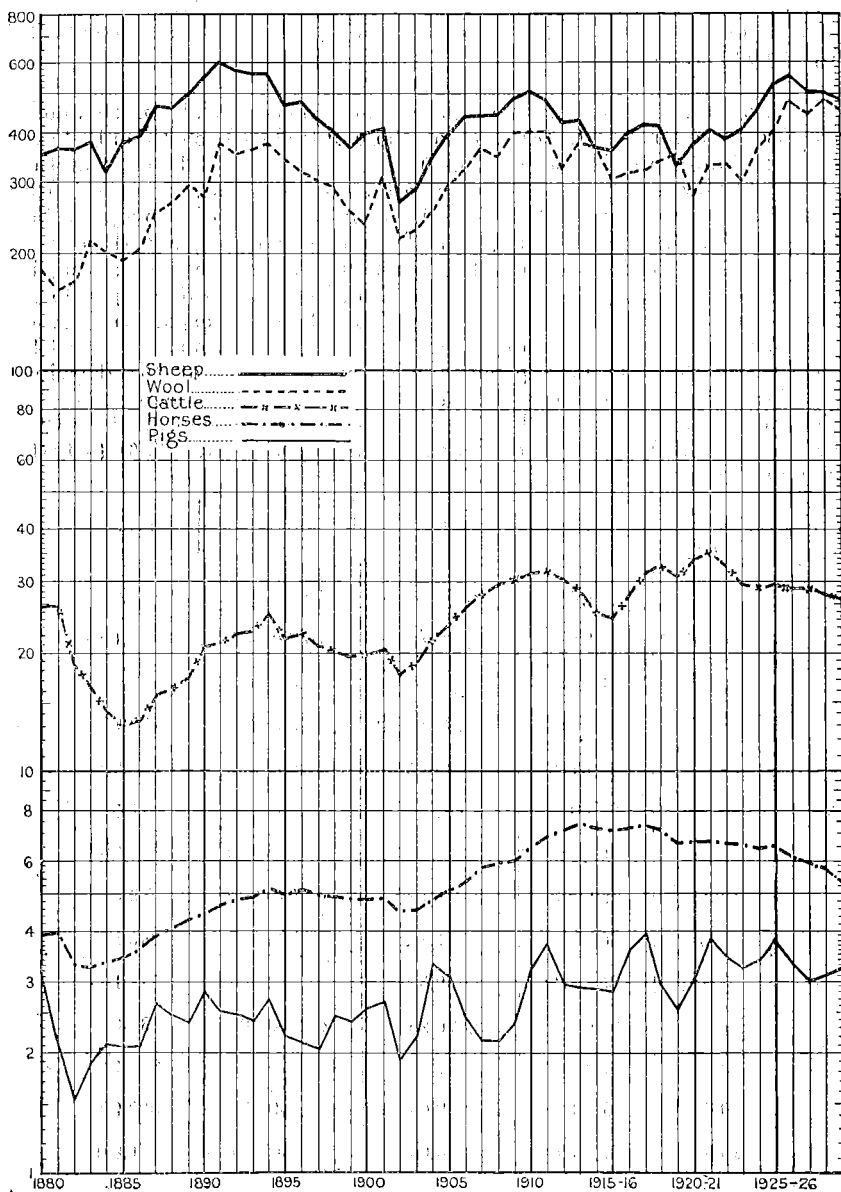
As at 30th June.	Horses.	Cattle.	Sheep.	Pigs.
1861*	233,220	2,271,923	5,615,054	146,091
1871*	304,100	2,014,888	16,278,697	213,193
1881*	398,577	2,597,348	36,591,946	213,916
1891*	469,647	2,128,838	61,831,416	253,189
1901*	486,716	2,047,454	41,857,099	265,730
1911*	689,004	3,194,236	48,830,000	371,093
1921	663,178	3,375,267	37,750,000	306,253
1922	669,800	3,546,530	41,070,000	383,669
1923	660,031	3,251,180	38,760,000	340,853
1924	658,372	2,938,522	41,440,000	323,196
1925	647,503	2,876,254	47,100,000	339,669
1926	651,035	2,937,130	53,860,000	382,674
1927	623,392	2,818,653	55,930,000	332,921
1928	598,377	2,848,654	50,510,000	301,819
1929	567,371	2,784,615	50,185,000	311,605
1930	534,945	2,686,132	48,720 000	323,499

* At 31st December.

Particulars of other live stock are shown on a later page.

LIVE STOCK AND PRODUCTION OF WOOL, 1880 to 1929-30.

Ratio Graph.



The numbers at the side of the graph represent 1,000,000 lb. of wool (as in grease) produced during year; and 100,000 sheep, cattle, horses, and pigs at end of year.

The diagram is a ratio graph. The vertical scale is logarithmic, and each curve rises and falls according to the rate of increase or decrease. Actual data are shown by means of the numbers at the side of the graph.

To obtain an idea of the varying extent of pastoral pursuits in the State as represented by the number of live stock grazed it is necessary to express the various species in common terms. This cannot be done with exactitude, but, adopting the arbitrary equivalent of ten sheep to each head of large stock, the following comparison is obtained:—

Year.	Equivalent in Sheep of Live Stock grazed.	Year.	Equivalent in Sheep of Live Stock grazed.
1861	30,666,000	1921*	78,134,000
1871	39,469,000	1927*	90,350,000
1881	66,551,000	1928*	84,980,000
1891	87,816,000	1929*	83,700,000
1901	67,199,000	1930*	80,930,000
1911	87,662,000		

* At 30th June, previous years at 31st December.

The number of live stock grazed declined on the whole by about 11 per cent. between 1891 and 1920. The decline was attributable to a decrease in the number of sheep, but under favourable conditions the number of live stock increased, until in 1927 it was in excess of the total in 1891. The sheep total was not maintained in 1928, and the equivalent receded by nearly 6 per cent. This was followed by a slight decrease in the number of sheep, cattle and horses in 1929, but in 1930 all the classes of stock decreased. It should be noted that careful breeding has led to marked improvement in the type of sheep depastured, and the average productive capacity of present-day sheep is very much greater than that of sheep depastured in 1891.

Comparison—Live Stock in the Commonwealth.

A comparison of the number of horses, cattle, sheep, and pigs in New South Wales and in the other States of the Commonwealth is shown in the following table. The figures are as at 31st December, 1930, excepting where otherwise specified:—

State.	Horses.	Cattle.	Sheep.	Pigs.
New South Wales	534,945(a)	2,686,132 (a)	49,870,000	323,499 (a)
Victoria	379,872	1,429,920	16,477,995	281,245
Queensland	481,615	5,463,724	22,542,043	217,628
South Australia	183,529	218,985	5,980,959	74,906 (b)
Western Australia (b)	159,528	836,646	9,871,000	64,522
Tasmania (b)	34,336	214,643	*2,000,000	52,899
Northern Territory (b)	33,703	711,607	*12,000	359
Federal Capital Territory (a)	929	4,760	*211,738	124
Total, Australia	1,808,457	11,566,417	106,965,735	1,015,082

(a) As at 30th June, 1930.

(b) As at 31st December, 1929.

* As at 31st December, 1930.

In New South Wales there are more sheep, horses, and pigs than in any other State in the Commonwealth, but Queensland has more cattle.

Distribution of Live Stock.

In order to indicate the distribution of flocks and herds in New South Wales the following table has been prepared. It shows the number of live stock, and the number per square mile, in each Division at intervals since 1891.

Division.	Number of Live Stock (000 omitted).					Number per square mile.				
	1891.	1901.	1911.	1921.†	1930.‡	1891.	1901.	1911.	1921.†	1930.‡
SHEEP—										
Coastal Belt	1,483	1,097	1,559	1,048	1,335	42.5	31.4	44.9	30.2	38.3
Tableland	7,882	8,859	9,735	7,524	11,251	195.3	219.5	235.2	181.8	278.6
Western Slopes	10,860	11,672	12,167	9,743	16,129	286.8	308.0	275.2	221.0	366.5
C'I Plains & Riverina ...	25,194	14,706	17,433	14,370	15,113	351.8	205.4	269.4	222.1	233.6
Western Division	16,403	5,523	7,936	5,065	4,822	130.6	44.0	63.2	40.4	39.0
Whole State	61,831	41,857	48,830	37,750	48,720	199.2	134.9	157.3	121.6	157.5
CATTLE, DAIRYING—										
Coastal Belt	197	284	653	674	8.4	5.6	8.1	18.7	19.3	25.1
Tableland	67	70	107	73	38	1.7	1.7	2.7	1.8	0.9
Western Slopes	37	40	78	59	40	1.0	1.1	2.1	1.6	0.9
C'I Plains & Riverina ...	35	20	48	36	6	0.5	0.3	0.7	0.5	0.1
Western Division	7	4	9	2	1	0.1	0.0	0.1	0.0	0.0
Whole State	343*	418*	895	844	959†	1.1	1.3	2.9	2.7	3.1
CATTLE, OTHER—										
Coastal Belt	640	667	915	1,009	761	18.3	19.1	26.2	28.6	21.8
Tableland	465	501	550	580	408	11.5	12.4	13.6	14.4	10.1
Western Slopes	247	306	422	441	334	6.5	8.1	11.1	11.6	7.6
C'I Plains & Riverina ...	339	115	302	369	173	4.7	1.6	4.2	5.2	2.7
Western Division	94	41	110	132	51	0.7	0.3	0.9	1.1	0.4
Whole State	1,785	1,630	2,299	2,531	1,727	5.8	5.3	7.4	8.2	5.6
HORSES—										
Coastal Belt	163	161	207	203	150	4.7	4.6	5.9	5.8	4.3
Tableland	92	112	127	112	87	2.3	2.8	3.1	2.8	2.2
Western Slopes	76	111	180	168	163	2.0	2.9	4.8	4.4	3.7
C'I Plains & Riverina ...	95	78	140	152	113	1.3	1.1	2.0	2.1	1.8
Western Division	44	25	35	28	22	0.4	0.2	0.3	0.2	0.2
Whole State	470	487	689	663	535	1.5	1.6	2.2	2.1	1.7

* Cows in milk only; dry cows and springing heifers are included in the total of Other Cattle.

† Cows in registered dairies only. ‡ At 30th June.

Sheep are depastured principally in the hinterland of the State, and are relatively most numerous in the Western Slopes Division. Dairying cattle and, in fact, all cattle, are more numerous in the coastal areas. Until 1922, horses were most numerous in the Coastal Division; since that year the Western Slopes Division contained the greatest number.

The divisional totals as stated for 1930 are not altogether comparable with those shown for the years 1891 to 1921, as they have been compiled in shire areas, and not in counties as formerly. The change in geographical basis

involved considerable alteration in the areas comprising divisions of the Western Slopes and the Central Plains, where large numbers of stock are depastured.

The figures for the years 1891 to 1921, however, afford interesting information as to the localities most susceptible to losses of sheep through drought. The greatest decline between these years was in the Central Plains and Riverina, where the numbers fell from 352 to 222 per square mile, and the greatest relative decline was in the Western Division, where the falling-off was from 131 to 40 per square mile.

SHEEP.

Investigations carried out in 1926 showed that the numbers of sheep in the State as recorded in landholders' returns had been considerably understated, and, after exhaustive inquiries, it was found necessary to revise the recorded totals back to the year 1908.

The following table shows the number of sheep as recorded in landholders' returns for various years between 1861 and 1906 in comparison with the adjusted totals since 1911. The figures are approximate, but they show the vicissitudes of sheep-breeding in New South Wales:—

Year.	Sheep.	Average Annual Rate of Increase.	Year.	Sheep.	Average Annual Rate of Increase.	Year.	Sheep.	Average Annual Rate of Increase.
			*			*		
1861	5,615,000	...	1891	61,831,000	(+) 9.6	1921	37,750,000	(+) 3.5
1866	11,562,000	(+) 15.5	1896	48,318,000	(—) 4.8	1926	53,860,000	(+) 42.7
1871	16,278,000	(+) 7.1	1901	41,857,000	(—) 2.8	1927	55,930,000	(+) 3.8
1876	25,269,000	(+) 9.2	1906	44,132,000	(+) 1.1	1928†	50,510,000	(—) 9.7
1881	36,591,000	(+) 7.7	1911	48,830,000	(+) 2.1	1929†	50,185,000	(—) 0.6
1886	39,169,000	(+) 1.4	1916	36,400,000	(—) 1.1	1930†	48,720,000	(—) 2.9

* At 30th June each year since 1916. (—) Denotes decrease.

† Excluding Federal Capital Territory (approx. 230,000).

At 31st December, 1930 the number of sheep in the State was 49,870,000. The number was greatest in 1891, and thereafter lowest at the end of 1902 by reason of drought. The main cause of the reduction in the number of sheep between 1891 and 1921 seems to have been a remarkable deterioration of seasons, due to diminished rainfall. This may be illustrated briefly by stating that the weighted average annual rainfall of the State was about $3\frac{1}{2}$ inches less in the twenty years which followed 1894 than in the preceding quarter of a century, and that this decline was proportionally heaviest in the plain districts of low average rainfall, which in 1891 carried two-thirds of the sheep depastured in the State. The rabbit pest, too, has aggravated the effects of dry weather through destruction of natural herbage, while the growth of the agricultural industry has caused land to be diverted from the purpose of sheep-breeding.

The sudden transition from very good to very bad seasons, which occurred in the early nineties, wrought such havoc amongst the flocks depastured on the immense western plains that by 1901 the returns showed a decrease from 16,400,000 to 5,500,000 sheep in the Western Division, and from 25,200,000 to 14,700,000 in the Central Plains and Riverina Division, and in 1902 these numbers were further reduced by 1,900,000 and 7,600,000 respectively. It is noteworthy that in 1930 there were many more sheep in the Tablelands and Western Slopes Divisions than in 1891, though considerably less in the Plains, Riverina, and Western Divisions (see table on previous page).

Estimates based on returns supplied by landholders show the following approximate distribution of the flocks according to sex, also the number of lambs:—

As at 30th June.	Rams.	Ewes.	Wethers.	Lambs (under 1 year).	Total.
1925	580,000	23,040,000	12,340,000	11,140,000	47,100,000
1926	670,000	25,920,000	15,360,000	11,910,000	53,860,000
1927	740,000	27,770,000	15,330,000	12,090,000	55,930,000
1928	675,000	26,262,000	15,200,000	8,373,000	50,510,000
1929	622,000	25,076,000	13,832,000	10,655,000	50,185,000
1930	651,000	25,349,000	14,597,000	8,123,000	48,720,000

The following table, compiled from the best data available, shows as nearly as may be the extent of each of the principal factors in the increase and decrease in the number of sheep since 1919.

Year.	Lambs Marked.	Sheep and Lambs Slaughtered.	Excess of Imports (+) or Exports (—)	Estimated number of Deaths* (Balance).	Net Increase (+) or Decrease (—)	Sheep at 30th June.
Thousands (000) omitted.						
1918-19	8,780	4,280	(—) 1,040	3,810	(—) 350	42,170
1919-20	5,230	5,540	(—) 1,380	7,330	(—) 9,020	33,150
1920-21	8,750	3,850	(+) 1,980	2,280	(+) 4,600	37,750
1921-22	10,860	5,230	(+) 150	2,460	(+) 3,320	41,070
1922-23	8,180	5,670	(—) 2,170	2,650	(—) 2,310	38,760
1923-24	9,080	3,620	(—) 140	2,640	(+) 2,680	41,440
1924-25	12,000	3,390	(—) 870	2,080	(+) 5,660	47,100
1925-26	13,100	4,250	(—) 610	1,480	(+) 6,760	53,860
1926-27	12,630	5,620	(—) 2,640	2,300	(+) 2,070	55,930
1927-28	9,220	5,010	(—) 1,990	7,640	(—) 5,420	50,510
1929†	12,560	5,380	(—) 2,410	4,540	(+) 230	†50,740†
1930†	10,950	6,350	(—) 1,090	4,380	(—) 870	†49,870†

* The figures in this column represent a balance and are only rough approximations. † Year ends 31st December; previous years ended 30th June. ‡ Excluding sheep in Federal Capital Territory.

While the returns as to slaughter and border movement are considered accurate, the numbers of lambs marked and of sheep prior to 1929 are estimates based on landholders' returns and other data. The estimated number of deaths is a balancing column and its accuracy is affected by the degree of approximation present in the other items in the table. The numbers shown under this heading, however, have in recent years been checked against recorded totals and represent the approximate annual losses from drought, disease, pest, and natural causes generally.

The effect of adverse seasons on the sheep flocks is apparent in four directions, viz., losses by death attributable mainly to lack of fodder and water, increase in the slaughtering of fat stock, decrease in lambing, and increased export to other States.

A brief review of the rise of sheep breeding in New South Wales was published on page 771 of the Year Book for 1921, but this is modified by the remarks made on a previous page regarding the totals recorded in earlier years.

Interstate Movement of Sheep.

Apart from the seasonal movement of stock to and from agistment in other States, there is a regular export of sheep from New South Wales to Victoria. During the past five years, 11,659,000 sheep have been moved from New South Wales to Victoria, and 3,324,000 from Victoria to New South Wales, leaving an excess of exports to Victoria of 8,335,000. In the same period, 3,674,000 sheep have been imported from Queensland to New South Wales, and 3,340,000 have been exported from New South Wales to Queensland, leaving an excess of exports of 334,000 from New South Wales to Queensland. The excess of exports to other destinations during the same period was 651,000, chiefly to South Australia, and the total excess of exports of live sheep from New South Wales for the period 9,310,000, consisting mainly of sheep sent to market in Victoria from the southern districts of New South Wales.

The following table shows the movement of sheep from and to New South Wales, so far as is recorded, in recent seasons:—

Year.	Sheep from New South Wales.				Sheep to New South Wales.				Excess of Imports (+) for of Exports (—).
	To Victoria.	To Queensland.	To South Australia and by Sea.	Total.	From Victoria.	From Queensland.	From South Australia and by Sea.	Total.	
	000	000	000	000	000	000	000	000	000
1919-20	2,289	335	218	2,842	689	750	26	1,465	(—) 1,377
1920-21	850	97	125	1,072	936	2,050	70	3,056	(+) 1,984
1921-22	1,383	245	109	1,736	541	1,306	42	1,889	(+) 153
1922-23	2,008	344	386	2,738	225	313	33	571	(—) 2,167
1923-24	1,281	208	76	1,565	440	947	37	1,424	(—) 141
1924-25	1,558	203	92	1,853	393	586	7	986	(—) 872
1925-26	1,540	321	83	1,944	561	759	14	1,334	(—) 610
1926-27	2,330	960	300	3,590	314	634	6	954	(—) 2,636
1927-28	2,507	989	122	3,618	938	587	103	1,628	(—) 1,990
1928-29	2,180	723	173	3,076	717	532	33	1,282	(—) 1,794
1929-30	2,744	631	112	3,487	715	661	36	1,412	(—) 2,075
1930-31	1,398	371	136	2,405	640	926	14	1,580	(—) 825

Lambing.

The greater part of the lambing of the State takes place during the autumn and winter months, although considerable proportions of ewes, varying according to the nature of the season, are reserved for spring and early summer lambing. It is possible to breed from ewes twice per year, but it is not considered good policy and is rarely practised, except, perhaps, after severe losses. Seasonal changes play a large part in determining the proportion of ewes mated and of resultant lambs, and thus cause wide variations in the natural increase. In 1925-26, 19,941,000 ewes were mated and produced 13,100,000 lambs, equal to 65.7 per cent.; in 1926-27, 18,897,000 ewes mated produced 12,630,000 lambs, equal to 66.8 per cent.; and in 1927-28, 15,651,800 ewes were mated, and produced 9,218,793 lambs, equal to 58.9 per cent.

In view of the fact that the lambing season extends almost continuously from March to November and that comparatively few lambs are dropped in the months of December, January and February, it has been found desirable to record lambing in calendar years. In 1929 lambs marked numbered 12,562,000 from 20,033,600 ewes mated a proportion of 62.7 per cent. Records for the year 1930 are shown below in statistical divisions:—

District.	Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes Mated.
Coast	269,364	165,390	per cent. 61.4
Tablelands—North	543,548	360,653	66.4
Central	1,755,637	1,099,047	62.6
South	965,756	598,211	61.9
Total	3,264,941	2,057,911	63.0
Western Slopes—North	2,008,898	1,249,776	62.2
Central	1,774,819	940,302	53.0
South	2,125,389	1,144,748	53.9
Total	5,909,106	3,334,826	56.4
Plains—North	1,879,964	1,155,151	61.5
Central	2,410,086	1,371,391	56.9
Riverina	2,880,101	1,508,993	52.4
Total	7,170,151	4,035,535	56.3
Western Division	2,436,438	1,356,338	55.7
Grand Total	19,050,000	10,950,000	57.5

Breeds of Sheep.

The principal breed of sheep in New South Wales is the celebrated short-woolled merino strain. Stud merino flocks are maintained throughout the State and a register is compiled annually giving the history of the flocks, together with the breeding of the rams used. The number of lambs bred and sheep sold and particulars of sheep purchased are also published.

At the 31st December, 1929, there were over 867,000 stud sheep in the 161 registered flocks; comprising rams 97,000, ewes 499,000, and lambs 271,000. During 1929 the number of stud stock bred was rams 142,477, and ewes 149,117. In addition to the registered stud flocks a number of other stud flocks are maintained, some of them of large dimensions.

The number of other pure breeds is very small. Crosses of long-woolled breeds with the merino are not at present numerous, but their numbers vary markedly according to market conditions. Merino comebacks, the progeny of crossbred ewes mated to merino rams are, however, fairly numerous. British breeds of sheep are represented chiefly by the Lincoln, English Leicester, Romney Marsh, and Border Leicester breeds, while Suffolk, Ryeland, and Dorset Horn sheep have been introduced for the raising of early-maturing lambs.

Lincolns and Border Leicesters and their crosses with merinos, constitute the largest proportionate number of crossbred varieties. The proportion of crossbred and comeback sheep is considerably greater than it was in 1901, prior to the development of export in the mutton trade. It has fallen since 1919 on account of the more favourable market for merino wool.

The estimated numbers of the principal breeds in the State at 30th June, 1930, were:—39,869,000 merino, 394,000 other pure breeds, 4,651,000 merino comebacks, and 3,806,000 crossbreds.

Production of Wool.

Wool is produced in New South Wales principally by shearing the live sheep, but also to a considerable extent by fellmongering. Comparatively little is picked from the carcasses of dead sheep on the holding. Many sheep skins are exported overseas and interstate, and the quantity of wool on these is estimated and included in the total production.

Formerly considerable numbers of sheep were washed before being shorn, and, as particulars of the resultant wool were not recorded separately prior to 1876, the estimates of the quantity of wool produced up to that date are approximate.

The output of wool is stated as in the grease, as data as to its clean scoured yield are not available. A small proportion of the shorn wool is scoured before being marketed, and the whole of the fellmongered wool is in a scoured condition. This is stated at its greasy equivalent by applying a factor determined annually, the proportion being rather more than 2 lb. of greasy to 1 lb. of scoured. Very little wool is now washed on holdings.

The following table shows, in quinquennial periods since 1876 and annually during the past eleven seasons, the total quantity of wool produced (as in the grease) in New South Wales, together with the aggregate value at Sydney, and the value to growers since 1920-21:—

Period.	Wool Produced (000 omitted).		Year.	Wool Produced (000 omitted).		
	Quantity as in the Grease.	Value at Sydney.		Quantity as in the Grease.	Value at Sydney.	Value at place of Production.
	lb.	£		lb.	£	£
1876-1880	718,397†	31,298	1920-21	275,269	14,163	13,023
1881-1885	943,814†	40,563	1921-22	333,856	16,971	15,557
1886-1890	1,294,781†	44,773	1922-23	336,899	24,566	23,048
1891-1895	1,813,630†	49,025	1923-24	303,032	29,672	28,209
1896-1900	1,408,240†	42,984	1924-25	369,118	35,989	34,073
1901-1905	1,302,585†	46,719	1925-26	402,460	28,216	26,223
1906-1910	1,846,604†	74,788	1926-27	499,320	35,629	33,234
1911-1915	1,786,281	77,339	1927-28	443,860	36,064	33,874
1916-1920*	1,640,325	92,535	1928-29	482,920	33,206	30,879
1921-1925*	1,618,174	121,361	1929-30	459,970	20,123	18,099
1926-1930*	2,288,560	153,238	1930-31	427,220	15,486	13,500†

* 5 years ended 30th June. † Excludes wool exported on skins. ‡ Preliminary, subject to revision.

A decline occurred in production between 1911 and 1920 on account of diminution in the number of sheep due to unfavourable seasons. After the breaking of the severe drought in June, 1920, the seasons were favourable up to 1927, and the flocks increased to a number larger than that in any of the previous thirty years. The fleece has also been improved considerably, and the wool production of 1926-27 was more than 23 per cent. greater than in any previous year. Despite relatively unfavourable seasons in 1927-28 and 1929-30 the production of wool remained at a high level. The value of the output increased under the influence of a marked rise in prices until in the season 1924-25 an average price of 25½d. per pound was realised for greasy wool at the Sydney wool sales. For the succeeding four seasons the prices were about one-third below this level, except for a temporary rise in 1927-28. A marked decline then occurred in consonance with the

general fall in world price levels. In 1929-30 the average greasy price was only 10½d. per lb., and 8½d. per lb. in 1930-31. This is reflected in a heavy fall in the total value of the wool produced.

Particulars of the number of sheep shorn, the average weight of wool per sheep, and the respective amounts of shorn and other wool produced since 1916-17 are given below:—

Year ended 30th June.	Sheep shorn during year.	Average clip per sheep (greasy).	Weight of Wool Produced (as in the grease).				
			Shorn and crutched.	Dead.	Fell- mongered.	Exported on skins.	Total production.
	Thousands.	lb.	Thousand lb. (000 omitted)				
1917	35,920	7·8	280,169	998	31,074	6,000	318,241
1918	39,450	7·3	288,013	1,040	28,702	5,100	322,855
1919	40,230	7·4	297,699	2,166	32,378	8,710	340,953
1920	41,280	7·2	297,176	2,528	42,271	10,096	352,071
1921	34,560	6·8	235,041	1,198	30,840	8,190	275,269
1922	37,370	7·8	291,500	413	30,445	11,498	333,856
1923	40,270	7·3	293,997	1,008	27,199	14,695	336,899
1924	38,370	7·1	272,438	1,249	17,749	11,596	303,032
1925	41,320	8·2	340,956	755	11,763	15,644	369,118
1926	45,550	8·1	368,739	761	14,780	18,210	402,490
1927	51,880	8·8	456,872	680	22,330	19,440	499,322
1928	53,730	7·5	404,465	1,705	19,780	17,910	443,860
1929	50,300	8·8	445,230	860	16,770	20,060	482,920
1930	53,260	7·8	416,810	920	18,990	23,250	459,970
1931	48,840	7·9	385,690		22,740	18,790	427,220

Average Weight of Fleece.

Shearing operations are carried out usually between May and November, and the average weight of the fleece varies very greatly under the influence of the seasonal conditions ruling during the period in which the wool is grown. The proportion of lambs and of merino sheep in the flocks are important factors affecting the average weight of the fleece. The average weight of fleece shorn at the general shearing (between 1st June and 31st December) in successive years is shown below in statistical divisions of New South Wales:—

Division.	1928.		1929.		1930.	
	Sheep.	Lambs.	Sheep.	Lambs.	Sheep.	Lambs.
	lb.	lb.	lb.	lb.	lb.	lb.
Coastal ...	8·56	2·39	8·35	2·35	7·67	2·82
Tablelands—North ...	8·37	2·68	8·03	2·65	8·09	2·90
Central ...	9·22	2·50	8·24	2·49	8·08	2·54
South ...	9·87	2·18	8·68	1·84	7·93	2·00
Total ...	9·19	2·40	8·31	2·28	8·04	2·41
Western Slopes—North ...	8·39	2·85	8·22	2·79	7·71	2·85
Central ...	9·23	2·60	8·26	2·64	7·92	2·46
South ...	9·64	2·76	8·05	2·53	7·69	2·55
Total ...	9·09	2·73	8·17	2·62	7·75	2·61
Plains—North ...	8·38	2·64	8·78	3·11	8·33	3·67
Central ...	9·32	2·69	8·11	3·04	8·65	3·07
Riverina ...	10·18	2·72	9·26	2·78	8·59	2·39
Total ...	9·40	2·69	8·77	2·92	8·53	2·93
Western Division ...	9·52	2·81	8·76	2·76	9·44	2·81
New South Wales ...	9·25	2·66	8·44	2·70	8·20	2·72

The foregoing figures exclude from account sheep and lambs shorn in the autumn, which constitute rather less than 5 per cent. of the total numbers shorn. Wool produced by crutching operations is also excluded. This wool represents a variable proportion ranging up to 3 per cent. of the total wool clip.

World's Sheep and Wool Production.

The number of sheep and the approximate wool production for the latest available year (excluding Russia) are shown below. Generally, the figures are extracted from the Annual Wool Review of the National Association of Wool Manufacturers (U.S.A.) and relate to the year 1930. The condensed table below includes only those countries which produced more than 20,000,000 lb. of wool.

Country.	Number of Sheep.	Production of Wool in lb.	Country.	Number of Sheep.	Production of Wool in lb.
	'000 omitted.	'000 omitted.		'000 omitted.	'000 omitted.
Australasia—			North America—		
Australia	105,896	937,597	United States ...	51,911	397,907
New Zealand	30,841	213,913	Canada	3,699	21,016
Other	100	...	Other	90	191
Total	136,837	1,151,510	Total	55,700	419,114
Europe—			Central America—		
Bulgaria	7,995	22,036	Mexico	3,100	12,400
France... ..	10,500	46,297	Other	125	...
Germany	3,500	35,000	Total	3,225	12,400
Italy	8,000	33,000	South America—		
Rumania	12,406	53,000	Argentina	43,084	333,336
Spain	19,370	75,000	Brazil	8,500	24,200
United Kingdom	28,196	152,644	Chile	4,300	30,000
Yugoslavia... ..	7,850	30,000	Uruguay	23,000	140,000
Other	29,259	90,640	Other	20,207	18,571
Total	127,076	537,617	Total	99,091	546,107
Asia—			Africa—		
British India ...	35,506	70,000	Algeria	7,168	48,000
China	35,000	55,500	Morocco	8,848	23,148
Persia	7,500	45,000	Union of South		
Russia in Asia ...	133,885	384,252	Africa	41,600	337,000
Other	26,105	61,950	Other	22,130	29,196
Total	237,996	616,702	Total	79,746	437,344
			World Total ...	739,671	3,720,794

The latest figures available in respect of Russia were 70,000,000 sheep and wool production 222,116,000 lb. According to the totals shown above, Australia's proportion of the world totals are calculated at approximately 13.8 per cent. of the sheep and 23.7 per cent. of the wool.

Wool Marketing.

For many years the whole of the wool grown in New South Wales was shipped for sale in London. As the number of continental buyers increased, however, there developed a tendency, which harmonised entirely with Australian interests, to seek supplies of the raw material at their source, and after the year 1885 Sydney wool sales began to assume importance.

Sydney Wool Sales.

The wool sales in Sydney usually commence about September and continue in series on fixed dates over a period of eight or nine months. These sales are attended by representatives of firms from practically every country in which woollen goods are manufactured extensively. From data at present available it is not possible to state what proportion of the wool received in Sydney is sold locally before export.

The following statement compiled from the records of the Sydney Wool Selling Brokers' Association shows particulars of Sydney wool sales since 1913, omitting from account the four seasons (1916-17 to 1919-20) during which the appraisement system under the Imperial Purchase Scheme was in operation:—

Season.	Wool Sold.*		Proportion of Wool of each Description Sold.						Average weight per Bale.	
	Weight.	Value.	Breed.		Growth.		Condition.		Greasy.	Scoured. †
			Merino.	Cross-bred.	Fleece, etc.	Lambs.	Greasy.	Scoured.		
	lb.000	£000	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	lb.	lb.
1913-14	277,112	10 333	89.0	11.0	94.4	5.6	88.7	11.3	334	223
1914-15	190,212	6,739	83.8	16.2	95.4	4.6	92.0	8.0	341	217
1915-16	245,298	10,430	84.5	15.5	95.8	4.2	86.7	13.3	332	223
1920-21	107,584	5,610	89.1	10.9	98.9	1.1	93.2	6.8	340	227
1921-22	313,886	14,755	73.2	26.8	95.7	4.3	90.7	9.3	330	240
1922-23	268,873	18,922	70.0	30.0	94.3	5.7	93.3	6.7	321	234
1923-24	224,719	21,445	83.9	16.1	96.6	3.4	92.6	7.4	318	228
1924-25	212,664	21,124	85.9	14.1	94.7	5.3	95.1	4.9	327	232
1925-26	345,685	23,601	86.6	13.4	93.7	6.3	95.2	4.8	315	227
1926-27	374,125	26,377	87.9	12.1	94.9	5.1	94.1	5.9	322	208
1927-28	338,476	26,885	90.3	9.7	95.3	4.7	93.7	6.3	306	226
1928-29	356,696	25,113	88.6	11.4	96.0	4.0	95.9	4.1	313	236
1929-30	342,084	14,888	90.1	9.9	95.5	4.5	95.7	4.3	305	231
1930-31	331,476	11,743	10.1	9.9	96.5	3.5	94.9	5.1	309	225

* Scoured being included at its greasy equivalent.

† Including skin wool.

The figures as to quantity and value in this table are not comparable with records of production, because considerable quantities of wool grown in New South Wales are sold in other States, notably in Victoria and South Australia, while small quantities of wool from the other States, mainly from Queensland, are marketed in Sydney. The wool produced in any season is not always sold in the same season. The uncertainty consequent on the outbreak of war caused a heavy decline in sales during 1914-15, and sales were retarded again on the resumption of auctions in 1920-21, owing to the existence of large stocks and to uncertain conditions. At the close of sales in June there is usually very little wool remaining unsold in Sydney. The balance remaining unsold in store on 30th June has not been appreciable since 1925, when 171,700 bales remained unsold. At 30th June, 1931, there were approximately 23,276 bales of unsold wool in store at Sydney.

Particulars of the appraisement and purchase of wool under the Imperial Wool Purchase Scheme which operated during the years 1916-17 to 1919-20 were published in earlier editions of this Year Book.

Sydney is by far the largest wool-selling centre of Australia, the quantity sold at Sydney wool sales being, usually, greater than at the two next largest centres (Brisbane and Melbourne) combined. Wool is sold also at Albury, on the southern border, and (since 1929-30) at Newcastle, but these sales are comparatively small in extent.

Prices of Wool.

On account of the very large number of varieties of wool, of the pronounced changes of condition from season to season, and of the varying

proportions of each variety in the total output, it is a matter of great difficulty to obtain price quotations which will show accurately the fluctuations of values.

However, it appears that the average values of Australian wool per pound have been subject to alternate periods of rising and falling which, on the basis of average export values from New South Wales, have been as follows:—Rising to 1830, falling 1831 to 1849, rising 1850 to 1861, falling 1862 to 1894, rising 1895 to 1907, falling 1908 to 1912, rising 1912 to 1924, rising 1925 to 1928, falling 1929 and 1930. These periods indicate the general trend only, because in certain years, notably 1900, 1914-15, 1921 and 1922, prices varied irregularly.

The following statement, compiled from the official records of the Sydney Wool Selling Brokers' Association, shows the average prices realised for wool at Sydney auctions since 1900:—

Season ended 30th June.	Average Prices per lb.		Season ended 30th June.	Average Prices per lb.		Season ended 30th June.	Average Prices per lb.	
	Greasy.	Scoured.		Greasy.	Scoured.		Greasy.	Scoured.
	d.	d.		d.	d.		d.	d.
1900	11 $\frac{1}{8}$	18 $\frac{1}{2}$	1911	8 $\frac{1}{2}$	14 $\frac{1}{2}$	1922	12 $\frac{1}{2}$	14 $\frac{5}{8}$
1901	5 $\frac{5}{8}$	10 $\frac{3}{8}$	1912	8 $\frac{1}{8}$	14	1923	17 $\frac{1}{2}$	23
1902	6 $\frac{1}{8}$	11 $\frac{1}{8}$	1913	9 $\frac{1}{8}$	16 $\frac{3}{8}$	1924	23 $\frac{1}{2}$	36
1903	8	14 $\frac{1}{2}$	1914	9 $\frac{1}{2}$	16 $\frac{3}{8}$	1925	25 $\frac{1}{2}$	41 $\frac{1}{8}$
1904	8 $\frac{1}{8}$	14 $\frac{1}{2}$	1915	8 $\frac{5}{8}$	15 $\frac{1}{2}$	1926	16 $\frac{3}{4}$	25 $\frac{3}{4}$
1905	8 $\frac{3}{8}$	14 $\frac{1}{2}$	1916	10 $\frac{1}{2}$	17 $\frac{1}{2}$	1927	17 $\frac{1}{2}$	29 $\frac{3}{8}$
1906	9	16 $\frac{1}{2}$	1917	14 $\frac{3}{8}$ *	20 $\frac{7}{8}$ *	1928	19 $\frac{1}{2}$	31 $\frac{3}{8}$
1907	9 $\frac{1}{2}$	15 $\frac{3}{4}$	1918	14 $\frac{3}{8}$ *	23 $\frac{1}{2}$ *	1929	16 $\frac{3}{4}$	27 $\frac{1}{4}$
1908	9	15 $\frac{1}{2}$	1919	15 *	25 $\frac{3}{8}$ *	1930	10 $\frac{1}{2}$	18 $\frac{3}{8}$
1909	7 $\frac{7}{8}$	13 $\frac{1}{2}$	1920	15 $\frac{5}{8}$ *	26 $\frac{1}{2}$ *	1931	8 $\frac{3}{4}$	13 $\frac{7}{8}$
1910	9 $\frac{1}{8}$	15 $\frac{7}{8}$	1921	12 $\frac{1}{2}$	25			

* Price as appraised under Imperial Wool Purchase Scheme. The average amount to be added to the value of greasy wool in respect of surplus profits is 6·88d. per lb., of which one-half accrued to Australian growers.

These figures represent the average price of wool sold during the financial year, and furnish an accurate guide to the average value per pound greasy of the clip produced in individual years, except that allowance for carry over of unsold wool is necessary in three seasons, viz.:—The average price realised for wool produced in 1920-21 was 12 $\frac{3}{4}$ d., in 1924-25 23 $\frac{3}{4}$ d., and in 1925-26 16 $\frac{3}{4}$ d. The prices of both greasy and scoured wool shown above are affected by changes in the proportion of merino to crossbred and of fleece to lambs' wool sold, and by such variable qualities as length, fineness, and soundness. The wool sold locally as scoured is of limited range and quantity, and the prices quoted are not representative.

Data as to the clean scoured value of wool in local markets are not at present available for publication. The average prices of greasy wool provide only an approximate measure of the variations in the value of wool as a commodity from season to season. The market price of the successive clips is affected by changes in the proportion of natural grease which the wool contains, and by variations in the proportionate quantities of wool of various qualities. During the war-time appraisements more than 800 distinct types of wool were classified.

Average Monthly Prices of Greasy Wool.

The averages as published below are an index (expressed in terms of pence) of the price of greasy wool per lb. at Sydney auctions. The averages

are based on the actual prices realised for typical grades of wool in Sydney, and the respective monthly averages may be compared very closely with the actual average prices of greasy wool shown above for previous seasons.

Month.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
July ...	d. †	d. †	d. †	d. †	d. †
August ...	16.9	†	17.8	†	†
September ...	17.3	18.2	17.8	12.0	9.4
October ...	16.4	18.7	16.9	10.7	8.2
November ...	16.9	18.7	17.3	12.2	8.4
December ...	17.0	19.1	16.9	11.7	7.9
January ...	17.3	19.6	17.3	10.7	7.7
February ...	17.7	20.0	16.9	9.7	9.0
March ...	17.6	20.0	16.0	9.2	10.2
April ...	17.5	20.0	15.6	9.8	10.3
May ...	†	20.0	14.7	10.3	9.7
June ...	17.4	17.8	12.9	9.9	9.0
Average price realised at Sydney auctions during year ...	17.1	19.5	16.5	10.5	8.7

† Unavailable. No sales.

The above prices are all in Australian currency.

British Australian Wool Realisation Association Limited.

Particulars of the formation and activities of this organisation are contained in the Year Book for 1921 at page 781 and for 1924 at page 586, and a summary of payments made to woolgrowers was published on page 630 of this Year Book for 1928-29. As at 10th June, 1931, the accounts showed total assets of £938,196, and it was announced that a sum of approximately £753,532, or 1s. 4d. per share, would be distributed on 15th March, 1932.

Destination of Wool Shipped.

The following statement shows the destination of the oversea shipments of wool, excluding wool on skins, from New South Wales during the two years ended June, 1921, and 1931, in comparison with similar information for the year 1913. The figures relate to the cargoes actually despatched during the periods specified, and not to the wool sold during each season:—

Destination.	Overseas Exports of Wool (000 omitted).								
	Greasy.			Scoured.			Tops.		
	1913.	1920-21.	1930-31.	1913.	1920-21.	1930-31.	1913.	1920-21.	1930-31.
United Kingdom...	lb. 50,120	lb. 80,322	lb. 76,084	lb. 10,009	lb. 18,164	lb. 6,123	lb. 40	lb. 422	lb. 216
Canada ...	...	127	...	...	60	141	...	287	784
Austria ...	7,297	734	...	33	298	...	29	...	...
Belgium ...	27,222	12,144	37,834	2,021	3,302	3,174	...	...	58
France ...	76,486	19,203	73,053	12,658	974	4,063	...	...	...
Germany ...	54,266	5,174	50,353	4,579	186	2,279	...	...	...
Italy ...	3,638	6,213	15,326	132	12	325	...	...	8
Japan ...	5,661	6,179	69,400	129	70	1,057	3,435	2,406	170
Netherlands ...	...	722	247	...	6	25	...	...	...
Russia ...	...	...	...	...	...	...	...	...	...
United States ...	4,286	15,236	10,343	85	3,217	54	...	1,344	45
Other Countries ...	23	3,007	1,973	2	68	141	68	761	21
Total ...	223,999	149,091	334,613	30,248	26,411	17,372	3,562	5,280	1,302*

*Includes 314,000 lb. Nols, and 144,000 lb. of Waste.

Index of Rainfall in Sheep Districts.

The following table provides a monthly index of rainfall in the sheep districts of New South Wales. The index represents the weighted average ratio of actual to normal rainfall each month, normal being the average over a long period of years and represented by 100.

Month and Season.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
<i>Spring—</i>											
September	127	83	105	143	36	117	59	96	79	46
October	102	75	91	103	43	46	133	71	83	207
November	80	15	63	311	149	14	152	40	100	83
<i>Summer—</i>											
December	177	153	129	83	58	137	85	27	86	166
January	76	68	43	71	168	86	118	140	23	55
February	91	76	10	185	102	26	19	362	145	37
<i>Autumn—</i>											
March	141	18	32	47	63	247	59	157	72	64
April	171	81	27	125	16	216	101	128	151	68
May	206	42	46	42	206	160	46	45	23	90
<i>Winter—</i>											
June	164	57	201	75	125	78	48	94	40	154
July	163	165	137	96	86	74	35	123	29	119
August	78	47	45	127	101	78	56	19	102	121
Spring	103	58	86	186	76	59	115	69	87
Summer	107	69	128	118	57	91	196	65	68
Autumn	173	47	35	71	95	208	69	110	82	74
Winter	135	90	128	99	104	77	46	79	57	131
Season	87	72	96	126	104	66	125	68	90

CATTLE.

Apart from dairying, industries connected with cattle, such, for instance, as the export of beef, have never existed on a large scale in New South Wales. Local production scarcely meets the requirements of local consumption, and only the import of cattle from Queensland enables the maintenance of a small export trade in frozen and tinned beef. From 1916 to 1922 an appreciable increase was apparent in the number of cattle depastured on account of favourable prices for beef, and the number in 1922 constituted a record for the State.

Subsequently the continuance of unfavourable markets led to a diminution in herds; breeding operations were curtailed, importation of live stock from Queensland was very restricted, and the herds were heavily depleted. Excluding cows in registered dairies the number of cattle in New South Wales decreased from 2,659,308 in 1922 to 1,726,638 in 1930.

The following table shows the total number of cattle in the State, including dairy cattle, at various dates:—

Year.	Cattle.	Year.	Cattle.	Year.	Cattle.
1861	2,271,923	1901	2,047,454	1925*	2,876,254
1866	1,771,809	1906	2,549,944	1926*	2,937,170
1871	2,014,888	1911	3,194,236	1927*	2,818,653
1876	3,131,013	1916	2,495,770	1928*	2,848,654
1881	2,597,348	1921*	3,375,267	1929*	2,784,615
1886	1,367,844	1922*	3,543,530	1930*	2,686,132
1891	2,128,838	1923*	3,251,180		
1896	2,226,163	1924*	2,933,522		

* At 30th June.

Particulars of cattle according to sex and age at 30th June, 1930, and the last three preceding years for which comparable data are available, are shown below:—

As at 30th June.	Bulls 3 years and over.	Cows and Heifers.			Bullocks and Steers.	Calves under 1 year.	Grand Total.
		In Registered Dairies.	Other.	Total.			
1922	43,381	887,422	771,305	1,658,727	1,230,720	613,702	3,546,530
1923	40,530	878,762	753,652	1,632,414	1,089,129	489,107	3,251,180
1924	38,045	864,455	671,365	1,535,820	991,265	373,392	2,938,522
1930	42,456*	959,494	667,259	1,626,753	558,713	458,210	2,686,132

* Bulls over 1 year old.

This summary shows that the decrease in herds has been mainly due to decreases in the number of bullocks and steers and that breeding stock have not diminished appreciably.

Calving.

The following table shows the calving in the State for the past ten seasons. The disparity between the calves dropped and those surviving at the end of the year is due mainly to the fact that in dairying districts about 95 per cent. of bull calves, and 70 per cent. of heifer calves are killed shortly after birth.

As more than one-half of the cows of the State are in registered dairies, and their progeny is generally not available for beef purposes, the beef stock of the State is mainly augmented from the interior divisions, where the calves surviving at the end of the year represent over 90 per cent. of those dropped.

From the table below it will be seen that the number of calves slaughtered for food has increased, and, in recent years, has approximated one-sixth of the total number dropped.

Year ended 30th June.	Calves.			Year ended 30th June.	Calves.		
	Dropped during year.	Surviving at end of year.	Slaughtered for Food.*		Dropped during year.	Surviving at end of year.	Slaughtered for Food.*
1920	726,670	479,521	76,811	1926	881,905	458,939	173,806
1921	813,665	536,729	79,504	1927	870,816	429,405	146,882
1922	995,128	613,702	103,883	1928	865,927	421,654	144,850
1923	961,154	489,107	133,524	1929	936,156	455,529	161,994
1924	804,928	373,392	123,760	1930	934,052	458,210	163,195

* Includes a number of calves dropped during previous year.

Interstate Movements of Cattle.

By reason of the existence of diseases among the cattle of certain districts, notably the presence of cattle tick in the north-east of New South Wales and in parts of Queensland, the interstate movement of cattle is closely regulated in order to stay the spread of disease. In certain cases cattle are quarantined, dipped or sprayed on admission and subjected to special treatment should such become necessary within a fixed period thereafter.

The following statement shows the number of live cattle (so far as recorded) passing into and out of New South Wales during each of the last five years. The movement is practically all overland, comparatively few cattle being transported by sea:—

Year.	From New South Wales.				To New South Wales.			
	To Victoria.	To Queensland.	To South Australia and by Sea.	Total.	From Victoria.	From Queensland.	From South Australia and by Sea.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.
1926-27	177,140	27,437	17,982	222,559	25,101	250,268	1,560	276,929
1927-28	111,434	9,832	8,385	129,651	36,929	339,587	2,427	378,943
1928-29	102,736	12,694	37,006	152,436	32,189	186,227	566	218,982
1929-30	99,803	11,471	11,031	122,305	16,591	155,822	535	172,948
1930-31	100,564	12,614	20,174	133,352	33,732	240,354	302	274,388

Although the effects of seasonal variations are apparent during this period there is, on the whole, a heavy but fluctuating import of cattle to New South Wales from Queensland, and a considerable export to Victoria. The interchange with South Australia is small.

During the five years covered in the table there was an excess of imports from Queensland of about 1,098,210 cattle, and an excess of exports to Victoria amounting to 447,135. The total net gain to New South Wales from all sources was 561,887.

Increase and Decrease of Cattle.

The number of cattle in New South Wales varies under the influence of three factors, viz., importation, slaughtering, and natural increase, i.e. excess of calving over deaths from causes other than slaughtering. The operation in these during recent years is shown in part below:—

Year.	Net Imports of Cattle.	Calves reared (surviving at 30th June).	Cattle and Calves died from Disease, Drought, etc.	Cattle Slaughtered (excluding Calves).	Cattle at end of Year.
1919-20	22,972	479,521	*	517,186	3,084,332
1920-21	396,611	536,729	*	446,551	3,375,267
1921-22	53,372	613,702	*	527,906	3,546,530
1922-23	5,890	489,107	*	605,526	3,251,180
1923-24	43,231	373,392	*	628,729	2,938,522
1924-25	78,095	422,736	*	658,827	2,876,254
1925-26	184,790	458,939	53,621	652,001	2,937,130
1926-27	54,370	429,405	76,114	665,347	2,818,653
1927-28	249,292	421,654	70,585	549,677	2,848,654
1928-29	66,546	455,529	48,882	617,000	2,784,615
1929-30	50,643	458,210	69,965	518,082	2,686,132

(—) Denotes excess of exports.

*Not available.

The figures shown in the table do not balance from year to year because it is not possible to obtain all necessary data relative to calving and disposal of calves. Nevertheless the table illustrates in a general way the influence of the various factors.

HORSES.

There was a great advance in horse-breeding between 1910 and 1918, owing to the increased demand which arose as a consequence of widening settlement, prosperous seasons, and defence requirements. During the lengthy

drought which terminated in June, 1920, the numbers declined heavily, and the decline has continued especially in the four seasons ended 30th June, 1930, owing to the increased use of motors for transport.

The following table shows the number of horses in New South Wales at the end of quinquennial periods from 1861 to 1916, and annually thereafter:—

Year.	Horses.	Year.	Horses.	Year.	Horses.
1861	233,220	1906	537,762	1923*	660,031
1866	274,437	1911	689,004	1924*	658,372
1871	304,100	1916*	719,542	1925*	647,503
1876	366,703	1917*	733,791	1926*	651,035
1881	398,577	1918*	742,247	1927*	623,392
1886	361,663	1919*	722,723	1928*	559,377
1891	469,647	1920*	662,264	1929*	567,371
1896	510,636	1921*	663,178	1930*	534,945
1901	486,716	1922*	669,800		

* At 30th June.

The number of horses in the State reached its maximum of 746,170 in 1913, but in 1930 it had fallen to 534,945. Between 1920 and 1930 the number of horses in the metropolitan area decreased from 26,243 to 11,400.

There is a small export trade to India, where the horses are required as remounts for the army. The number of ordinary horses sent there during the year ended 30th June, 1931, was 474; the value being £13,470.

There is comparatively little interstate movement of horses except to and from Queensland, and practically no import by sea. The recorded net import of horses interstate by land in the past five years ended 30th June has been as follows:—1927, 5,124; 1928, 1,442; 1929, 2,206; 1930, 4,628; and 1931, 2,845. The recorded number of horses which died from disease, drought, etc., on rural holdings was 11,022 in 1926-27, 16,665 in 1927-28, 11,449 in 1928-29, and 20,284 in 1929-30.

Horse Breeding.

Horse breeding operations have been decreasing since 1913, when the number of foals reared was 79,620. A sudden decrease occurred as a result of the drought which broke in June, 1920, and except for a temporary recovery in 1925 and 1926 the decrease has continued.

The number of foals reached its lowest recorded level (20,065) in 1921, but had increased to 39,415 in 1925, falling again after a further interval of four years to a new low level (19,991) in 1929, and to a lower level still (16,716) in 1930, which was only 23 per cent. of the average annual number of foals in pre-war years.

The decrease in foals is much more striking than the decline in the total number of horses, and the foals reared in recent years are much below the number required for the replacement of the horses now in use.

The following table shows the number of foals recorded at the end of each of the past twenty-one years:—

Year ended 31st December.	Foals reared (Surviving at end of year).	Year ended 30th June—	Foals reared (Surviving at end of year).	Year ended 30th June—	Foals reared (Surviving at end of year).	Year ended 30th June—	Foals reared (Surviving at end of year).
1909	61,153	1915	60,337	1921	20,065	1926	36,521
1910	71,382	1916	41,818	1922	29,685	1927	28,282
1911	77,294	1917	49,087	1923	28,616	1928	22,922
1912	76,462	1918	46,832	1924	24,307	1929	19,991
1913	79,620	1919	40,015	1925	39,415	1930	16,716
Average	73,182	1920	24,755				

The increased use of motor power on farms and the consequent depreciated value of the horse have resulted in the disposal of studs formerly engaged in breeding utility horses.

Particulars of power machinery on farms in 1930 are published on page 196.

Particulars are shown below of the number, description, and ages of horses in New South Wales as at 30th June, 1930, as collected in conformity with the schedules of the World Agricultural Census:—

Classification.	Stud Stock.	Racing Stock.	Draught Horses.	Light Horses.	Ponies.	Total.
<i>Stallions—</i>						
Under 1 year	280	329	912	474	169	2,164
1 to 3 years	121	182	343	162	82	890
3 years and over	410	265	2,236	1,084	418	4,413
Total Stallions	811	776	3,491	1,720	669	7,467
<i>Geldings—</i>						
Under 1 year ... ..	...	185	4,200	2,454	455	7,294
1 to 3 years ... ..	...	964	13,219	8,410	1,727	24,320
3 years and over ... ..	...	2,461	132,803	84,301	14,197	233,762
Total Geldings ... ..	...	3,610	150,222	95,165	16,379	265,376
<i>Mares—</i>						
Under 1 year	329	324	3,882	2,202	521	7,258
1 to 3 years	436	900	10,502	7,125	1,896	20,859
3 years and over	3,109	2,822	131,311	79,168	17,575	233,985
Total Mares	3,874	4,046	145,695	88,495	19,992	262,102
Grand Totals	4,685	8,432	299,408	185,380	37,040	534,945

OTHER LIVE STOCK.

Particulars of the number of pigs in the State are shown on a later page.

The number of goats in New South Wales in June, 1930, was 16,651, including 1,468 Angora goats. Under the provisions of the Dog and Goat Act, 1898, the use of dogs or goats for purposes of draught is prohibited.

In New South Wales camels are used principally as carriers on the Western Plains, but their numbers are steadily diminishing. The number in June, 1930, was only 554, compared with 1,792 at the close of the year 1913.

Donkeys and mules are not extensively used in New South Wales, the numbers in 1930 being 172 of the former and 50 of the latter. Most of these are situated in the Western Division, where they are used for purposes of transport. Movements across the border cause marked fluctuations in the number in the State.

The climate of certain portions of the State is considered suitable for ostrich farming. The number of ostriches at the end of June, 1930, was only 22.

PRICES OF LIVE STOCK.

The following statement shows the average prices of fat stock in the metropolitan saleyards at Flemington during recent years in comparison with 1913. The averages stated are the means of the monthly prices which are published annually in the Statistical Register:—

Stock.	1913.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
Cattle—	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
Bullocks and steers—Prime medium ...	10 18	10 14	11 16	11 18	15 13	13 13	15 2	13 18
Cows and heifers—Prime ...	6 19	7 19	9 5	9 0	11 17	10 10	11 10	11 3
Sheep—	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Crossbred wethers—Prime ...	19 3	38 2	35 11	26 10	24 2	30 5	25 9	18 4
Crossbred ewes—Prime ...	15 11	36 0	31 4	22 0	20 4	26 7	20 4	14 1
Merino wethers—Prime ...	19 6	38 10	37 4	25 9	24 5	30 9	24 8	16 10
Merino ewes—Prime ...	17 4	31 4	28 10	19 11	19 4	23 9	19 6	14 1
Lambs and suckers, woolly—								
Prime ...	15 4	31 3	30 8	23 0	21 7	26 4	22 0	17 0

Prices of live stock vary from year to year partly under the influence of seasonal conditions and of the price of wool. In periods of dry weather fat stock are hastened to market and prices decline, but with the advent of relief rains stock are withheld from market for fattening or breeding and prices rise. The first half of the year 1930 was a period of dry weather, and throughout the whole year the price of wool was very low.

Monthly variations in the prices of typical grades of live stock are shown below:—

Month.	Bullocks. Prime medium weight.			Crossbred Sheep. Prime wethers and hoggets.			Lambs. Prime suckers and woolly.		
	1929.	1930.	1931.	1929.	1930.	1931.	1929.	1930.	1931.
January ...	£ s. 12 16	£ s. 15 10	£ s. 11 10	s. d. 23 4	s. d. 19 9	s. d. 10 11	s. d. 20 6	s. d. 18 9	s. d. 12 2
February ...	14 2	16 5	10 5	27 11	18 5	10 2	24 10	18 8	11 2
March ...	14 18	14 18	11 14	31 0	18 3	14 0	26 9	18 9	13 5
April ...	14 3	13 0	10 17	32 3	17 7	15 0	26 0	17 6	13 6
May ...	12 12	13 10	10 5	28 11	19 0	16 11	23 7	18 6	13 8
June ...	13 13	15 0	9 7	30 7	25 3	16 7	23 5	20 9	13 9
July ...	14 8	15 2	9 6	28 8	26 3	16 5	21 2	19 6	13 7
August ...	15 1	14 17	8 9	28 5	23 8	13 0	21 5	18 9	13 10
September ...	17 8	14 6	8 1	23 2	17 1	13 0	21 2	16 9	13 1
October ...	18 4	12 10	8 2	20 3	13 2	10 1	19 8	13 9	10 9
November ...	17 6	11 5	...	16 3	11 0	...	17 4	11 6	...
December ...	16 19	10 16	...	18 9	10 5	...	18 8	11 2	...
Average for year ...	15 2	13 18	...	25 9	18 4	...	22 0	17 0	...

Comparison of the course of prices may be made with the monthly rainfall index and the average of monthly price of wool published on previous pages.

SLAUGHTERING.

The slaughter of live stock for sale as food, either for local consumption or for export, is permitted only in places licensed for the purpose, in accordance with the Cattle Slaughtering Act, 1902.

The following table shows the number of slaughtering establishments and the total number of stock slaughtered in the State at intervals since 1901. The figures relating to the establishments prior to 1921 are in excess of the actual number, as they include a large number of butchers' shops in country districts.

Year ended 30th June.	Slaughter-houses.	Stock Slaughtered in Establishments and on Farms and Stations.					
	No.	Sheep.	Lambs.	Bullocks. †	Cows.	Calves.	Pigs.
1901*	1,642	4,372,016	147,117	202,795	113,374	19,654	248,311
1906*	1,522	4,229,407	252,648	237,722	94,955	26,200	281,650
1911*	1,287	6,146,739	400,186	300,773	182,178	59,969	316,331
1916	1,071	3,815,477	361,831	187,882	165,134	31,986	219,806
1921	960	3,506,008	345,255	300,941	145,610	79,504	238,259
1926	1,103	3,258,202	994,203	383,005	268,996	173,806	402,479
1927	1,075	4,167,866	1,451,536	365,136	300,211	146,947	461,981
1928	1,057	3,872,984	1,136,527	283,673	266,004	144,850	412,424
1929	1,086	3,873,905	1,093,930	362,253	254,747	161,991	406,187
1930	1,057	4,773,924	1,553,001	293,755	223,366	163,195	405,639

* Calendar Year. † Includes a small number of bulls.

The numbers of sheep and lambs slaughtered in 1930-31 are estimated at approximately 4,500,000 and 1,600,000 respectively.

In 1929-30 the stock slaughtered in the county of Cumberland numbered 2,652,994 sheep, 1,349,867 lambs, 152,811 bullocks, 89,715 cows, 138,028 calves, and 200,925 pigs. The numbers slaughtered for food on stations and farms were:—Sheep, 1,082,763; lambs, 32,915; cattle, 15,096; and pigs, 10,505.

The following summary shows the distribution of slaughtering operations in New South Wales in the year ended 30th June, 1930. For purposes of classification in this table the term "abattoirs" relates to establishments in which 100,000 or more sheep were slaughtered:—

District and Establishments.	Sheep.	Lambs.	Cattle.			Pigs.
			Bullocks.	Cows.	Calves.	
State Abattoirs	1,851,434	923,623	113,113	77,533	118,478	187,988
Other Abattoirs	735,386	416,495	33,056	9,712	17,381	9,318
Balance of County Cumberland	66,174	9,749	6,642	2,470	2,169	3,619
Total, Cumberland	2,652,994	1,349,867	152,811	89,715	138,028	200,925
Country Abattoirs	216,277	72,606	19,274	20,468	13,812	28,157
Country Slaughter-houses	821,890	97,613	114,703	107,484	8,925	166,052
Stations and Farms	1,082,763	32,915	6,967	5,699	2,430	10,505
Total Country	2,120,930	203,134	140,944	133,651	25,167	204,714
Grand Total	4,773,924	1,553,001	293,755	223,366	163,195	405,639

Country killing for purposes of export or metropolitan consumption is of inconsiderable extent. The Newcastle District Abattoirs are included under the heading "Country Abattoirs." Under the heading "Country Slaughter-houses" are included all licensed slaughter-houses outside county Cumberland (except country abattoirs), while the slaughter for consumption on rural holdings is shown under the heading "stations and farms."

In country towns licensed slaughter-houses are inspected by a local officer appointed and controlled by the Local Government authorities. In Newcastle public abattoirs were established in 1912 under control of a board, elected by the councils of the local areas in the district.

In the metropolitan area stock is slaughtered at the State Abattoirs at Homebush Bay. Animals sold at Flemington are inspected before being killed and those found to be diseased are destroyed, while "doubtful" beasts are marked for further special attention at the abattoirs. There is a staff of inspectors at the State Abattoirs and inspectors are stationed at private slaughtering premises throughout the County of Cumberland. The operations of the inspectorial staff are supervised by the veterinary officers of the Metropolitan Meat Industry Board, who pay regular visits to the different establishments.

Particulars of stock slaughtered at the State Abattoirs, Homebush Bay, during recent years are shown in the following statement:—

Year ended 30th June.	Cattle.	Calves.	Sheep.	Lambs.	Pigs.
1927	255,595	107,121	1,742,000	968,000	202,688
1928	225,785	111,693	1,611,191	805,596	179,531
1929	230,153	116,757	1,381,506	690,753	176,053
1930	190,646	118,478	1,851,434	923,623	187,988
1931	157,117	103,252	1,808,259	904,129	184,029

Certain aspects of the local meat trade, especially the distribution and consumption of meat, are discussed in the chapter "Food and Prices" of this Year Book.

Prices of Meat, Sydney.

The following table shows the average wholesale prices of meat (in pence per lb.) in Sydney in each month since January, 1929:—

Month.	Beef (Ox) per lb.						Mutton and Lamb per lb.					
	1929.		1930.		1931.		1929.		1930.		1931.	
	F.	H.	F.	H.	F.	H.	M.	L.	M.	L.	M.	L.
January	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
February	2.3	5.5	6.0	8.3	2.5	5.9	4.1	6.3	3.5	5.8	2.6	4.7
March	3.2	6.3	4.6	7.6	2.2	5.5	4.9	7.8	3.7	5.5	2.2	4.4
April	3.9	7.4	4.4	7.4	2.9	5.8	5.5	8.0	3.6	5.5	2.8	4.8
May	3.9	7.3	3.7	6.7	2.6	5.6	6.3	7.8	3.4	5.6	2.9	4.9
June	3.7	5.8	3.8	6.4	2.4	5.3	4.5	6.8	3.4	5.6	2.8	4.8
July	3.7	5.7	4.3	6.5	2.3	4.8	4.6	6.4	3.8	6.2	2.8	4.9
August	3.6	5.8	5.4	7.0	2.2	5.0	3.8	5.5	4.5	6.4	2.7	4.8
September	4.4	6.7	5.0	7.3	2.0	4.5	4.1	6.2	4.4	6.1	2.6	4.7
October	5.4	7.6	4.1	7.0	2.3	4.8	3.9	5.8	3.5	5.3	2.5	4.3
November	5.7	8.0	3.3	5.8	2.1	3.9	4.0	5.6	2.9	4.8	2.4	3.9
December	5.9	8.1	3.3	6.2	2.4	4.2	3.1	4.8	3.2	5.0	2.7	4.3
.. ..	6.0	8.2	2.9	5.5	..	..	3.4	5.7	3.2	4.4	..	..
Average	4.3	6.9	4.4	7.0	..	..	4.4	6.4	3.6	5.5	..	..

F—Fores; H—Hinds.

M—Mutton; L—Lamb.

The average annual wholesale prices of meat in Sydney and of frozen Australian meat in London in pre-war years as compared with the period 1921-1930, are shown in the following table:—

Year.	Sydney.				London.	
	Beef (Ox).		Mutton.	Lamb.	Beef Hinds (Frozen).	Mutton (Frozen).
	Fores.	Hinds.				
	per lb.	per lb.	per lb.	per lb.	per lb.	per lb.
	d.	d.	d.	d.	d.	d.
1911	1·7	2·7	2·0	2·7	3·5	3·2
1912	2·1	3·5	2·9	3·7	3·6	3·3
1913	2·4	3·4	3·0	3·9	4·0	4·0
1921	2·2	5·6	4·2	6·8	6·5	7·5
1922	1·4	4·0	3·9	5·8	4·5	6·1
1923	2·4	5·3	5·6	7·4	4·7	6·4
1924	2·1	4·5	5·9	8·3	4·7	7·2
1925	2·2	4·6	5·9	8·5	5·5	6·7
1926	2·3	5·1	4·0	6·2	4·9	4·6
1927	2·8	5·9	3·9	6·2	5·0	4·4
1928	2·8	5·3	4·5	6·7	5·4	5·1
1929	4·3	6·9	4·4	6·4	4·7	5·5
1930	4·4	7·0	3·6	5·5	5·5	4·2

MEAT TRADE.

Meat Export Trade.

The meat export trade commenced to assume importance in New South Wales toward the end of the nineteenth century, when the export of frozen and chilled meat became possible through the provision of refrigerated space in ocean steamers.

The oversea export trade has, for both frozen and canned meats, grown considerably, although its progress has been subject to vicissitudes. Especial attention is given to preparation and transport of meat for export in order to ensure a high standard in the product. Stringent regulations have been issued by the Department of Trade and Customs regarding inspection and shipment of meat exported. The work is carried out by the Commonwealth authorities. All stock killed for export are examined in a manner similar to those for local consumption, and carcasses which have been in cold storage are re-examined immediately before shipment. In all the large modern steamers visiting the ports of New South Wales refrigerated space has been provided.

The number of stock available for export depends mainly upon the season, as in periods of scarcity the local demand absorbs the bulk of the fat stock marketed.

The movement of the London prices for Australian frozen meat during the last four years in comparison with 1913 is shown below. The monthly quotations represent the averages of weekly top prices and the annual averages are the means of the monthly averages. All prices are in sterling.

Month.	Frozen Beef (Hinds) per lb.						Frozen Mutton per lb.					
	1913.	1927.	1928.	1929.	1930.	1931.	1913.	1927.	1928.	1929.	1930.	1931.
January ...	d. 3½	d. 4	d. 5	d. 5½	d. 6½	d. 4½	d. 4½	d. 4½	d. 5½	d. 4½	d. 5½	d. 3½
February ...	3½	4	4½	4½	6½	3½	4½	4½	5½	4½	5½	2½
March ...	3½	4	5	4½	6½	3½	3½	4	5½	5	6½	2½
April ...	3½	4½	4½	5½	6	3½	4	3½	*	5½	4½	3
May ...	3½	4½	5½	5½	5½	3½	3½	4	*	6½	3½	3½
June ...	3½	5½	6	5½	5½	3½	4	4	*	5½	3½	4
July ...	4	5½	6½	5½	5	3½	4	4	*	5½	3½	4
August ...	4	5½	6	4½	5½	3½	4	4½	*	5½	3½	4
September ...	4	5½	5½	4½	5½	4	4	5	*	5½	4	4
October ...	4½	5	5	4½	5½	4	4	4½	5½	5½	4½	3½
November ...	4½	5½	5	4½	5½	3½	4	4½	4½	6	4½	3
December ...	4½	5½	4½	4½	4½	...	4½	5	4½	6½	4½	...
Annual Average	4	5	5½	4½	5½	...	4	4½	5½	5½	4½	...

* No quotation.

In 1928 there was a substantial drop in shipments of chilled beef from South America, due partly to dry weather and partly to restrictions in an endeavour to cope with foot-and-mouth disease. With a decline in the production of home-grown beef prices rose temporarily to a higher level.

The demand for mutton was well sustained until towards the end of 1925, but the average price of 1926 was only 15 per cent. above the pre-war average. The decline in price in 1927 was partly due to poorer quality of mutton being sent forward, and with improved quality in 1928 the average price increased by 3d. per lb., but fell again in 1929, and in 1930 during the severe world-wide decline in prices.

The quantity of frozen meat exported oversea in various years since 1891 is shown below. Ships' stores, amounting annually to several millions of pounds in weight, are not included in the table:—

Year.	Frozen or Chilled.				Preserved.		Value of all Meat Exported.†
	Beef.	Mutton and Lamb.	Total Weight.	Total Value.	Weight.	Value.	
	cwt.	cwt.	cwt.	£	lb.	£	£
1891	*	*	105,013	101,828	6,509,928	85,629	201,421
1896	26,529	559,507	586,036	294,596	14,385,300	187,957	562,389
1901	115,050	351,516	466,566	541,525	10,086,940	209,697	914,573
1906	32,640	455,165	487,805	579,294	3,121,933	62,307	724,048
1911	65,097	535,259	600,356	753,155	20,783,779	401,384	1,291,404
1915-16	7,000	236,099	243,099	562,262	4,087,618	159,711	771,502
1920-21	110,727	166,039	276,766	937,040	4,479,460	235,801	1,225,354
1925-26	44,172	258,444	302,616	999,243	3,786,003	126,884	1,177,712
1926-27	60,143	410,588	500,731	1,013,959	6,002,937	211,210	1,304,650
1927-28	31,464	157,775	189,239	474,933	2,621,283	93,308	631,711
1928-29	63,149	202,173	265,322	702,449	2,534,832	82,928	857,535
1929-30	46,081	308,427	355,108	894,408	2,867,259	117,637	1,051,057
1930-31	19,019	327,757	346,776	663,690	2,494,380	85,669	785,827

* Not available.

† Beef, mutton, and pork, fresh, frozen, preserved, and salted.

The oversea trade in frozen meat has undergone an appreciable change in the past twenty years, frozen lamb having largely replaced frozen mutton. In the year 1911 the oversea export comprised 1,149,121 carcasses of frozen mutton and 292,258 carcasses of frozen lamb. In 1930-31 the corresponding numbers were respectively 310,438 and 667,806.

The following comparison of the imports of meat to the United Kingdom shows the relative importance of the principal suppliers in relation to Australia:—

Year.	Beef (000 omitted) Frozen and Chilled.				Mutton and Lamb (000 omitted).			
	South American.	Australian.	Other.	Total.	South American.	New Zealand.	Australian.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1921	441	84	56	581	92	223	21	336
1922	440	59	38	537	85	151	49	285
1923	547	43	47	637	109	115	64	288
1924	551	38	38	627	103	120	23	249*
1925	511	68	39	618	112	125	26	268*
1926	571	57	35	663	92	134	38	267*
1927	617	32	22	671	106	137	31	276*
1928	532	51	26	609	113	140	27	281*
1929	500	46	37	583	96	137	30	282*
1930	480	40	59	579	94	165	41	319*

* Including other

The average wholesale prices per pound obtained in each of the past ten years for Scottish and frozen mutton sold in London were:—

Year.	Best Scottish.	New Zealand.	Australian.	Argentine.	Year.	Best Scottish.	New Zealand.	Australian.	Argentine.
	d.	d.	d.	d.		d.	d.	d.	d.
1921	18	8½	7½	7½	1926	11½	6½	4½	5½
1922	16½	7½	6½	7½	1927	11½	6½	4½	5½
1923	15	8½	6½	7	1928	12½	7½	5½	6½
1924	14½	8	7½	7½	1929	*	6½	4½	5½
1925	13½	8½	6½	7½	1930	*	5½	4½	4½

* Not available.

Meat Works.

Apart from slaughtering, important subsidiary industries in the handling of meat have arisen in the form of refrigerating and meat-preserving works. The extent of their activities, however, is subject to marked seasonal fluctuations. Particulars of the numbers of sheep and cattle handled in the various works, and of the output during the past five years are shown below:—

Year.	Carcasses etc. Treated.				Output of Meat Preserving Works.		
	Refrigerating Works.		Meat Preserving.		Tinned Meat.		By-Products, etc.
	Cattle.	Sheep.	Sheep.	Meat and Sundries.	Weight.	Value.	Value.
	No.	No.	No.	lb. (000).	lb. (000).	£	£
1924-25	52,883	531,474	557	11,904	5,144	173,078	64,160
1925-26	50,882	£04,857	1,423	11,758	4,988	186,815	74,586
1926-27	30,247	1,225,182	60,507	18,496	6,673	217,238	138,653
1927-28	30,202	641,082	1,642	9,182	3,920	167,815	42,619
1928-29	51,410	718,571	255	10,681	4,251	172,627	70,524
1929-30	48,421	1,132,552	1,416	10,979	4,185	162,408	70,238

Included in the meat and sundries treated in meat preserving works in 1929-30 were 6,344,931 lb. of beef, 4,009,875 lb. of mutton and 624,373 lb. of sheep and ox tongues.

OTHER PASTORAL PRODUCTS AND BY-PRODUCTS.

The minor products accruing from pastoral occupations include skins and hides, tallow, lard and fat, furs, hoofs, horns, bones, bone-dust, glue pieces, and hair. Some of these are discussed in the chapter relating to factories, and the following table contains particulars of the oversea exports of these products at intervals since 1901:—

Products.	Oversea Exports.					
	1901.	1906.	1911.	1915-16.	1929-30.	1930-31.
Skins and Hides—						
Cattle No.	91,084	72,743	263,306	431,731	494,802	520,917
Horse No.	472	722	1,392	706	1,040	3,618
Rabbit and Hare ... lb.	*	7,380,455	5,795,839	4,352,640	5,817,993	4,670,429
Sheep No.	*	2,706,027	2,410,543	3,447,212	4,185,425	3,302,037
Other £	184,522	140,050	296,672	272,622	455,668	179,819
Bonedust cwt.	66,473	56,415	116,733	71,795	6,426	6
Bones cwt.	3,207	2,431	6,807	6,963	4,485	5,646
Furs (not on the skin) ... £	767	180	117	...	...	...
Glue-pieces and Sinews ... cwt.	12,862	11,003	20,580	13,276	5,756	3,106
Glycerine and Lanoline ... lb.	*	336,586	138,347	218,673	709	96,628
Hair (other than human) ... lb.	165,562	142,636	255,819	336,765	98,934	86,206
Hoofs cwt.	2,215	2,839	3,733	4,518	4,226	2,885
Horns £	12,532	11,979	13,475	3,455	6,604	4,325
Lard and Refined Animal Fats lb.	13,633	56,737	227,000	73,461	169,905	186,991
Leather £	374,541	411,030	334,996	551,026	320,927	258,178
Sausage-casings £	2,567	17,033	52,562	31,595	182,591	128,861
Tallow (unrefined) cwt.	305,227	357,031	612,911	128,290	258,164	227,993
Total Value of above-mentioned minor Pastoral Products ex- ported £	1,223,728	1,780,466	2,486,492	2,176,838	3,855,818	2,149,714

* Not available.

Skins and hides are the most important of the items included in the table, and the number and value of these vary seasonally in accordance with slaughtering operations and the prevalence or otherwise of rabbits.

VALUE OF PASTORAL PRODUCTS EXPORTED.

The total value of goods exported oversea, which may be classed as pastoral products or by-products (apart from dairy and farmyard products), is very large. Particulars of the value, as declared upon export, of such products exported oversea from New South Wales during each of the past five years are shown in the following table:—

Commodity.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
	£	£	£	£	£
Wool	28,896,682	30,320,197	27,377,890	16,235,892	14,126,871
Meat	1,304,652	631,711	857,535	1,051,057	785,827
Live stock... ..	87,270	84,432	102,156	131,780	73,508
Other*	6,207,155	5,594,507	5,392,207	3,855,818	2,149,714
Total	36,495,759	36,630,847	33,729,788	21,274,547	17,135,920
Proportion of total exports oversea	per cent. 58.1	per cent. 70.60	per cent. 68.3	per cent. 67.5	per cent. 57.0

* Items listed in previous table.

† Excluding specie.

The above figures are not comparable with those relating to the value of production which follow, since they contain items which have been enhanced in value by manufacture and other processes. In addition, they are not valued as at the place of production, but on the basis of f.o.b. Sydney, and they do not relate to goods produced during the year as do the estimates of the value of production.

VALUE OF PASTORAL PRODUCTION.

It is difficult, from the nature of the industry, to estimate the return from pastoral pursuits as at the place of production; but, taking the Sydney prices as a standard, and making due allowance for incidental charges, such as railway carriage or freight and commission, the farm value of pastoral production from the different kinds of stock during various years since 1901 are shown in the following table:—

Year.	Annual Value of Pastoral Production (000 omitted).							
	Wool.	Sheep.		Cattle.		Horses (cast).	Total.	Per head of Population
		Slaught- ered.	Export and Increase.	Slaught- ered.	Export and Increase.			
	£	£	£	£	£	£	£	£ s. d
1901	8,425	2,071	...	1,229	...	722	12,447	9 2 1
1906	13,792	3,514	...	1,520	...	885	19,711	13 5 6
1911	14,085	2,811	...	1,689	...	2,001	20,586	12 7 3
1915-16	13,288	4,295	...	3,729	...	2,172	23,494	12 8 1
1920-21	13,023	2,313	...	2,973	...	2,027	20,336	9 14 7
1921-22	15,557	4,144	...	3,278	...	2,041	25,020	11 15 2
1922-23	23,048	6,766	...	4,912	...	2,057	36,783	16 18 6
1923-24	28,209	5,446	...	4,117	...	2,003	39,775	18 0 1
1924-25	34,073	4,752	...	5,365	...	1,838	46,028	20 8 9
1925-26	26,223	4,323	7,139	4,816	(—) 580	448	42,369	18 8 10
1926-27	33,234	4,747	4,604	5,037	(—) 240	440	47,822	20 7 4
1927-28	33,874	5,078	2,771	5,023	(—) 1,807	468	45,407	18 18 3
1928-29	30,879	4,541	2,500	5,876	(—) 547	452	43,701	17 17 1
1929-30	18,099	3,874	1,971	4,547	(—) 291	311	28,511	11 10 2

In 1925-26 items of production formerly omitted were included in terms of resolutions carried at the Conference of Statisticians (1926). These items represented the value of the natural increase in sheep and cattle plus the value of exports and minus the value of imports of live animals at appropriate prices. In view of the diminution of horse-breeding the method of calculating the value of the cast was revised, and this led to a substantial reduction in the total. For the year 1929-30 it was estimated that the value of the principal materials used in the pastoral industry was £403,000 and the depreciation on machinery £253,000.

NOXIOUS ANIMALS.

The only large carnivorous animals dangerous to stock in Australia are the indigenous dingo, or so-called native dog, and the fox, which has been introduced from abroad; but graminivorous animals, such as kangaroos, wallabies, hares, and rabbits, particularly the last-named which are of foreign origin, are deemed by the settlers even more noxious. In the latter part of 1920, however, native dogs became an increasing menace to flocks in the Western Division, and added considerably to the difficulties experienced by graziers in that region. In 1921 a Wild Dog Destruction Act was passed, placing the matter in the control of the Western Land Board. This board was charged with the maintenance of the border fence between Queensland and New South Wales and with the prosecution of measures calculated to destroy the dingo pest. During the year ended 31st December, 1929, a sum of £3,199 was collected as rates under this Act, and £8,218 was expended; for 1930 the corresponding figures were £2,446 and £6,844 respectively. The pest has been so far checked that it was possible to re-stock with sheep holdings which for some time had been used for cattle only. The rate imposed

under the Act was reduced from $\frac{1}{2}$ d. per acre to $\frac{1}{100}$ d. per acre in 1927, and the surplus funds accumulated at the higher rate are being expended to supplement the annual receipts. The credit balance on 31st December, 1930, was £3,314.

Rabbits.

A brief account of the measures taken to combat the pest was published on page 794 of the Year Book for 1921, and further reference to rabbits was published on page 643 of the Year Book for 1928-29.

The total length of rabbit-proof fencing erected by the State to 30th June, 1930, was approximately 1,332 miles, and the cost £69,888. It is estimated that pastures protection boards erected 1,013 miles and private owners 140,492 miles, the respective costs being £59,731 and £9,446,082.

The following table shows the quantity and value of frozen rabbits and hares, and of rabbit and hare skins exported from New South Wales to countries outside Australia:—

Year.	Exports Oversea.				
	Frozen Rabbits and Hares.		Rabbit and Hare Skins.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	pairs.	£	lb.	£	£
1901	*	6,158	*	9,379	15,537
1906	5,938,518	246,803	7,380,455	293,260	540,063
1911	6,806,246	330,741	5,795,839	295,476	626,217
1915-16	9,487,687	607,711	4,352,640	210,935	818,646
1920-21	2,830,315	301,615	3,387,480	609,570	911,185
1925-26	3,510,311	340,171	11,004,446	2,231,637	2,571,808
1926-27	2,831,701	257,641	11,860,570	2,437,010	2,694,651
1927-28	2,884,026	262,759	9,316,863	1,886,523	2,149,282
1928-29	1,956,508	193,525	8,225,868	1,950,027	2,143,552
1929-30	2,371,506	214,203	5,817,993	1,042,068	1,256,271
1930-31	3,526,033	252,074	4,679,429	415,245	667,319

* Not available.

It is apparent that the rabbit industry has assumed an important place in the oversea trade of the State, although its volume is subject to pronounced seasonal and market fluctuations.

Wire-netting Advances.

Under the provisions of the Pastures Protection Act for the destruction of rabbits and noxious animals, the Minister for Lands is empowered to advance to Pastures Protection Boards money voted by Parliament for the purchase of netting and other materials used in the construction of rabbit-proof fences. Each board thereupon becomes liable to repay the advances by instalments with interest over a period not exceeding twenty years. In case of default in repayment the Colonial Treasurer is empowered to take possession of any moneys or property vested in the board and to levy rates as prescribed by the Act. The boards are empowered to sell such wire-netting and other materials to owners of private lands, repayments to be made by instalments with interest over a fixed period. The purchase money and interest is a charge upon the holding of the owner, and has priority over all debts other than debts due to the Crown.

The amount of wire-netting supplied to any individual is limited to 5 miles, and the rate of interest on advances is fixed at 6 per cent.

Figures as to operations during the year 1929-30 with those for 1930-31 shown in brackets were as follow:—The quantities of material supplied to landholders were 974 (417) miles of wire-netting, 125 (57) tons of fencing wire, 57 (27) tons barbed wire, in addition to sundry materials, the total value being £42,622 (£17,970). Repayments during the year amounted to £59,520 (£31,457). A sum of £470,000 has been voted by Parliament since 1905 for the purpose of making wire-netting advances. By utilising this sum and re-advancing moneys repaid, the Department of Lands has made advances amounting to £1,060,417 at 30th June, 1930, and £1,078,387 at 30th June, 1931.

The amount outstanding in respect of advances made by the State was £367,361 at 30th June, 1930, and £374,278 at 30th June, 1931.

In terms of the Advances to Settlers Act, 1923, a trust fund was established by the Commonwealth, from which advances for the purchase of wire-netting may be made to the States. The wire-netting is then supplied to the settlers at such price and upon such terms as are prescribed by regulation. During the year 1928-29 approval was given for a supply of wire-netting at a cost of £194. The total expenditure under this Act to 30th June, 1931, was £54,316, and the repayments amounted to £20,037.

PASTURES PROTECTION BOARDS.

For the purpose of administering the Pastures Protection Act which relates to destruction of rabbits and noxious animals, diseases of sheep, importation of sheep, travelling stock, sheep brands and marks, and certain minor matters, the State is divided into 63 Pastures Protection Districts, for each of which there is constituted a board of eight directors, elected every three years by ratepayers from among their own number. There is also a Chief Veterinary Surgeon, appointed by the Governor, besides other inspectors, similarly appointed, who are paid from the funds of the Pastures Protection Districts to which they are attached. Each director of a board is *ex officio* an inspector in certain matters under the Act.

Rates to provide funds for the purposes of the boards are levied upon owners of ten or more head of large stock, or 100 or more sheep, at a rate not exceeding fourpence per head of large stock and two-thirds of a penny per head of sheep, but a reduction of one-half is made to occupiers of holdings which are considered rabbit-proof. Subsidy in respect of public lands may be paid to any board by the State. The funds so raised may be applied by the board to defraying expenses incurred in administering the Act, to clearing scrub, exterminating noxious weeds and noxious animals on travelling stock and camping reserves; and to any other approved purpose. In addition, the Governor may call upon the boards in any year to pay a proportion not exceeding 3 per cent. of their funds into the Treasury to cover the cost of administering the Act.

Since 1918 the boards have levied rates on travelling stock in the Eastern and Central Divisions to constitute a fund for the improvement of travelling stock and camping reserves handed over to the board's supervision.

The boards are empowered also to erect rabbit-proof fences as "barrier" fences wherever they deem necessary, to pay a bonus for the scalps of animal pests, and to enforce the provisions for the compulsory destruction of rabbits.

REGISTRATION OF BRANDS.

The Registration of Stock Brands Act, which came into force on 13th December, 1921, cancelled the registration of all existing brands and provided for re-registration of those which owners desired to retain, upon

application being made within a prescribed period. The Act was amended in 1923. Of approximately 143,000 registered large stock brands in existence at the time of passing the principal Act, 43,229 were re-registered, and to 30th June, 1931, additional applications to the approximate number of 26,183 had been registered, making the total number at that date 69,412. Excluding transfers and cancellations, etc., the number of individual brands was approximately 66,000. Brands for large stock may be used either on cattle or horses, and a current registered brand may not be re-issued in the State.

Sheep brands, of which the registrations are approximately 40,500, are issued for Pastures Protection Districts and may not be duplicated in any one District; similar brands may however be issued in different Pastures Protection Districts.

CATTLE TICK ERADICATION.

In the cattle districts of the north-east corner of the State, embracing the most productive dairying districts, the menace of the cattle tick has been growing steadily for a number of years, despite the methods adopted to combat it. The first Act dealing expressly with this pest was passed in 1902, giving power to inspectors to deal with infected cattle by quarantine, disinfection, or destruction.

An Act was passed in 1923 to replace the existing legislation and to give wider powers for the control and eradication of cattle tick and the prevention of other stock diseases. The Act commenced on 14th January, 1924. On 24th April, 1924, a new Board was appointed consisting of a Government officer as chairman, two stock-owners nominated by the Government, and two stock-owners elected by persons affected within the quarantine areas. In each of the five years to June, 1930, the holdings infested numbered 103, 93, 53, 436, and 689, respectively.

In 1926-27 a Cattle Tick Control Commission was appointed to arrange for co-operation between the States of Queensland and New South Wales and the Commonwealth Government in an endeavour to eradicate the pest.

Under the arrangement agreed upon, the Commonwealth Government will contribute one-third of the actual expenditure for tick eradication, up to a maximum of £53,325 per annum. This money is to be expended in New South Wales until the eradication of the cattle tick has been accomplished, and it will then be made available to Queensland in order to enable the campaign to be carried out on an extensive scale in that State. Pending the transfer of operations to Queensland, that State will carry out cleansing work within its borders, and for this purpose is to expend an amount not exceeding £25,000 per annum. When the work is subsequently transferred to Queensland, New South Wales will continue to contribute to the expenditure at a rate of one-third the amount actually expended in the northern State in cleansing work, but not exceeding £25,000 per annum. The annual receipts and expenditure are shown on page 201.

The Commission meets at least twice in the year, and its functions are to determine the areas in which the eradication operations shall proceed, methods to be adopted in each area, composition of dipping fluids, the intervals between treatments, the method of application, the condition of the control of stock movements, including straying and unattended stock, the conditions of enclosure of all grazing lands, the location and erection of dips, the general expenditure, and such other matters as are considered essential for eradication.

This co-operative effort will enable tick eradication work to be prosecuted on a more extensive scale than has hitherto been possible.

STOCK DISEASES.

Under the Stock Diseases Act, 1923, the notification of stock suffering from diseases specified by regulation is compulsory. Provision is made under the Act to compel the drafting out of diseased animals, the isolation of infected animals or, where necessary, the quarantining of the stock or the areas where such stock have been depastured.

To prevent the spread of disease power is also given to order the destruction of any live stock, carcase or other portion thereof.

The diseases prescribed by regulation include most of the epizootics prevalent in other parts of the world, some of which are practically unknown in this State, also general diseases such as cancer and tuberculosis.

VETERINARY SURGEONS ACT.

The Veterinary Surgeons Act came into operation on 5th December, 1923, to provide for the registration of veterinary surgeons, and to regulate the practice of veterinary science. A board called the Board of Veterinary Surgeons has been established to administer the Act, which specifies the qualifications for registration and prohibits practice by unregistered persons.

As at 31st December, 1930, there were registered 240 veterinary surgeons.

AUSTRALIAN PASTORAL RESEARCH FUND.

Following upon a resolution passed on 25th June, 1927, at a joint conference of the Australian Woolgrowers' Council and the National Council of Wool Selling Brokers of Australia, an endeavour is being made to raise a fund of £200,000 to promote pastoral research. A voluntary contribution of 2s. per bale of the 1928-29 clip was invited and to June, 1929, the total receipts amounted to £40,284. The Australian Pastoral Research Trust Limited has now been registered as a company with an initial capital of £43,000. The object is to promote the growth, development, and best interests of the pastoral and grazing industry by any means, especially through scientific and economic research relating in particular to stock diseases, animal pests, harmful plant life, and edible plants.

It is proposed to work in close co-operation with existing State and Federal and other scientific institutions, and if necessary to engage or subsidise specialists to deal with particular pastoral problems.

DAIRYING, POULTRY, Etc.

THE natural conditions in parts of New South Wales are highly favourable to the development of the dairying industry. The soil and climate in the coastal portions of the State are suitable for the maintenance of the dairy herds with a minimum of expense and labour, as the rainfall is abundant and the animals do not require housing nor hand-feeding during a long winter, as in cold countries. Natural pasture is generally available throughout the year, and hand-feeding is necessary only in very dry seasons.

Dairying operations in New South Wales are said to have begun during the twenties of last century in the immediate vicinity of Sydney and in the Illawarra districts to supply the population of the metropolis.

The development of dairying as a national industry is, however, comparatively recent, as its progress was slow until the introduction of refrigeration enabled producers to overcome disabilities in manufacturing and distributing perishable dairy products in a warm climate and to export the surplus oversea. Pasteurisation and the application of machinery to the treatment of milk and the manufacture of butter, the development of the factory system, and improvements in regard to ocean transport have enabled production to expand beyond the limits of local requirements, and butter has become an important item of the export trade.

In the drier inland divisions the area devoted to dairying is not extensive, sheep and wheat farming being the main rural industries. In proximity to the centres of population dairy-farming is undertaken to supply local wants, and well-equipped factories have been established in a number of inland centres. Dairying is conducted also on the Murrumbidgee and Hay irrigation areas.

In the Coastal Division 12,346 holdings are used exclusively for dairying, and 3,767 for dairying combined with other purposes. In the other parts of the State, where fodder must be grown for winter feeding, the industry is nowhere extensive, and is conducted usually in conjunction with agriculture and grazing—there being only 948 holdings used solely for dairying and 2,044 for dairying in combination with other rural pursuits.

The total area devoted to dairying for the year 1929-30 approximated 4,808,000 acres, of which 4,212,000 acres were in the Coastal Division; of this latter area 1,952,000 acres were in the North Coast and 1,456,000 in the Hunter and Manning divisions.

Most of the native grasses of the State are particularly suitable for dairy cattle, as they possess milk-producing as well as fattening qualities. In the winter the natural herbage is supplemented by fodder crops, such as maize, barley, oats, rye, lucerne, and the brown variety of sorghum, or the planter's friend. Ensilage also is made for fodder, but the quantity made in each year is not large and varies considerably. The area of land devoted to sown grasses has been extended largely during recent years, and in June, 1930, amounted to 2,237,092 acres, of which 2,108,961 acres were in the coastal district. The produce of this land is used mainly as food for dairy cattle. The practice of manuring pastures has been adopted in dairying districts during recent years, and an extension in this direction is anticipated.

A Select Committee of the Legislative Council which investigated the condition of the dairying industry in 1920-21 emphasised the need for a better

system of feeding with due regard to conservation of fodder, improvements of pastures, and cultivation of suitable crops. Successful dairying depends mainly on the proper feeding of the cows, and the conservation of fodder as ensilage was recommended for all dairying districts, especially for those areas where the rainfall is irregular. Another recommendation strongly urged by the Committee was the breeding of dairy stock on the lines of practical utility, and it stressed the need for a "better bull" campaign.

SUPERVISION OF DAIRIES AND DAIRY PRODUCTS.

The manufacture, sale and export of dairy products, *i.e.*, milk, condensed milk, butter, cheese, and margarine, are subject to supervision in terms of the Dairies Supervision Act, and the Dairy Industry Act passed in New South Wales in 1901, and December, 1915, respectively, and the Commerce (Trade Descriptions) Act, and the Dairy Produce Export Control Act, passed by the Commonwealth Parliament in 1905 and 1924 respectively. Since 31st January, 1930, the supply and distribution of milk for consumption in the metropolitan area and certain neighbouring municipalities has been placed under the control of the Metropolitan Milk Board, the constitution and functions of which are described in part Food and Prices of this Year Book.

Under the Dairy Industry Act, 1915, dairy factories and stores must be registered, and are under the supervision of State Government inspectors. Cream supplied to a dairy factory must be tested and graded at the factory, and the farmer is paid on the basis of the butter-fat results, or on the amount of butter obtained from his cream. Butter must be graded on a uniform basis and packed in boxes bearing registered brands indicating the quality of the product and the factory where it was produced. The testing and grading at the factory may be done only by persons holding certificates of qualification.

The State has been divided into nine dairying districts, and in each an experienced dairy inspector is appointed to administer the Act and regulations thereunder. He acts as inspector, instructs the factory managers and cream-graders in matters connected with the industry, and advises the dairy-farmers, especially those supplying cream of inferior quality. He also exercises supervision over the quality of butter produced, and may order structural improvements in factory premises. Since 1919 factory premises have been altered extensively, and in numerous cases entirely new buildings have been erected. Usually the number of factories under the supervision of each inspector does not exceed twenty.

Since the Dairy Industry Act came into force the quality of factory butter has shown a marked improvement, and returns of factories showed that for the year ended 30th June, 1931, 96.5 per cent. of the butter made in factories was of choicest grade, 0.7 per cent. was first grade and 2.8 per cent. second grade.

Particulars regarding the supervision of dairies supplying milk for consumption as fresh milk, are shown in the chapter "Food and Prices."

The Dairies Supervision Act, 1901, consolidated laws designed to prevent the spread of disease through the insanitary conditions under which milk and milk products had been handled. Under this law all dairymen and milk vendors are required to register their premises with local authorities and such premises are subject to the inspection of the authorities. It is illegal for any person to sell milk or milk products produced on unregistered premises. The beneficial effects of this law in relation to public health are referred to in the chapter "Vital Statistics" of this Year Book.

The supervision of dairy products for the oversea export trade is conducted by officers appointed by the Federal Government, under the Commerce (Trade Descriptions) Act of 1905. Since 1st August, 1924, a national brand has been placed on all butter graded for export as choicest quality. This brand consists of the figure of a kangaroo imposed on the boxes as well as the ordinary trade-marks in use. During the year ended June, 1931, 628,523 boxes of butter were examined for oversea export. Of these 547,164 were classed as choicest, 67,448 as first grade, 11,773 as second grade, 597 as third grade, and 1,252 as pastry butter; 289 boxes were prohibited from export. By Statutory Rules issued in November, 1930, the third-grade classification was discontinued.

Australian Dairy Produce Export Control Board.

A description of the constitution and functions of the Board was published on page 650 of the Official Year Book of 1928-29. The activities of the Board extend over many phases of the marketing of Australian butter in the United Kingdom, including ocean transport and guidance of manufacturers in Australia.

The expenses of the Board are defrayed from a fund created by a levy which may not exceed $\frac{3}{4}$ d. per lb. on butter and $\frac{1}{16}$ d. per lb. on cheese exported from the Commonwealth. A levy was imposed on all exports after 1st July, 1925, at the rate of $\frac{1}{16}$ d. per lb. of butter and $\frac{1}{32}$ d. per lb. of cheese; these rates have been reduced to $\frac{1}{20}$ d. and $\frac{1}{40}$ d. respectively.

During its existence the Board has obtained substantial reductions in the rates for marine insurance and freight, in respect of butter and cheese. A further rebate of $2\frac{1}{2}$ per cent. in the rates of freight on butter and cheese shipped to the United Kingdom for the season 1929-30 represented a saving of £8,507. The Board acts in conjunction with other organisations in advertising Australian products throughout the United Kingdom. Its revenue during 1929-30 was £23,227, and the expenditure £21,211, of which £10,000 was for propaganda and advertising.

Dairying Organisations.

Most of the dairy factories of the State are conducted on co-operative principles, and a similar condition exists throughout Australia. This has resulted in the formation of a number of organisations for promoting the interests of the industry, many of which are federal in character. Principal among these is the Ministerial Dairy Council, consisting of the Commonwealth Minister of Trade and Customs and the Minister of Agriculture of each of the States. This Council meets at least once a year to consider matters of policy and future development.

A Stabilisation Committee, consisting of representatives elected by the boards of directors of the butter factories in New South Wales, met for the first time on 3rd April, 1924, to consider ways and means of stabilising prices in the dairying industry.

This Committee has since become part of a Federal organisation—the Australian Stabilisation Committee—and an arrangement known as the "Paterson" scheme was inaugurated on 1st January, 1926, with the object of stabilising the butter markets in Australia. Under this arrangement butter producers pay a levy on all butter produced, and from the funds thus provided a bonus is paid on butter exported. The levy was originally fixed at $1\frac{1}{2}$ d. per lb. and the bonus at 3d. per lb.; but a bonus of 4d. per lb. was paid on butter exported between 12th and 31st December, 1927. In

October, 1928, it was decided to increase the levy to 1½d. per lb. The bonus on butter exported was 4½d. per lb. as from 1st January, 1929, 3½d. per lb. as from 1st January, 1931, and 2½d. per lb. as from 11th April, 1931.

A New South Wales Butter and Cheese Exporters' Association, and a Co-operative Dairy Factory Managers and Secretaries' Association have been in existence since 1906.

DAIRY INSTRUCTION.

Educational and experimental work relating to dairying is conducted by the Department of Agriculture at eight of the State experiment farms, and at the Hawkesbury Agricultural College.

The breeds of stud cattle kept at the various farms are as follows:—At Cowra and at Berry, Milking Shorthorn; at Wollongbar, Guernseys; at Grafton and Glen Innes, Ayrshires; at Wagga Wagga and Bathurst Jerseys. At the Hawkesbury Agricultural College a Jersey stud holds a prominent place.

In order to enable factory managers and butter-makers to improve their scientific knowledge, dairy-science schools are held for short terms at different dairying centres, and certificates are given to those who pass examinations in the grading of cream, and in the testing of milk and cream.

During the year 1929-30 there were nine schools and 127 students.

HERD-TESTING.

Three herd-testing units functioned temporarily between 1909 and 1912, and the present herd-testing movement was established with financial and administrative assistance from the Department of Agriculture. In 1913-14, 35,000 cows were tested, but the scheme was interrupted by the war and droughts and was not re-established on a durable basis until 1924-25, when 23,000 cows were under test. The number did not increase appreciably until 1927-28 when the number tested was 43,000, with subsequent increases to 70,000 in 1928-29 and 100,000 in 1929-30. The extension of the practice of herd-testing is enabling the farmers to ascertain the productivity of individual cows, to cull unprofitable animals, and to retain the progeny of those of higher grade.

The scheme provides means of testing ordinary dairy herds and is controlled by the Department of Agriculture, whose officers conduct the tests. The farmers who participate pay an annual fee, and the annual cost of testing, about 6s. per cow submitted, is shared equally by the farmer, the State, and the Commonwealth Government.

The gross expenditure on the scheme in the year ended 30th September, 1929 was £24,790, of which £6,800 was charged to farmers, £6,981 to the Federal Government and the remainder to the Government of New South Wales. The average cost per cow tested was 7s. 1d.

Testing of Pure-bred Stock.

The testing of pure-bred stock for production is carried out under the Australian recording scheme, which is conducted on similar lines in each State of the Commonwealth by its Department of Agriculture. In New South Wales as from 1st January, 1929, the charge was 4s. per cow for each record, which covers a period of 273 days lactation, with an extension to 365 days if desired.

As from 1st October, 1929, records of the tests of pure-bred cows have been compiled in two sections:—(a) The official record of tests conducted under the rules of the Australian scheme, which prescribe that each cow must be milked dry before the monthly test is made; (b) a semi-official or uncertified record of tests when the other conditions of the official scheme have been observed but the cows have not been milked dry under supervision.

These records are limited to cows registered in one of the several Herd Societies of the various breeds.

Unregistered pure-bred cows are grouped with the grade or the ordinary cows, which comprise the majority of the milking herds on registered dairy farms.

DAIRY CATTLE.

In the dairy herds the Shorthorn preponderates. This breed was introduced into the Illawarra or South Coast districts in the early period of dairying, before the Shorthorn had been developed by English breeders into a beef-producing type. By an admixture with other strains, a useful type of dairy cattle, known as the Illawarra, has been developed, and an association has been formed to establish the breed. There is also a large number of Jersey cattle, and the popularity of the breed for the production of butter is increasing. The Ayrshire is well represented in the dairy herds. It is noted for hardiness, but is considered as better suited for producing milk for human consumption as fresh milk than for the purposes of butter-making.

The number of cows used for milking in the State in each year since 1920 is shown below:—

As at 30th June.	Cows in Milk at 30th June.		Cows Dry as at 30th June.*	Helpers.*		Average Daily Number of Cows in Milk during Year.
	In Registered Dairies.	Other.		Springing.	Other, over one Year.	
	No.	No.	No.	No.	No.	No.
1920	419,732		277,888	72,311	133,092	511,064
1921	475,785		282,208	86,381	97,368	542,092
1922	414,557	86,665	314,771	68,222	89,872	580,933
1923	404,611	79,525	313,264	63,100	97,787	579,516
1924	418,505	84,680	282,014	71,515	92,421	561,908
1925	457,217	88,567	280,186	68,206	79,674	614,841
1926	472,273	90,336	278,967	59,194	83,731	632,331
1927	462,365	85,674	286,592	51,422	106,366	616,805
1928	465,773	84,731	290,914	53,022	108,397	615,700
1929	482,568	81,797	293,754	49,655	115,413	627,815
1930	487,910	80,455	289,896	55,285	126,394	623,196

*For 1922 and subsequent years these columns relate to cows in registered dairies only.

The basis of classification was improved in 1922 in order to provide the return of separate particulars of the cows in registered dairies, but the figures of each column are substantially comparable with those of preceding years.

During the winter months the number of cows in milk is usually smaller and the number of springing heifers is usually greater than in the summer months, and for those reasons the numbers shown above as at 30th June are not typical of the distribution of cows under the various headings throughout the year.

Dairy Farms.

Under the Dairies Supervision Act, 1901, every person keeping cows to produce milk for sale for human consumption in any form must register his premises and conform to prescribed standards of cleanliness, etc. Some persons so registered, however, conduct operations on a very limited scale.

The following statement shows a comparison for the past seven years of the number of holdings of 1 acre and upwards used for dairying operations on a commercial scale:—

Year ended 30th June.	Holdings of one acre and upwards used principally for—				
	Dairying only.	Dairying and Agriculture.	Dairying and Grazing.	Dairying, Grazing and Agriculture.	Total used for Dairying.
1923	9,222	5,266	2,227	1,642	18,357
1924	9,191	5,561	1,969	1,756	18,477
1925	9,499	5,919	1,766	1,990	19,174
1926	9,766	5,624	1,794	1,734	18,918
1927	10,075	5,529	1,350	1,892	18,846
1928	10,118	5,375	1,516	1,755	18,764
1929	12,985†	2,942†	1,722†	1,189†	18,838
1930	13,294†	3,170†	1,607†	1,034†	19,105

† Basis of Classification amended.

As stated the figures quoted above indicate the principal purposes for which the holdings were used. It is apparent that the great bulk of the dairy farmers specialise in dairying operations. When the quantity of maize or other grain grown is clearly in excess of the amount required for consumption on the farm and the surplus is intended for sale the holding is classed as "agricultural and dairying," although the principal source of income from these and other dual-purpose dairy farms is the dairy. In 1929 the basis of classification was improved so that holdings on which dairying was clearly the predominant activity were placed in the classification "dairying only." The number of registered dairies one acre or more in extent recorded at the census collection as at 30th June, 1930, was 19,238, and the number of dairymen registered under the Dairies Supervision Act as at 31st December, 1930, was 19,651.

Dairy Factories.

Although there is some seasonal variation, approximately 83 per cent. of the milk production of the State is treated in factories either as cream or whole milk, the balance being sold as fresh milk direct from dairy or used on the farms. Most of the factories are conducted on co-operative principles, with the suppliers as shareholders, and are situated in the country districts at convenient centres. Particulars of the operations of the butter factories are shown on page 68 of this Year Book.

DAIRY PRODUCTION.

The following statement shows the quantities of the principal dairy products in each Division of the State during the year ended the 30th June, 1930:—

Division.	Estimated Yield of Milk.	Butter Made.	Cheese Made	Bacon and Ham Made.
Coastal—	gallons.	lb.	lb.	lb.
North Coast	138,234,128	*61,193,802	759,488	6,782,105
Hunter and Manning	57,985,201	24,236,392	1,441,175	1,905,699
Metropolitan	13,295,477	407,597	5,794	11,384,475
South Coast	38,217,567	10,278,096	3,960,128	483,624
Total	247,732,373	96,115,887	6,166,585	20,555,903
Tableland—				
Northern	5,293,342	1,575,056	.....	338,868
Central	6,174,076	1,339,564	.....	75,957
Southern	1,953,154	377,446	.....	34,749
Total	13,420,572	3,292,066	.....	449,574
Western Slopes—				
North	5,066,406	1,527,494	.....	41,175
Central	2,038,366	410,009	.....	33,605
South	9,123,156	†2,734,465	179,200	145,814
Total	16,227,928	4,671,968	179,200	220,594
Plains—				
North Central	895,799	95,108	.....	7,451
Central	843,090	87,020	.....	9,453
Riverina	4,231,196	741,844	.....	372,282
Total	5,970,085	923,972	.....	389,186
Western Division	595,787	18,491	.....	1,215
Total, New South Wales ..	††283,946,745	*†105,022,384	6,345,785	21,616,472

* Including 769,114 lb. made from cream, the produce of Queensland, and † 77,930 from Victoria.

†† Includes 1,310,000 gallons sent to Interstate factories.

This statement illustrates the importance of dairying activities in the Coastal Division as compared with the remainder of the State. In this area over 90 per cent. of the cows in registered dairies are depastured, and approximately 87 per cent. of the total output of milk, 90 per cent. of the butter, and 97 per cent. of the cheese are produced. Fifty-seven per cent. of the butter of the State was made in the North Coast division. The Hunter and Manning division is next in importance, then the South Coast, followed by the South Western Slopes. Formerly the South Coast division was the principal dairying region, but in recent years the industry has made rapid progress in the northern districts, where many large estates, used previously for raising cattle for beef, have been subdivided into dairy farms. The manufacture of cheese is of small extent when compared with the manufacture of butter, and more than one-half of the total output is made in the South Coast division. The curing of bacon and ham is confined almost entirely to the Coastal division, where more than 95 per cent. of the output is produced.

Milk.

Particulars of the consumption and supply of milk and milk products are published in the chapter "Food and Prices" of the Year Book.

Cows used for producing milk for sale are inspected by Government officers, who have power to condemn and prevent the use of diseased animals. The standard of milk sold for human consumption is prescribed, the quality of the milk sold is tested frequently, and prosecutions are instituted where deficiencies are found. By these means the purity and wholesomeness of dairy products are protected. Under the Metropolitan Milk Act, which comes into operation on 1st March, 1930, a Board was appointed to regulate and control the supply of milk and cream within the metropolitan milk area, including improvements in the methods of collecting and distributing milk and fixation of prices of milk. Further particulars are shown in part "Food and Prices" of this Year Book.

The total yield of milk can be estimated only approximately. Few dairy farmers actually measure the quantity of milk obtained from their cows throughout the year. The majority are concerned principally in producing cream for manufacture into butter. In recent years, however, it has been found possible to make checks against the milk supplied to factories, and results show that the farmers' estimates are approximately correct. In this connection also, the testing of dairy herds has been developed so far as to give a fair indication of the butter-fat contents of the milk.

Average Yield per Cow.

The steps being taken to increase the yield per cow are discussed in the earlier pages of this chapter. While sufficient information is not available to show conclusively the average annual production of milk per cow, an estimate of the productivity per cow in registered dairies in terms of commercial butter is published below. For the purposes of this estimate it is assumed that the mean of the number of cows in milk and dry at the beginning and end of any given year represents the average number kept for milking in registered dairies during that year, and an estimate is made (on the basis of butter fat content) of the quantity of commercial butter produceable from milk used for purposes other than butter-making.

The following table relates to all cows in registered dairies and covers a period of eight years, for which the necessary particulars are available:—

Year ended 30th June.	(A) Cows Dry and in Milk in Registered Dairies at end of Year.	(B) Estimated Number of Cows Dry and in Milk in Registered Dairies during Year.	Butter Produced.		(E) Estimate of Commercial Butter Produceable from Milk of Cows in Registered Dairies used for other Purposes.	(F) Total Commercial Butter Produced or Produceable from Milk of Cows in Registered Dairies.	(G) Estimated Production of Commercial Butter per Cow.
			(C) In Factories.	(D) On Farms.			
			Thousand lb.				lb.
1922	729,328	...	...	...	...	...	...
1923	717,875	723,601	69,255	4,469	20,424	94,148	130.1
1924	700,519	709,197	68,030	4,654	20,722	93,406	131.7
1925	737,403	718,961	112,505	4,706	22,632	139,843	194.5
1926	751,240	744,321	101,698	5,270	21,592	128,560	172.7
1927	749,957	750,598	91,727	4,825	22,235	118,787	158.3
1928	756,687	753,322	96,707	4,888	23,999	125,594	166.7
1929	776,322	766,504	91,733	4,511	23,288	119,532	155.9
1930	777,815	777,069	100,814	4,208	23,697	128,719	165.6

The estimated number of cows dry and in milk in registered dairies during the year shown in the column B above represents the mean of the total numbers at the beginning and end of the year concerned as shown in column A. The estimated production per cow shown in column G is obtained by dividing the average number of cows in column B into the total commercial butter for respective years shown in column F. It represents therefore an average covering all cows kept for milking in registered dairies irrespective of periods of lactation, and includes heifers on first calf, aged cows, and cows disabled from any cause.

Use of Milk.

The following statement shows the estimated amount of milk used for various purposes during each of the last three years:—

	1927-28. gallons.	1928-29. gallons.	1929-30. gallons.
Used for butter on farms	14,553,000	13,473,000	12,481,000
" " in N.S.W. factories	200,194,000	197,072,000	206,048,000
" " interstate... ..	710,000	1,297,000	1,310,000
	<hr/> 215,457,000	<hr/> 211,842,000	<hr/> 219,839,000
Used for cheese made on farms ...	224,000	134,000	184,000
" " in factories...	7,494,000	6,589,000	6,648,000
	<hr/> 7,718,000	<hr/> 6,723,000	<hr/> 6,832,000
Used for sweet cream, ice cream, condensing, etc.	6,633,000	6,116,000	6,842,000
Pasteurised for metropolitan and Newcastle markets	19,922,000	20,521,000	21,658,000
Balance sold and used otherwise ...	33,316,000	32,176,000	28,776,000
	<hr/> 283,046,000	<hr/> 277,378,000	<hr/> 283,947,000
Total			

An estimate of the quantity of fresh milk used for human consumption is shown in the chapter relating to "Food and Prices."

A census of individual holdings showed that the number of farms with power separators in 1929-30 was approximately 5,654. This number is comparable with 4,680 in 1928-29, but previous comparison is not possible. The number of power-driven milking machines in use on dairy farms was 2,683 in 1929-30 as compared with 2,105 in 1928-29.

The milk used for making butter represents 77.4 per cent. of the estimated total production; 2.4 per cent. is used for cheese; 2.4 per cent. for condensed milk, cream, ice-cream, etc.; and the balance—17.8 per cent.—is consumed as fresh milk or used otherwise.

Preserved Milk.

Various kinds of preserved milk and milk foods are produced in New South Wales, *e.g.*, sweetened condensed milk, unsweetened condensed milk, concentrated milk, and powdered milk, etc.

During the war period there was great progress in the manufacture of preserved milk, and the output was increased from 3,682,800 lb. in 1913 to 14,938,100 lb. in 1920-21. Since that year there has been an amalgamation of the companies engaged in the manufacture of preserved milk products in Australasia and some of the factories in New South Wales have been closed.

The quantity made in 1926-27 was 6,315,621 lb., valued at £304,251. The results for later years are not available for publication.

Butter.

The following statement shows the quantity of butter made annually at intervals since 1901. The butter made in factories and the total butter made include for the year 1926-27, 698,356 lb., for 1927-28, 800,520 lb., for 1928-29, 906,990 lb., and for 1929-30, 847,044 lb., made from cream produced in other States.

Year ended 30th June.	On Farms.	In Factories.	Total.	Year ended 30th June.	On Farms.	In Factories.	Total.
Thousand lb. (000 omitted.)							
1901*	4,775	34,282	39,057	1925	4,706	112,505	117,211
1906*	4,637	54,304	58,941	1926	5,270	101,698	106,968
1911*	4,632	78,573	83,205	1927	4,825	91,727	96,552
1916	4,258	55,374	59,632	1928	4,888	96,707	101,595
1921	4,388	79,880	84,268	1929	4,511	91,733	96,244
1922	4,978	95,695	100,673	1930	4,208	100,814	105,022
1923	4,469	69,255	73,724	1931	4,208‡	109,292‡	113,500‡
1924	4,654	68,030	72,684				

* Calendar year.

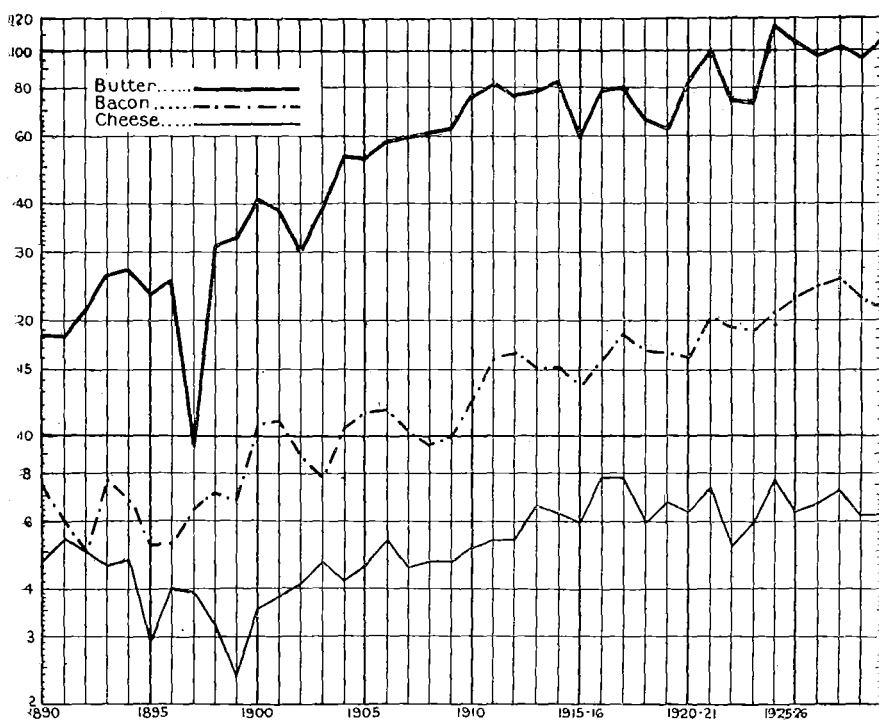
† Subject to revision.

‡ Estimated.

The production of butter in factories has been maintained for seven years past above 90,000,000 lb. per annum—a level which hitherto had seldom been attained.

DAIRY PRODUCTION, 1890 to 1929-30.

Ratio graph.



The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise or fall according to the rate of increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

External Trade in Butter.

Particulars of the external trade in butter during each of the past four seasons are summarised in the following statement:—

Particulars.	1927-28.	1928-29.	1929-30.	1930-31.
Imports:—	lb.	lb.	lb.	lb.
Interstate	5,288,164	5,311,348	3,748,276	2,114,084
From New Zealand	4,682,229*	61	434	116
Total Imports	9,970,393	5,311,409	3,748,710	2,114,200
Exports:—				
Interstate	6,215,020	5,025,944	5,087,208	1,971,368
Oversea—Australian produce	20,820,331	15,455,928	19,916,913	31,388,919
New Zealand produce				
Ships' Stores—Australian produce... ..	527,689	423,696	411,240	404,123
New Zealand produce				
Total Exports	27,563,043	20,905,568	25,415,361	33,764,410
Excess of Exports	17,592,650	15,594,159	21,666,651	31,650,210

*Includes 1,302 lb. from various countries.

In 1926-27 and 1927-28 imports from New Zealand increased very substantially owing to the high prices prevailing in the Sydney market, but in the latter year the duty on New Zealand butter imported into Australia was increased from 2d. to 6d. per lb., while the general tariff on butter was increased from 3d. to 7d. per lb. Interstate imports increased substantially from 1926 to 1929, but have decreased latterly.

Production and Exports of Butter Monthly.

The following table shows for each month during the four seasons ended 30th June, 1931, the quantity of butter produced in factories in New South Wales in comparison with the quantity exported overseas from New South Wales. Butter may be stored for a considerable period before export, and the figures for production and export each month do not necessarily refer to the same butter. The export figures relate to Australian produce.

Month.	Quantity of Butter Produced in Factories.				Quantity of Butter Exported Oversea (Australian Produce).			
	1927-28.	1928-29.	1929-30.	1930-31.	1927-28.	1928-29.	1929-30.	1930-31.
Thousand lb.								
July	3,834	4,136	4,475	4,981	201	224	229	317
August	3,753	4,631	4,178	5,308	128	313	92	379
September	3,789	6,086	5,655	7,245	109	697	309	638
October	5,827	8,250	8,620	9,914	42	1,583	910	2,114
November	8,953	7,808	10,967	10,824	1,289	1,644	3,208	4,293
December	12,010	7,336	10,170	10,416	2,955	833	3,913	3,599
January	12,402	8,483	11,257	9,913	4,923	1,078	3,135	2,883
February	11,794	9,785	11,227	10,662	3,973	3,070	4,075	3,855
March	11,620	12,090	11,622	12,384	2,108	2,763	2,383	5,437
April	9,692	10,273	9,604	10,813	1,425	2,468	1,027	4,343
May	7,813	7,781	7,514	9,128	2,466	447	382	2,411
June	5,232	5,087	5,523	7,704	1,201	336	254	1,120
Total	96,719*	91,746*	100,812*	109,292*	20,820	15,456	19,917	31,389

* Compiled from monthly returns of Dairy Branch. The totals differ slightly from those published elsewhere in this volume.

These monthly records show the pronounced seasonal nature of the production, with the consequent monthly variations in the volume of exports. Production increases in a marked degree during the summer months and decreases during the winter, reaching a minimum usually in July.

Usually more than 80 per cent. of the butter exported oversea from New South Wales is sent to the United Kingdom, the remainder being sent mainly to countries bordering the Pacific Ocean.

The principal sources from which butter was imported into Great Britain and Northern Ireland during each of the last five years are shown below:—

Year ended June.	Imports of Butter into Great Britain and Northern Ireland from—					
	Australia.	New Zealand.	Denmark.	Argentina.	Other Countries.	Total Imports.
	tons.	tons.	tons.	tons.	tons.	tons.
1927	30,216	56,534	97,795	26,498	77,596	288,639
1928	33,582	67,343	100,349	17,921	84,562	303,747
1929	43,116	64,636	105,162	17,034	87,527	317,475
1930	41,158	65,496	111,925	15,706	89,377	323,662
1931	62,357	87,491	118,149	21,358	70,905	360,260

Prices of Butter.

The average monthly wholesale prices of butter in Sydney and London markets during each of the past four seasons are shown below:—

Month.	Average Price in Sydney of Choicest Butter per cwt.				Average Top Price in London of Australian Butter per cwt.			
	1927-28.	1928-29.	1929-30.	1930-31.	1927-28.	1928-29.	1929-30.	1930-31.
	s.	s.	s.	s.	s.	s.	s.	s.
July ...	201	191	205	182	162	173	167	135
August ...	209	196	205	182	169	173	168	133
September	224	196	205	166	178	173	175	126
October ...	221	195	205	153	176	172	178	117
November	189	188	194	142	173	173	173	108
December	179	202	190	135	164	182	161	109
January ...	178	210	187	150	157	184	153	113
February ...	168	208	184	166	159	181	146	119
March ...	172	197	177	168	167	168	135	118
April ...	177	196	177	152	162	160	125	109
May ...	177	200	179	149	158	161	129	108
June ...	178	205	182	154	164	165	130	108

The prices quoted in the table for Sydney and London respectively may not be used to estimate the difference between the actual selling price in Sydney and the local parity of London prices. The Sydney price is an average of daily prices and relates to the official price of butter of choicest quality. No account is taken of under-selling such as has occurred at times through the incidence of interstate competition. On the other hand the London prices are the mean of the top prices quoted weekly in the *Statist* for Australian butter, but owing to the smallness of supplies at certain periods these prices are more or less nominal. Usually there are appreciable quantities of Australian butter on London markets for only about half the year, viz., from November to May inclusive. Owing to the operation of the "Paterson" stabilisation scheme, which is explained on a previous page, the prices quoted for Sydney do not indicate accurately the incidence of market fluctuations on gross returns to producers and their organisations.

The average price paid to suppliers of cream to local factories was as follows in recent years:—1921-22, 1s. 1.9d.; 1922-23, 1s. 6.9d.; 1923-24, 1s. 4.6d.; 1924-25, 1s. 1d.; 1925-26, 1s. 3.8d.; 1926-27, 1s. 4.2d.; 1927-28, 1s. 4d.; 1928-29, 1s. 5.1d., and in 1929-30, 1s. 5.6d. per lb. of commercial butter manufactured. These payments include amounts deferred from the previous year, and they do not relate exactly to the financial year.

Cheese.

Excellent conditions exist in New South Wales for the production of cheese, but cheese-making has not advanced to the same extent as the manufacture of butter, the latter being more profitable. From a previous table showing the cheese made in the various divisions of the State, it will be seen that nearly two-thirds of the total production is made in the South Coast division.

The industry is retarded by the great disadvantages of cheese as an article of export. It matures quickly and after a short period depreciates in value. Unlike butter it cannot be preserved satisfactorily by freezing. Moreover, cheese represents little more than half the money value of butter for the same weight, while the cost of freight is practically the same. At present, however, sufficient cheese is not produced in New South Wales to supply local requirements.

The following table shows the production of cheese in factories and on farms and the import and export of cheese from New South Wales at intervals since 1901:—

Year ended 30th June.	Production.			Import.		Export.
	In Factories.	On Farms.	Total.	Oversea.	Interstate.	Oversea.‡
	lb.	lb.	lb.	lb.	lb.	lb.
1901*	2,428,599	1,410,236	3,838,835	1,862,000	399,000	191,000
1906*	3,459,641	1,999,004	5,458,645	115,000	359,000	133,600
1911*	4,617,387	843,265	5,460,652	129,000	†	141,400
1916	4,969,374	1,010,262	5,979,636	479,000	†	301,200
1921	5,965,715	441,494	6,407,209	31,000	†	806,700
1926	6,321,111	141,424	6,462,535	736,000	1,288,000‡	284,000
1927	6,628,000	107,960	6,735,960	560,000	1,313,000‡	180,300
1928	7,081,000	203,630	7,284,630	506,000	3,500,000	223,900
1929	6,203,409	135,643	6,339,052	256,000	2,924,000	229,300
1930	6,163,295	182,490	6,345,785	216,000	4,097,000	219,400
1931	†	†	†	18,000	3,086,000	188,900

*Calendar year. † Not available. ‡ Excluding imports by rail. § Including Ships' Stores.

The annual output of cheese has shown no permanent expansion in the past fifteen years. The maximum production was in 1916-17, when the total reached 7,830,239 lb. Cheese-making on farms was formerly extensive, but declined appreciably between 1916 and 1924. Practically the whole of the cheese produced for sale is now made in factories.

PIGS.

The breeding of pigs is conducted usually on dairy farms, where a large supply of separated milk is available for fattening the stock. They are reared also in agricultural districts, where special crops of maize, peas, etc., are grown as fodder for them.

The following table shows the number of pigs in New South Wales at intervals since 1891:—

At 31st December.	Pigs.	At 30th June.	Pigs.
	No.		No.
1891	253,189	1922	383,669
1896	214,581	1923	340,853
1901	265,730	1924	323,196
1906	243,370	1925	339,669
1911	371,093	1926	382,674
1916*	281,158	1927	332,921
1919*	294,648	1928	301,819
1920*	253,910	1929	311,605
1921*	306,253	1930	323,499

* As at 30th June.

In 1918 the number, 396,157, was the highest on record, but it declined owing to adverse seasons in 1919 and 1920. There was a substantial increase in 1921, and again in 1926, but the number diminished in 1927 and 1928, owing largely to an outbreak of swine fever. The extent of pig breeding, however, is not accurately reflected in variations in the number of pigs at the end of the year, but rather by the extent of slaughtering in conjunction with increase or decrease in numbers. Comparison of two periods of four years are shown below:—

Year ended 30th June.	Increase (+) or Decrease (—).	Number Slaughtered.	Year ended 30th June.	Increase (+) or Decrease (—).	Number Slaughtered.
1923 ...	(—) 42,816	339,658	1927 ...	(—) 49,753	461,981
1924 ...	(—) 17,657	302,733	1928 ...	(—) 31,102	412,424
1925 ...	(+) 16,473	361,065	1929 ...	(+) 9,786	406,187
1926 ...	(+) 43,005	402,479	1930 ...	(+) 11,894	405,639
Totals ...	(—) 995	1,405,935	Totals ...	(—) 59,175	1,686,231

At 30th June, 1930, the pigs less than one year old numbered 237,850, and the pigs aged one year and over 85,649; these latter consist mainly of breeding stock.

The following statement shows the number of pigs in various divisions of the State, and the production of bacon and ham in 1929-30 as compared with the years 1911 and 1920-21:—

Division.	1911.		1920-21.		1929-30.	
	Pigs.	Bacon and Ham cured.	Pigs.	Bacon and Ham cured.	Pigs.	Bacon and Ham cured.
	No.	lb.	No.	lb.	No.	lb.
Coastal ...	255,361	13,845,520	208,903	14,781,094	267,007	20,555,903
Tableland ...	45,578	1,124,091	29,700	597,872	17,727	449,574
Western Slopes ...	42,258	666,173	39,599	422,712	25,095	220,594
Other ...	27,896	467,043	28,051	455,564	13,670	390,401
Whole State	371,093	16,102,827	306,253	16,257,242	323,499	21,616,472

This table shows that the production of bacon has increased since 1911 in the dairying districts of the Coastal Division, and 95 per cent. of the total production of bacon in 1929-30 was cured in these districts. In the Tableland Division there has been a marked decline in pig-raising, and little or no progress has been made in other parts of the State.

Interstate Movement of Pigs.

The introduction of pigs from other States is closely regulated in order to prevent the spread of the various diseases current among these animals, and, on the whole, few pigs are brought into the State except for slaughtering in adverse seasons. Until 1927-28 there was usually a net export of pigs from New South Wales to Queensland, but in that year the net import into New South Wales was 2,240. This number increased in 1928-29 to 7,192, and in 1929-30 to 19,268, falling in 1930-31 to 6,021. In the same four years there was a net export of 2,431, 4,396, 3,430, and 3,433 pigs from New South Wales to Victoria.

Bacon and Hams.

The output of bacon and hams from factories and farms in New South Wales and the net interstate imports at intervals since 1901 is shown hereunder:—

Year ended 30th June.	Production of Bacon and Ham.			Net Import of Bacon and Ham Interstate.
	Factory.	Farm.	Total Production.	
	lb.	lb.	lb.	lb.
1901*	7,392,100	3,688,800	11,080,900	1,216,700
1911*	13,393,500	2,709,300	16,102,800	†
1916	11,637,900	1,938,700	13,576,600	†
1921	14,625,800	1,631,400	16,257,200	†
1922	18,544,067	1,878,803	20,422,870	†
1923	17,506,343	1,739,523	19,245,866	†
1924	17,693,376	1,358,733	19,052,109	6,700,000
1925	19,764,983	1,311,813	21,076,796	8,800,000
1926	21,548,888	1,409,483	22,958,371	9,500,000
1927	23,275,890	1,327,175	24,603,065	8,000,000
1928	24,523,873	955,335	25,479,208	8,000,000
1929	22,340,106	747,165	23,087,271	8,300,000
1930	20,934,249	632,223	21,616,472	9,900,000

* Calendar year. † Not available.

The net import of bacon and hams interstate was 9,400,000 in 1930-31.

During the first decade of the period under review the production of bacon showed a substantial increase. The production in 1920-21 was only slightly higher than in 1911, but the output in the last seven years has been much greater, and in 1927-28 it exceeded 25,000,000 lb. for the first time. The increased production, coupled with large imports since 1925-26, has been reflected in increased consumption of bacon and ham as shown in part "Food and Prices" of this Year Book.

Lard.

Statistics showing the total production of lard are not available. During the year ended 30th June, 1930, the quantity extracted in factories amounted to 625,604 lb., valued at £21,968; but as the manufacture of this product is conducted in many other establishments, as well as on farms, this quantity represents only a portion of the total output.

During the twelve months ended 30th June, 1931, the overseas exports of lard and refined animal fats amounted to 186,991 lb., valued at £6,518, as compared with imports from overseas countries amounting to 75,657 lb., valued at £2,005.

LOCAL CONSUMPTION OF DAIRY PRODUCTS.

The local consumption of dairy products in New South Wales is comparatively high. The average consumption per head in 1928-29 was as follows:—Fresh milk 21 gallons, preserved milk 6.9 lb., butter 34.5 lb.,

cheese 3.9 lb., bacon and ham 11.8 lb. The quantities of these products required for a normal year in New South Wales are approximately 52,000,000 gallons of fresh milk, 15,000,000 lb. to 17,000,000 lb. of preserved milk, 86,000,000 lb. of butter, 10,000,000 lb. of cheese, and 30,000,000 lb. to 33,000,000 lb. of bacon and ham. Comparison with the figures on the foregoing pages shows that the State is self-supporting in regard to milk and butter, and that portions of the supplies of cheese and bacon are imported—generally from the other States of the Commonwealth. During the summer months, when production is at a maximum, a quantity of butter is placed in cold storage in order to ensure an adequate supply during the winter. This matter is treated more fully in the chapter relating to "Food and Prices."

EXPORTS OF DAIRY PRODUCTS.

Dairy products for export beyond the Commonwealth are subject to inspection by Federal Government officials under the provisions of the Commerce Act, 1905, and the exportation of inferior products is prohibited unless the goods are labelled as below standard. Since August, 1925, the export of butter and cheese has been supervised by the Dairy Produce Export Control Board, of which particulars are given on an earlier page.

The following table shows the oversea exports of the principal dairy products from New South Wales, inclusive of ships' stores, at intervals since 1891. The particulars for 1906 and earlier years relate to New South Wales produce only, but in later years the figures include a small quantity of the produce of other Australian States. New South Wales produce exported through other States is excluded from account:—

Year ended 30th June.	Oversea Exports (including Ships' Stores).							
	Butter.		Cheese.		Milk—Preserved, Condensed, etc.		Bacon and Ham.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lb. (000)	£	lb. (000)	£	lb. (000)	£	lb. (000)	£
1891*	11	478	18	411	...	...	9	380
1896*	1,912	75,994	45	821	8	156	40	994
1901*	8,700	379,342	174	4,359	196	2,525	96	3,007
1906*	23,362	978,725	123	3,268	258	4,906	141	4,996
1911*	33,044	1,518,993	127	3,723	1,127	17,471	618	17,561
1916	4,306	259,834	191	9,767	947	22,052	224	11,279
1921	28,429	3,458,280	804	49,813	11,576	691,122	1,357	132,075
1922	36,730	2,327,080	629	26,565	3,634	203,483	1,053	80,641
1923	12,883	1,035,186	293	14,319	688	33,119	757	57,406
1924	10,266	778,963	156	8,902	742	37,382	545	45,170
1925	44,727	2,968,525	878	29,514	647	26,999	766	52,724
1926	27,008	1,943,586	259	12,321	656	26,513	790	61,681
1927	18,485	1,292,737	220	11,714	558	22,172	1,143	86,008
1928	21,348	1,429,716	224	10,764	816	28,917	830	68,161
1929	15,880	1,192,141	229	11,838	477	19,446	612	48,883
1930	20,328	1,442,851	219	11,624	452	18,222	520	39,585
1931	31,793	1,698,835	189	8,969	497	18,006	552	28,646

* Calendar year.

The values of other dairy and farmyard products exported overseas in 1930-31 were as follows:—Frozen pork, £13,511; frozen poultry, £5,022; eggs, £139,782; live pigs and poultry, £1,336; making a grand total of £1,914,107, including the items listed above.

POULTRY-FARMING.

Poultry-farming was conducted formerly in conjunction with dairying; but the interests involved have become important commercially, and a distinct industry has been developed. Returns collected as at 30th June, 1930, showed that there were 1,293 holdings of one acre or more in extent devoted mainly to poultry-farming, besides thirty-three to poultry, bees, and pigs combined. In addition, many holdings less than 1 acre in extent, and therefore not included in these returns, are used for raising poultry as a commercial pursuit, while many farms, utilised mainly for agriculture, dairying or grazing, also carry large numbers of poultry. The returns showed that at 30th June, 1930, there were 2,033 holdings over 1 acre in extent carrying poultry for commercial purposes to the extent of 150 head or more. Of these, 1,313 were in the County of Cumberland and 487 in other coastal districts.

Accurate statistics of poultry production are not available, but a general estimate based on accessible returns indicates that the value of production during 1929-30 was approximately £3,216,000. The returns showed that approximately 1,360,000 poultry were marketed for food during the year 1929-30.

Special attention is devoted to improving the laying qualities of the different breeds, and egg-laying competitions, organised originally by private subscriptions, have been conducted since 1901 at the Hawkesbury Agricultural College, with the object of stimulating the poultry industry. These competitions have attracted widespread interest among poultry-farmers. The most successful laying strains have proved to be the black orpington, the white leghorn and the langshan. An annual report in bulletin form, giving particulars and tabulated results of these competitions, is issued by the Department of Agriculture.

The numbers of poultry enumerated in returns supplied annually under the Census Act are as follow:—

As at 30th June.	Fowls, Chickens, etc.	Ducks, etc.	Geese, etc.	Turkeys, etc.	Guinea Fowl, and other.
1921	3,260,000	122,000	18,000	119,000	4,900
1922	3,630,000	159,000	22,000	154,000	3,800
1923	3,600,000	142,000	20,000	136,000	3,800
1924	3,670,000	139,000	17,000	148,000	4,300
1925	4,000,000	159,000	19,000	162,000	4,600
1926	4,020,000	156,000	21,000	159,000	6,300
1927	4,002,000	131,000	20,000	148,000	5,100
1928	3,968,000	123,000	17,000	147,000	6,900
1929	3,919,000	120,000	16,000	130,000	5,700
1930	3,798,000	100,000	15,000	127,000	3,700

The decrease in the number of fowls, chickens, &c., shown above is due to a decrease in the numbers on holdings with less than 150 stock. The numbers recorded for such holdings were 2,704,000 in 1928, 2,518,000 in 1929, and 2,370,000 in 1930.

Included in the figures are estimates (made by local collectors) of the number of poultry on holdings less than one acre in extent and on householders' premises, but these estimates are probably far from complete. The numbers stated afford some guidance as to the growth of the industry in recent years, but in view of the great difficulty of obtaining accurate records they are probably considerably less than the numbers of poultry in the State. In order to provide data upon which to measure the extent and

expansion of the poultry industry, special returns were collected for the year 1929-30 in respect of 2,033 commercial poultry farms representing those which marketed products from 150 or more poultry. Owing to the limitations of the Census Act holdings less than 1 acre in extent were necessarily omitted, and the figures therefore must be regarded as incomplete to the extent that commercial poultry farming is carried on on holdings of less than 1 acre and on holdings with less than 150 poultry.

Statistics shown below are compiled from returns collected under the Census Act from farms 1 acre or more in extent from which products were marketed from 150 or more poultry:—

Year ended 30th June.	Number of Farms.	Stock at 30th June.		Eggs Produced. Thousand dozen.	Chickens Hatched.	
		Chickens under six months old.	Other Fowls.		For Farm Stock.	For Sale as Day-Olds.
1928	1,952	247,349	1,016,082	9,418	802,963.	535,351
1929	2,124	300,547	1,099,558	10,637	990,638	658,263
1930	2,033	301,753	1,126,957	10,884	1,256,451	775,860

Assuming that the mean of the number of stock over six months old at 30th June represents approximately the number of laying stock in respective years (with some deduction for male stock), it would appear that the average egg production is in the vicinity of ten dozen per hen per year.

The number of poultry recorded as disposed of for table purposes from holdings not classed as commercial poultry farms was 758,000 in 1929-30, making a total for the whole State (so far as recorded) of 1,360,000 head as compared with 1,412,000 in 1928-29, 1,439,000 in 1927-28, and 1,349,000 in 1926-27.

Price of Eggs.

The average monthly wholesale prices of new-laid hen eggs per dozen in Sydney since 1926 are shown in the following table, together with the annual average weighted in accordance with the seasonal expectation of laying:—

Month.			Weight.	1926.	1927.	1928.	1929.	1930.	1931.
				s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January	...	...	13	1 5-3	1 9-0	1 8-5	1 7	1 7-2	1 2-8
February	...	...	11	1 9-1	2 0-7	1 11-9	2 0	1 8-9	1 4-9
March	...	...	7	2 3-2	2 2-7	2 7-2	2 1	2 0-5	1 3-4
April	...	...	6	2 8-1	2 8-2	2 8	2 6	2 5-4	1 10-2
May	...	...	4	2 9	2 9-0	2 9	2 9	2 6	2 0-0
June	...	...	6	2 6-5	2 9-0	2 8-4	2 5	2 3-2	1 10-6
July	...	...	10	1 9	1 11-2	2 0-1	1 10	1 7-3	1 4-0
August	...	...	16	1 6-8	1 7-2	1 5-6	1 6	1 2-6	1 0-5
September	...	...	19	1 5-2	1 6	1 5-1	1 4	1 2	1 0
October	...	...	19	1 5-6	1 6	1 6	1 4	1 1-1	1 0
November	...	...	17	1 6-7	1 7-6	1 6	1 4	1 1-6	1 0
December	...	...	16	1 8-6	1 10	1 6	1 6	1 4-9	.....
Estimated	weighted								
average	price for								
year	...	...	144	1 8-7	1 10	1 10-6	1 7-8	1 5-7	.....

The monthly averages are unweighted and represent the mean of the daily quotes. The amount received by poultry farmers after payment of cartage

freight, pool levy, and selling commission in the year 1930-31 was approximately 2½d. below the above prices. Prices are also quoted for medium and pullet eggs, but these are not included above.

The Director of Marketing has estimated that, including provision for cost of feeding fowls, interest, depreciation, local government rates, and the basic wage for the farmer, the average cost of producing eggs on a five-acre farm with 800 laying hens, producing on the average 12 dozen eggs per year, was 1s. 2.675d. per dozen in the year ended 30th April, 1931. The Poultry and Egg Committee of the Producers and Consumers' Conference in May, 1931, endorsed the basis of this estimate, but adopted an average production of 11 dozen eggs per hen, whence an average cost of 1s. 4d. per dozen was derived. The cost of feedstuffs included in the estimate was abnormally low on account of the extreme cheapness of wheat and mill offals.

Oversea and Interstate Trade.

The following table shows the recent trend of the oversea export trade in poultry and eggs:—

Year ended 30th June.	Eggs in Shell.		Frozen Poultry.		Total Value.
	Quantity.	Value.	Quantity.	Value.	
	doz.	£	pairs.	£	£
1923	1,049,117	86,122	31,748	41,157	127,279
1924	574,212	47,835	7,493	9,323	57,158
1925	627,473	49,059	7,705	12,182	61,241
1926	802,421	63,833	10,928	23,300	87,133
1927	1,839,046	137,808	18,892	29,681	167,489
1928	447,996	34,660	6,453	7,600	42,260
1929	858,795	66,893	8,050	11,971	78,864
1930	1,627,367	123,443	11,445	15,545	138,988
1931	2,388,126	139,782	5,312	5,022	144,804

Approximately 3,600,000 dozen eggs were exported oversea from New South Wales in the export season ended 31st December, 1931.

Particulars as to the interstate import of eggs by rail and sea into Sydney market are now collected by the Director of Marketing and a summary of these is provided below in respect of the year ended 30th June, 1931:—

State Whence Imported.	Eggs in Shell.			Eggs (Pulp).
	By Rail.	By Sea.	Total.	By Sea.
	doz.	doz.	doz.	cub. tons.
Victoria ...	12,840	640,450	653,290	73
Queensland ...	628,030	16,960	644,990	10
South Australia ...	.....	666,510	666,510	583
Western Australia ...	.....	240	240	...
Tasmania ...	.....	27,480	27,480	...
Total ...	640,870	1,351,640	1,992,510	666

Accurate information as to the numerical equivalent of egg pulp imported is not at present available, but it is apparently in the vicinity of 1,250 dozen per cubic ton. Corresponding totals for interstate imports in 1929-30 were 2,071,370 dozen eggs in shell, and 1,462 cubic tons of egg pulp.

Egg Marketing Board.

On 21st September, 1928, a poll of poultry farmers approved the constitution of an Egg Marketing Board for a defined area embracing the counties of Cumberland and Northumberland and the shires of Nattai and Wollondilly. The Board consists of three members elected by producers and two nominated by the Government. Active operations commenced on 27th May, 1929.

Unless exempted by the board, all persons having more than twenty head of poultry of laying age in the defined area were required in 1929-30 to market their eggs through authorised agents, of whom there were 14 operating during the year. Exemptions were granted to approximately 4,540 poultry farmers who were allowed to supply the whole or part of their eggs for local trade and private contracts. In the case of exemptions, monthly declarations are required that eggs have not been sold at prices below those fixed by the board. As from 1st July, 1930, the system of authorised agents was discontinued and all eggs (except those exempt) were required to be consigned to the Egg Board's floor and exempt producers were licensed as "producer agents."

The board's operations in 1929-30 were financed by a levy on eggs distributed, the charge being 1d. per dozen, of which approximately one-tenth was absorbed in administration and nine-tenths for equalisation purposes. This charge was continued in 1930-31, and as from the date that eggs were handled on the central floor by the Egg Board a commission of 7 per cent. of selling price was charged to cover cost of distribution and selling.

Particulars of the operations of the board during both years are as follow:—

Heading.	Year ended 30th June.	
	1930.	1931.
Eggs under Board's Administration doz.	14,232,310	14,477,559
Comprising—		
Handled on Board's Floor or by authorised agents doz.	8,961,946	8,804,605
Sold by exempt producers or producer's agents doz.	5,270,364	5,672,954
Pool deductions received at 1d. per doz.... .. £	50,016 (a)	60,323
Gross amount realised for sale of eggs handled on {	Total £	
Board's floor or by authorised agents {	683,946	504,502
Average per doz.	1s. 6-31d.	1s. 3-06d.
Eggs exported oversea {	dozen	
Net price per doz.	1,644,510	2,430,390
Sydney basis	1s. 1-73d.	1s. 0-13d. (b)
Costs (Sydney-London) per doz.	7-28d.	6-61d.

(a) Levy discontinued as at 31st March, 1930. (b) Including exchange premiums (between 6 and 8 per cent.).

The operations of the Board, as pointed out above, do not cover the whole of the eggs of New South Wales.

BEE-KEEPING.

The bee-keeping industry is at the present time of small importance, and is generally conducted as an adjunct to other rural occupations. Good table honey is obtained from the flora of native eucalypts of many varieties.

Details of special legislation regarding apiculture were published at page 655 in the Year Book of 1918. Frame hives are in general use, box hives being specifically prohibited.

The particulars stated below represent the activities on holdings of 1 acre and upwards, but as many hives are maintained on smaller areas, from which no information is collected, the figures quoted are considerably below the actual numbers or quantities.

The statistics quoted for 1929-30 represent the details of 1,133 holdings, on which bee hives were kept.

The production of honey and of beeswax varies considerably from year to year, as shown in the following table which relates to production on holdings 1 acre or more in extent, and is therefore exclusive of a considerable section of the industry. The quantity of honey sold under the administration of the Honey Marketing Board in the year ended 31st October, 1930, was 2,940,000 lb.

Season.	Bee Hives.			Honey.	Average Yield of Honey per Productive Hive.	Beeswax.
	Productive.	Un-productive.	Total.			
	No.	No.	No.	lb.	lb.	lb.
1910-11	55,958	14,308	70,266	2,765,618	49.4	72,617
1920-21	28,041	6,387	34,428	1,443,377	51.5	23,320
1921-22	34,129	7,369	41,498	2,989,074	87.6	28,385
1922-23	26,855	11,549	38,404	1,239,080	46.1	28,442
1923-24	19,987	11,774	31,761	590,980	29.6	12,703
1924-25	34,692	5,431	40,123	3,090,150	89.1	40,108
1925-26	36,901	4,527	41,428	2,235,095	60.6	38,271
1926-27	31,310	7,732	39,042	1,522,540	48.6	22,636
1927-28	26,009	11,096	37,105	1,154,201	44.4	17,139
1928-29	32,444	8,711	41,155	2,354,845	72.6	30,064
1929-30	32,420	10,860	43,280	2,101,619	64.8	35,493

The yield per productive hive improved considerably as a result of the enactment of the Apiaries Acts in 1916 and 1917, but it is subject to marked fluctuations according to seasonal conditions. Endeavour is being made to obtain returns of apiarists whose holdings being less than 1 acre in extent are excluded from the operation of the Census Act.

In 1929-30 the estimated value of the recorded production from bees was £44,000, the quantity of production in each division being as follows:—

Division.				Honey.	Beeswax.
				lb.	lb.
Coastal	...	...	...	535,355	17,172
Tableland	...	...	...	1,074,800	11,409
Western Slopes	...	...	...	453,230	6,205
Central Plains, Riverina, and Western Division.	...	...	...	38,234	707
Total	...	...	...	2,101,619	35,493

Marketing of Honey.

Under the Marketing of Primary Products Act, 1927, a poll of apiarists was taken on 11th February, 1929, as to the advisability of establishing a board to control the marketing of honey.

A roll of apiarists was prepared, and at a ballot 92.5 per cent. of these recorded their votes, 70 per cent. favouring the proposal.

A board comprising three elected representatives of the apiarists and two nominated members held its first meeting in May, 1929. The operations of the Board commenced on 1st November, 1929, when the wholesale price of honey was fixed, nine authorised selling agents were appointed and all producers were registered. A levy of 5 per cent. was imposed on all sales in order to provide finance for the Board. During the year ended 31st October, 1930, the quantity of honey sold through authorised agents in Sydney was approximately 1,872,000 lb., besides 1,068,000 lb. sold direct by beekeepers. The prices fixed by the Board for sales by beekeepers to the trade were per lb. of honey:—

Date.	Choicest.	Good.	Medium.
1 Nov., 1929	d. 6	d. 5	d. 4
— Feb., 1930	6½	5½	4½
27 May, 1930	6	5	4
9 Sept., 1930	5	4½	3½

VALUE OF DAIRY AND FARMYARD PRODUCTION.

It is evident from the foregoing that the dairying and farmyard industries are important factors in the rural production of New South Wales. The value of production in 1929-30 amounted to £14,796,000, or £5 19s. 5d. per head of population. The dairying industry yielded £10,422,000; pigs, £1,114,000; poultry, £3,216,000; and bees, £44,000. The value of production in each year since 1911 was as follows:—

Year.	Milk for Butter.	Milk for Cheese.	Milk (not used for Butter or Cheese).	Milch Cows.	Pigs.	Poultry and Eggs.	Bees.	Total.
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
	£	£	£	£	£	£	£	£
1911	3,631	129	619	389	447	1,280	39	6,534
1912	3,895	168	750	406	539	1,401	33	7,192
1913	3,450	170	950	385	500	1,578	30	7,063
1914-15	4,038	170	962	523	533	1,597	18	7,846
1915-16	3,198	167	1,084	419	605	2,144	32	7,649
1916-17	4,740	227	1,059	657	795	1,908	33	9,419
1917-18	4,954	250	1,618	668	990	2,082	73	10,635
1918-19	4,537	204	1,949	709	1,153	2,501	20	11,073
1919-20	4,712	278	2,132	721	1,121	2,814	15	11,793
1920-21	3,411	306	2,751	603	1,130	3,196	50	16,447
1921-22	5,800	228	2,359	899	925	2,650	53	12,914
1922-23	5,805	193	2,553	1,136	976	2,750	22	13,445
1923-24	5,027	213	2,604	1,113	1,037	2,321	12	12,327
1924-25	6,342	197	3,039	1,005	1,107	2,591	55	14,336
1925-26	7,045	233	2,386	430	1,304	3,277	37	14,712
1926-27	6,478	227	2,446	473	1,323	3,617	27	14,591
1927-28	6,722	248	2,714	600	1,237	3,728	24	15,273
1928-29	6,779	228	2,701	774	1,237	3,086	44	14,849
1929-30	6,842	234	2,650	696	1,114	3,216	44	14,796

PRICES OF FARMYARD PRODUCTS.

The average wholesale prices obtained in the Sydney markets for the principal kinds of dairy and poultry farm produce in 1914 and during the last six years are shown in the following table. The average quoted for the year represents the mean of the prices ruling each month, and does not take into account the quantity sold during the month.

Dairy and Poultry Farm Produce.	1914.	1925.	1926.	1927.	1928.	1929.	1930.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Milk ... ..gal.	0 11 $\frac{3}{4}$	1 6 $\frac{3}{4}$	1 8 $\frac{1}{2}$	1 10	1 10	1 8 $\frac{1}{4}$	1 6 $\frac{1}{4}$
Butter ... ..lb.	0 11 $\frac{1}{2}$	1 5 $\frac{1}{4}$	1 7 $\frac{3}{4}$	1 10	1 7 $\frac{3}{4}$	1 9 $\frac{3}{4}$	1 6 $\frac{1}{4}$
Cheese"	0 7 $\frac{1}{2}$	0 10 $\frac{1}{4}$	0 11 $\frac{1}{2}$	0 11 $\frac{1}{2}$	0 10 $\frac{1}{4}$	0 11 $\frac{1}{2}$	0 9 $\frac{3}{4}$
Bacon (sides) ... "	0 9 $\frac{1}{2}$	1 0 $\frac{1}{2}$	1 0 $\frac{3}{4}$	1 1 $\frac{3}{4}$	1 0 $\frac{1}{4}$	1 1 $\frac{1}{4}$	0 11
Eggs (new laid) doz.	1 4 $\frac{1}{2}$	1 10 $\frac{1}{2}$	1 11	1 8	1 11 $\frac{1}{4}$	1 10 $\frac{1}{4}$	1 7 $\frac{1}{2}$
Poultry—							
Fowls—							
(Roosters) ...pr.	5 5	9 3	10 3	10 5	8 11	8 11	8 2
Ducks—							
(English) ... "	4 5	8 0	*	11 3	8 8	8 4	7 2
Geese"	6 8	10 0	9 9	11 2	11 9	11 2	11 1
Turkeys (cocks) "	11 2	30 3	39 3	39 6	30 10	30 6	26 7
Bee produce—							
Honey ... ..lb.	0 3 $\frac{3}{4}$	0 4	0 4 $\frac{1}{4}$	0 5	0 5	0 4 $\frac{1}{2}$	0 5
Wax"	1 2 $\frac{1}{2}$	1 4 $\frac{1}{2}$	1 8	1 9	1 9 $\frac{1}{2}$	1 9	1 7

* No quotations.

The relative variations in the Sydney wholesale prices of eight principal dairy and farmyard products, viz., butter, cheese, bacon, ham, eggs, condensed milk, honey and lard are shown in the following table of index numbers, in which the prices of 1911 are taken as the base and represented by 1,000:—

Year.	Index Number.	Year.	Index Number.	Year.	Index Number.
1901	963	1917	1,440	1925	1,612
1906	953	1918	1,487	1926	1,760
1911	1,000	1919	1,718	1927	1,831
1912	1,133	1920	2,236	1928	1,763
1913	1,043	1921	2,020	1929	1,842
1914	1,128	1922	1,735	1930	1,571
1915	1,349	1923	1,939	1931	*1,442
1916	1,380	1924	1,671		

* To June.

Although the average prices of dairy produce have remained very much above the pre-war level the relative increases have been considerably less than those of non-rural products, the index for which on the above basis was 1783 in the first half of 1931. A comparative table showing the relative increases in each of eight groups of commodities is published in the chapter "Food and Prices" of this Year Book.

FUR FARMING RABBITS.

At the beginning of the year 1928 the Minister of Agriculture appointed a committee to investigate the possibilities of farming with fur-bearing rabbits within the State of New South Wales.

After consideration of this committee's report, sanction was given to the keeping of fur-bearing rabbits in captivity within the counties of Cumberland and Camden under properly safeguarded conditions in terms of the Pastures Protection Act.

Annual licenses are issued after the rabbit-proof enclosure has been passed as satisfactory and a prescribed fee paid. The safekeeping of the rabbits and licensing of the owner of the premises is under the control of the Secretary, Stock and Brands Branch, Department of Agriculture.

The classes of rabbits concerned are Angora, Chinchilla, and similar types of pelt rabbits. The Angora, a long-woolled white rabbit, is clipped and the wool made into various classes of clothing in a process somewhat similar to the treatment of sheep's wool. Rabbits of the Chinchilla type are usually grown for their pelts.

The first license was issued on 1st September, 1929, and the subsequent growth of the industry is shown in the following summary of commercial licenses current as at the dates shown:—

Size of Rabbit Flock for which License was issued.	31st Dec., 1929.	31st Dec., 1930.	12th June, 1931.
Up to			
25	29	69	85
100	17	50	73
200	1	2	10
300	.....	.....	5
400	2	3	.....
500 and over	1	1	3
Total licenses	50	125	176
Total number of Rabbits for which Licenses were issued	5,175	9,975	20,310

FORESTRY.

THE forest lands of the State containing timber of commercial value consist of about 11 million acres, of which about 8 million acres are Crown lands. Nearly 7 million acres of State lands have been either dedicated or reserved for the preservation and growth of timber.

The total forest area, although not large, contains a great variety of useful timbers, which in hardwoods number about twenty different kinds of good commercial value, including such renowned constructional woods as ironbark, tallow-wood, and turpentine. In other timbers there are about twenty-five varieties, including such valuable timbers as cedar, beech, pine, and teak. It is estimated that, approximately, five-sixths of the timber supply consists of mixed hardwoods and one-sixth of soft and brush woods.

An account of the system of forestry administration in New South Wales was published on pages 669 and 670 of the Year Book for 1928-29.

State Forests.

As at 31st December, 1930, a total area of 5,258,290 acres of Crown lands has been dedicated permanently as State forests, and 1,543,235 acres had been set apart tentatively as timber reserves. Included in the State forests and a number of State forest plantations of an aggregate area of 23,367 acres.

Particulars relating to the State forests and plantations and timber reserves as at the end of each of the last five years are shown below:—

At 30th June.	State Forests.		State Plantations.	Timber Reserves.	
	Number.	Area.	Area.	Number.	Area.
		acres.	acres.		acres.
1926	731	5,230,601	11,214	563	1,653,817
1927	725	5,277,739	13,440	576	1,595,726
1928*	726	5,315,426	16,698	587	1,541,346
1929*	721	5,255,635	19,780	590	1,564,858
1930*	727	5,258,290	23,367	588	1,543,235

* 31st December.

The timber reserves are reviewed from time to time, and arrangements are made to dedicate suitable reserves as State forests, in order that they may be reserved permanently for forestry purposes and the reservation of unsuitable areas is revoked to make them available for other uses.

Location of Forest Lands and Main Forest Types.

A description of the timber zones of New South Wales and of the principal types of timber to be found in them was published on pages 671 and 672 of the Year Book for 1928-29.

State Forest Nurseries and Plantations.

A State Forest Nursery is maintained at Gosford for the propagation of plants of commercial types; the planted area is about 42 acres. Exchanges of seeds and plants are made with similar institutions in various parts of the world. Branch nurseries of various dimensions have been established in practically every forestry district in the State. At Tuncurry on the

North Coast, Mila on the Southern Tableland, and Mount Mitchell, near Glen Innes, on the Northern Tableland, pine plantations are worked by prison labour.

To supplement the supply of softwood in the State, afforestation should be conducted on a more extensive scale than at present, and it has been estimated that it is necessary to plant 5,000 acres per year for thirty years in order to assure adequate supplies. Preliminary surveys in the southern and central highlands disclose an area of 200,000 acres suitable for the growth of softwoods. Similar surveys are proceeding in the northern highlands.

In the forests which have been placed under intensive management the Forestry Commission undertakes the conversion of many classes of forest produce in order to ensure that all saleable timber will be removed promptly from each area to make way for young growth.

Production and Consumption of Timber.

The following summary shows the number of timber mills in operation, the number of employees, and the output of sawn timber in each of the past five years:—

Year ended 30th June.	Mills Operated.	Persons Employed.	Output of Sawn Timber.					
			Native.		Imported.		Total.	Value.
			Soft- wood.	Hard- wood.	Soft- wood.	Hard- wood.		
			Thousand super feet.					
1926	532	5,645	55,875	114,116	2,692	3,274	175,957	£000 2,280
1927	501	5,391	54,685	108,206	2,393	3,351	168,635	2,209
1928	468	4,784	48,716	97,859	1,764	1,123	149,462	1,877
1929	477	4,639	41,637	94,414	3,197	282	139,530	1,750
1930	433	3,896	37,464	81,556	5,941	.....	124,961	1,522

The activity in the industry was severely affected by the general depression in 1929-30, but there had been a steady diminution in output during each of the preceding four years.

The following table shows the annual gross consumption of native and imported timbers as estimated by the Forestry Commission for successive years since 1920:—

Year ended 30th June.	Estimated Gross Consumption of Timber.					
	Softwood.	Hardwood.	Fuel.	Native.	Imported.†	Grand Total.
	(000 omitted.)					
	cubic feet.	cubic feet.	cubic feet.	cubic feet.	cubic feet.	cubic feet.
1920	5,900	14,872	5,731	26,503	7,220	33,723
1921	5,973	17,262	6,172	29,407	8,055	37,462
1922	5,687	16,448	7,610	29,745	9,185	38,930
1923	5,911	16,765	7,800	30,476	11,923	42,399
1924	6,615	19,255	6,685	32,555	14,898	47,453
1925	6,526	20,231	18,055	44,812	14,553	59,365
1926	7,136	19,234	12,421	38,791	18,549	57,340
1927	7,584	21,372	11,000	39,956	17,127	57,083
1928*	6,874	21,259	10,938	39,071	15,217	54,288
1929*	7,479	19,866	12,700	40,045	19,753	59,798
1930*	3,735	14,755	11,226	29,716	7,871	37,587

* Year ended 31st December.

† Oversea.

Most of the imported timber consists of soft woods. Until towards the end of 1929 there was remarkable activity in the building trade, and the consumption of timber increased rapidly. The year 1930 was affected by the general depression, which caused severe curtailment in all structural activities.

Value of Production from Forestry.

The following table shows the value of forestry production as at the place of production in New South Wales at intervals since the year 1901:—

Year ended 30th June.	Value.	Year ended 30th June.	Value.
	£		£
1901*	554,000	1924	1,659,000
1906*	1,008,000	1925	1,647,000
1911*	998,000	1926	1,871,000
1916	1,045,000	1927	1,862,000
1921	1,656,000	1928	1,715,000
1922	1,585,000	1929	1,601,000
1923	1,544,000	1930	1,496,000

* Year ended 31st December.

Imports and Exports of Timber.

The greater part of the softwood used in New South Wales has been drawn for many years from foreign sources of supply, among which New Zealand, the United States of America, Canada, Norway, and Sweden are most important. Steps are being taken, however, to plant extensive areas in New South Wales with high-class American and other softwoods in order to render the State independent of imported timbers.

In the following table particulars are shown regarding the import and export of timber to and from New South Wales at intervals since 1901. The large import reflects a local demand for softwoods. It is not probable that the export trade will assume large proportions, though the forests of the State abound in high-class hardwoods.

Year.	Imports Oversea to New South Wales.				Exports of Australian Produce Oversea from New South Wales.			
	Undressed.		Other.	Total Value.	Undressed.		Other.	Total Value
	Quantity.	Value.			Quantity.	Value.		
	sup. feet. (000)	£	£	£	sup. feet. (000)	£	£	£
1901	68,369	322,642	137,123	459,765	10,386	66,346	58,664	125,010
1906	84,772	444,563	81,850	526,413	29,322	325,805	9,361	335,166
1911	164,380	955,344	209,028	1,164,372	28,398	250,990	17,949	268,939
1915-16	119,232	814,102	74,305	888,407	15,099	144,486	10,965	155,451
1920-21	93,303	1,904,064	174,910	2,078,974	23,202	447,653	17,072	464,725
1925-26	194,393	1,964,596	463,610	2,428,206	23,486	390,439	6,689	397,128
1926-27	173,261	1,904,040	393,983	2,298,023	18,282	301,671	5,349	307,020
1927-28	229,977	2,207,103	438,234	2,645,337	16,577	283,053	11,163	294,216
1928-29	187,009	1,919,846	301,343	2,221,189	13,989	241,504	7,408	248,912
1929-30	177,635	1,718,015	179,639	1,897,654	15,898	270,019	8,440	278,459
1930-31	47,825	294,029	14,428	308,457	16,384	228,561	13,431	241,992

In addition there is a considerable interstate movement of timber by sea, of which complete records are not available. The quantity of rough and

sawn timber recorded by the Sydney Harbour Trust as being imported at Sydney from other Australian States in 1928-29 was 10,116,961 super. feet, in 1929-30, 9,716,533 super. feet, and, in 1930-31, 3,245,050 super. feet.

Forestry Licenses and Permits.

Licenses and permits are granted for the purposes of obtaining timber and fuel, grazing, sawmilling, ringbarking, and for the occupation of land. The fees for licenses and permits are small, but considerable revenue is gained from royalties on timber, agistment, and occupation fees, etc.

The revenue collected by the State from timber licenses and from royalty on timber during various years since 1911 is shown in the following table:—

Year ended 30th June.	Sales, Rents, Fees, etc.	Royalty on Timber.	Total.	Year ended 31st Dec.	Sales, Rents, Fees, etc.	Royalty on Timber.	Total.
	£	£	£		£	£	£
1911*	11,153	79,165	90,318	1928	80,183	146,484	226,667
1916	8,701	59,406	68,107	1929	69,754	140,989	210,743
1921	76,141	114,601	190,742	1930	45,370	83,426	128,796

* Year ended 31st December.

Included in the total for 1930 are sales of converted and confiscated material, £14,645, and rents for occupation permits, forest leases, etc., £21,339.

The experience of Europe and America has shown that well-directed expenditure by the Government in afforestation and re-afforestation is directly reproductive, and forest improvement in New South Wales, where timber grows more rapidly and to larger size, should yield even more favourable results.

Particulars of expenditure by the Forestry Department during the last five years are shown in the following table:—

Head of Expenditure.	Year ended 30th June.		Year ended 31st December.		
	1926.	1927.	1928.	1929.	1930.
	£	£	£	£	£
Demarcation	6,912	7,390	5,787	4,178	3,736
Forest Roads and Fire-breaks	3,899	13,918	14,086	22,765	39,540
Sylvicultural Works	34,126	45,996	40,116	39,561	37,876
Permanent Improvements	44,698	18,677	13,528	12,902	17,600
Conversion Work	4,156	5,415	29,872	19,993	7,428
Administrative, Research and Other ...	84,699	115,703	109,469	94,670	77,540
Total... ..	178,490	207,099	212,858	194,069	*183,720

* Excluding £19,822 disbursed as Unemployment Relief.

Persons Employed in Timber Industry.

It has been estimated by the Forestry Department that 8,110 persons were employed in the timber industry during the year 1930, viz., 2,144 in felling and cutting; 1,621 in hauling timber to the mills; 2,334 in milling; and 2,011 in other occupations. These figures include persons partially employed, viz., 1,380 in felling and cutting and 1,040 in hauling timber.

FISHERIES.

A BRIEF statement of the nature of the fisheries of New South Wales was published on page 676 of the Year Book for 1928-29.

CONTROL OF THE FISHERIES.

Under the Fisheries Act, 1902, control of the fisheries of the State, previously administered by a Commission, was placed in the hands of a Board to supervise the industry, to carry out investigations likely to be of service, and to ensure observance of the regulations in regard to the dimensions of nets, closure of inland and tidal waters, net-fishing, and other such matters. Under an amending Act, in 1910, the Fisheries Board was dissolved and its powers vested in a Minister of the Crown, the Chief Secretary being charged with the administration of the Act. In 1928 a Director of State Fisheries was appointed.

Fishing Licenses.

Persons catching fish for sale in tidal or inland waters must be licensed, also boats used for this purpose, the annual fee being 5s., which is reduced to half that amount if the license is issued after 30th June and before 1st December.

The number of licenses granted to fishermen during the year 1930 was 3,797, and licenses were issued in respect of 1,928 fishing boats.

Oyster Leases.

For the purposes of oyster-culture, tidal Crown lands below an approximate high-water mark may be leased at yearly rentals, determined by the Minister. The areas are classified as average, special, or inferior lands.

The leases of average lands are for fifteen years, but may be renewed for a like period. An area upon which an aggregate rental of less than £5 per annum is payable may not be leased to any person unless he is already an oyster lessee.

Leases of special lands are granted for areas of special value after the land has been offered by auction or tender, and are subject to the same conditions as leases of average lands, but need not be confined to areas along the approximate high-water mark.

Leases of inferior lands are granted for a term not exceeding ten years, with the right of renewal for a further term of five years.

During the year 1930 applications for leases numbered 315, representing 66,533 yards of foreshore and 229 acres of off-shore leases. At the end of the year the existing leases numbered 5,142. The length of foreshores held was 1,148,084 yards, and there were deep-water leases to the extent of 3,187 acres.

PRODUCTION FROM FISHERIES.

The principal items of fisheries production since 1921 are shown in the following table:—

Year Ended 31st December.	Fish.			Oysters.	Prawns.
	Trawled.	Captured Otherwise.	Total.		
	lb.	lb.	lb.	bags.*	lb.
1921	5,585,000	16,415,000†	22,000,000‡	21,628	474,700
1922	5,405,000	14,595,000‡	20,000,000‡	24,811	340,698
1923	†	†	17,641,000	27,970	300,165
1924	5,302,000	13,265,170	18,567,170	28,380	596,241
1925	7,694,757	12,645,598	20,340,355	28,546	1,002,926
1926	6,681,251	12,996,318	19,677,569	31,876	1,042,774
1927	8,096,420	12,755,942	20,852,362	30,303	1,083,324
1928	11,682,450	13,855,165	25,537,615	29,180	1,471,186
1929	14,342,054	13,519,308	27,861,362	31,965	1,119,044
1930	14,219,937	9,957,611	24,177,548	25,472	1,040,387

* 3 bushels.

† Not available.

‡ Approximate.

Until 1923 fish were trawled by a State enterprise which, that year, closed down and operations commenced by private individuals. Activities were steadily expanded and between 1924 and 1929 the production of trawled fish was almost trebled. Production by inshore fishermen at first declined slightly then recovered and the annual production of fish increased by over 10,000,000 lb. or 58 per cent. in the six years 1923 to 1929. General industrial depression caused a reduced demand for fish in 1930. Between 1921 and 1929 the average consumption of fresh fish increased from 13.7 lb. to 16.2 lb. per head of population. These quantities are exclusive of fish caught other than commercially.

Most of the fish referred to above is consumed in the Metropolitan and Newcastle districts, only 1,315,076 lb. having been consigned to the country districts from the metropolitan market in 1930. The Director of Fisheries has drawn attention to the possibility of expanding the country market for fish.

During 1929 the number of deep-sea trawlers was increased from 11 to 18, but, as the existing market was not able to absorb the resultant catch in 1930 and prices declined, the Steam Trawlers' Association reduced the number of vessels operating from 18 in January, when the total trawl was 17,181 baskets, to 14 in August, 1930, the total trawl for which month was 13,521 baskets.

The most important kinds of fish marketed are flathead, snapper, bream, blackfish, whiting, mullet, jewfish, garfish, and Murray cod—a freshwater fish; tailer, trevally, leather-jacket, and gurnard are readily saleable in the local markets. Mullet was formerly the principal product of the inshore

fisheries, but the demand for it has decreased because it has been replaced in the metropolitan market by trawled flathead, and provision has not been made for an expansion of the trade in suburban and country districts.

Fish.—The bulk of the inshore supplies is obtained in the estuaries and lakes on the northern part of the coast-line. The approximate quantities of fresh fish obtained from each of the principal fishing grounds of the State are indicated below:—

	1930.		1930.
	lb.		lb.
Clarence River	1,158,208	Botany Bay	137,863
Wallis Lake	1,103,187	Richmond River	82,795
Port Stephens	533,364	Hawkesbury River	419,605
Lake Illawarra	256,003	Port Jackson	48,387
Tuggerah Lakes	678,249	Hastings River	146,831
Lake Macquarie	281,886	Macleay River	289,659
Camden Haven	389,544	St. George's Basin	184,250
Manning River	473,975	Wollongong	98,374
Tweed River	251,516	Shoalhaven River	253,158
Jervis Bay	121,689	Byron Bay	110,582

Crayfish.—The number of marine crayfish (*Palinurus*) marketed during 1930 was 207,444. The number captured was very much greater, but many were lost by death before marketing. The principal source of supply was the northern crayfish grounds, from Newcastle to Port Macquarie. From Port Stephens, Wallis Lake and Manning River over 85,000 were sent to Market.

Prawns.—A quantity of approximately 1,040,387 lb. of marine prawns (*Penaeus*) was marketed during 1930, and about 14,992 lb. were condemned. These figures do not include prawns sold for bait.

Crabs.—About 1,650 dozen of crabs were marketed. They comprised several species of swimming crabs, notably the Blue (*Lupa*) and the Mangrove (*Scylla*).

Oysters.—During the year 1930 the oyster production of the State amounted to 25,472 bags, each of 3 bushel capacity, valued at £82,784. These consisted of Rock oyster (*Ostrea cucullata*). This output was principally the result of artificial cultivation.

Oversea Trade in Fish.

A very considerable proportion of the local requirements of fish are imported from countries outside Australia, the value of fish so imported during the year ended June, 1931, being £302,755, including 5,013,460 lb. of tinned fish, valued at £203,938. The value of fish exported oversea was £9,515, including tinned fish to the value of £7,478.

Value of Fisheries Production.

The value of the production from fisheries of New South Wales, as recorded during the year ended 30th June, 1930, was approximately £717,000, including fresh fish, £535,000, oysters, crayfish, prawns, etc., £182,000.

The value of production is estimated as at the place of production and is exclusive of fish condemned, of fish sold in fishing and other centres and not recorded, or used for fertiliser and oil, and of the value of molluscs other than oysters.

The following table shows the value of production from fisheries since the year 1918-19:—

Year ended 30th June.	Value. (000 omitted.)	Year ended 30th June.	Value. (000 omitted.)
	£		£
1919	335	1925	540
1920	470	1926	583
1921	491	1927	614
1922	538	1928	671
1923	491	1929	741
1924	520	1930	717

FISH PRESERVING.

Many fishes specially suitable for treatment by canning, smoking, or salting are obtainable in the waters along the coast of New South Wales, but irregularity of supplies and climatic disadvantages have militated against the success of canning factories.

FISH CULTURE AND ACCLIMATISATION.

Acclimatisation of trout has met with remarkable success in the State—trout up to 8 and 10 lb. are not uncommonly captured. Every suitable stream, viz., practically all above an altitude of 2,500 feet, is stocked with trout.

During the last few years liberations of trout have increased enormously; prior to 1914 the total released was 66,500, but in 1930 1,361,322 trout were liberated.

RURAL SETTLEMENT.

A BRIEF resume of the spread of settlement in New South Wales and of the development of the problem of rural settlement was published at page 679 of the Year Book for 1928-29.

RURAL HOLDINGS.

The land of New South Wales which is occupied in rural holdings consists either of alienated lands, lands in course of alienation, leased Crown lands, or various combinations of these tenures, while a considerable area remains as Crown reserves. At 30th June, 1930, the number of agricultural and pastoral holdings of 1 acre or more in extent was 76,158, including 1,419 unoccupied or not used for agricultural or pastoral purposes at that date, and 1,776 used only incidentally for such purposes. These holdings embraced a total area of 172,536,000 acres.

The area of land neither alienated nor leased from the Crown does not represent the area of unoccupied land available for settlement. It includes the land unfit for occupation of any kind—estimated to be approximately 5,000,000 acres in extent; land embraced in State forests and not otherwise occupied; unoccupied reserves for necessary public purposes, such as commons, travelling stock and water reserves, roadways, railway enclosures, and unoccupied land covered by water or too rugged or arid for occupation. Such lands are situated mainly in the coastal and tableland divisions, but smaller proportions are found in all divisions.

Use of terms "Alienated Land" and "Holding."

In collecting statistical returns relating to agricultural and pastoral holdings, the term "alienated land" is intended to relate to lands absolutely alienated, lands in course of alienation, homestead selections and homestead farms embraced within rural holdings 1 acre or more in extent. These tenures include practically the whole of the land alienated and virtually alienated. The term "alienated land" used throughout this chapter refers to the area so returned by individual landholders, and it does not, therefore, correspond to lands absolutely alienated for which deeds of purchase have been issued. This area has been shown as land absolutely alienated in the chapter entitled "Land Legislation and Settlement," which follows.

The term "holding" as used in this section and the sections dealing with rural industries signifies, in general and unless the context otherwise requires, an area of land worked as an individual unit. In some cases, two or more such "holdings" are in the same ownership, but usually where contiguous or closely neighbouring "holdings" are within the same ownership and are worked virtually as one they are classified as one holding.

Purposes for which Holdings are Used.

The problem of rural development in New South Wales relates largely to the task of placing additional permanent settlers on the land as productive units of the population. In addition to human factors, this problem is complicated by the variations of seasons and of markets, which determine largely the profitability of rural pursuits. An approximate classification of the main purposes for which rural holdings of 1 acre and upwards were

used is available for each year since 1908, and provides the following comparison, which shows at intervals the distribution of rural settlement according to purposes:—

Main purpose for which holdings are used.	Number of Holdings.						
	1908.	1911-12.	1915-16.	1925-26.	1927-28.	1928-29.*	1929-30.
Agriculture only	7,244	6,814	10,856	11,435	10,319	10,153	10,188
Dairying only	3,575	3,157	6,074	9,766	10,118	12,985†	13,294
Grazing only	21,874	22,011	23,497	25,428	24,263	26,044†	25,925
Agriculture and Dairying ...	8,377	8,258	5,641	5,624	5,375	2,942†	3,170
Agriculture and Grazing ...	18,733	21,969	20,895	18,084	19,472	17,353†	16,206
Dairying and Grazing ...	1,818	2,099	1,402	1,794	1,516	1,722†	1,607
Agriculture, Dairying, and Grazing	3,312	4,362	1,537	1,734	1,755	1,189†	1,034
Poultry, Pig, or Bee Farming	529	879	1,256	1,526	1,447	1,484	1,539
Total Holdings of 1 acre and upwards used mainly for Agricultural and Pastoral purposes	65,462	69,549	71,158	75,391	74,265	73,872	72,963

* Basis of classification amended in this and subsequent years.

In addition to the above, a considerable number of small holdings—usually less than 30 acres in extent—were used partly for agricultural and pastoral purposes, but mainly for residential and other purposes, or were unoccupied at the time of collecting the returns. The above table does not indicate the actual number of settlers occupying the land—because some holdings are held conjointly, and a number of landholders own more than one holding.

The decrease in the total number of holdings in 1929-30 was largely due to the elimination of small areas formerly classified as grazing areas in the coastal districts. The decrease in the number of holdings used for agriculture and grazing combined was due mainly to diminution in the number of farms on which wheat was grown in 1929-30.

Since 1928-29 the basis of classification has been amended so that holdings on which agricultural operations were entirely or almost entirely confined to the raising of produce to feed sheep, cattle or pigs on the holding were classified under the headings "grazing only" or "dairying only" in order that the grouping might reflect more accurately the commercial purpose of the landholder. Since 1921-22 the purpose "dairying" alone or with agriculture or grazing or both has been attributed to all holdings which are registered dairies. The decline in the number of holdings devoted to agriculture only is co-incidental with a decrease in the number of holdings cropping less than 200 acres for wheat. Many holdings besides those classified as devoted mainly to poultry, pig and bee farming conduct these activities as a subsidiary pursuit. In 1929-30 there were 2,033 holdings 1 acre or more in extent which carried 150 or more poultry for commercial purposes.

The area of land utilised for the principal forms of rural industry during the year 1929-30 were as shown below:—

Divisions.	Agriculture.	Dairying.	Grazing.	Other Purposes.	Total.
	acres.	acres.	acres.	acres.	acres.
Coastal	279,996	4,212,355	8,052,731	405,412	12,950,494
Tablelands	576,180	330,702	18,875,441	137,494	19,919,817
Western Slopes	4,204,947	208,522	20,172,007	118,195	24,703,671
Plains	3,846,748	54,438	33,067,333	105,593	37,074,112
Western Division	50,393	2,335	77,664,925	169,935	77,887,588
Total, 1929-30	8,958,264	4,808,352	157,832,437	936,629	172,535,682
„ 1928-29	8,789,049	4,565,002	159,087,741	1,062,130	173,503,922

Climatic and meteorological circumstances play a considerable part in determining the uses to which land is put in the various districts. The distribution of rainfall in relation to the geographical distribution of rural industries in New South Wales was shown in a map facing page 728 of the Year Book for 1924.

Size of Holdings.

Information regarding the size of rural holdings is available in two distinct classifications, one in accordance with the size of the alienated area only, excluding the Crown lands attached thereto, and the other in accordance with the total area of alienated and Crown land contained in each holding.

A table showing the number and size of holdings classified according to the total area of alienated and Crown lands combined as at 30th June, 1927, was published on page 683 of the Year Book for 1928-29. These tabulations are available in greater detail in the Statistical Register of New South Wales.

The following tabulation shows particulars of alienated holdings in New South Wales classified in area series as at 30th June, 1930:—

Area of Alienated Land in Holding.	Number of Alienated Holdings.	Aggregate Area of Alienated Land.	Unimproved Capital Value of Alienated Land.	Improved Capital Value of Alienated Land.
acres.		acres.	£	£
1— 30... ..	8,720	117,889	2,663,890	7,883,000
31— 320... ..	27,214	3,949,300	17,991,990	51,933,850
321— 640... ..	11,309	5,424,505	12,171,480	36,080,920
641— 1,280... ..	10,728	9,966,089	17,494,840	53,499,740
1,281— 2,000... ..	4,950	7,920,484	12,199,350	36,860,880
2,001— 3,000... ..	3,076	7,551,238	10,741,030	32,361,050
3,001— 4,000... ..	1,388	4,809,014	6,724,710	19,556,940
4,001— 5,000... ..	827	3,703,352	5,036,830	14,463,000
5,001— 7,500... ..	1,090	6,537,676	9,058,630	25,069,930
7,501— 10,000... ..	426	3,686,300	5,025,120	13,884,190
10,001— 15,000... ..	391	4,733,911	6,828,120	17,838,340
15,001— 20,000... ..	184	3,152,876	4,253,000	11,141,710
20,001— 30,000... ..	152	3,652,936	4,821,990	12,545,250
30,001— 40,000... ..	56	1,920,960	2,290,140	5,425,490
40,001— 50,000... ..	27	1,188,455	1,520,170	3,399,940
50,001— 100,000... ..	40	2,784,987	2,929,130	6,633,350
100,001 and over	17	2,122,403	2,444,460	5,131,280
Total	70,595	73,231,375	124,203,880	353,708,860

(a) See explanation on page 806.

Similar data for each of the statistical divisions of New South Wales were published on pages 726 and 727 of the Statistical Register of New South Wales for 1929-30.

Number of Holdings and Average Area.

Statistics as to the number and average area of alienated holdings and of the number of large holdings, were published on pages 684 and 685 of the Year Book for 1928-29.

Tenure of Holdings.

The tenure of land-holdings in New South Wales is principally of two classes—freehold and leasehold from the Crown. Only a small proportion of the total area occupied (approximately 2 per cent.) is rented from private owners, although the area held on lease from the Crown is very large. Tenancy, as understood in older countries is, therefore, of small extent, 95.2 per cent. of the total alienated area being occupied by its owners.

The following table shows the area occupied in each division of New South Wales, according to the class of tenure as at 30th June, 1930. Owing to rearrangement of the divisions on the basis of Local Government areas in 1922-23, divisional comparisons cannot be made effectively with figures published prior to that year.

Division.	Area of Alienated* Holdings.			Crown Lands occupied as separate holdings or attached to alienated holdings.	Total Area in Holdings.
	Occupied by Owner.	Private Rented.	Total.		
	acres.	acres.	acres.	acres.	acres.
Coastal	8,721,679	1,174,777	9,896,456	3,054,038	12,950,494
Tableland... ..	13,047,423	639,152	14,286,575	5,033,242	19,919,817
Western Slopes	20,157,722	695,897	20,853,619	3,850,052	24,703,671
Central Plains and Riverina	25,731,372	12,896	26,674,368	10,399,744	37,074,112
Western	1,493,747	26,610	1,520,357	76,367,231	77,887,588
New South Wales	69,751,943	3,479,432	73,231,375	93,304,307	172,535,682

* See explanation, page 306.

Of the total area occupied, 41 per cent. was classed as freehold, although a considerable proportion of the total was in course of purchase from the Crown, and 59 per cent. was leased from the Crown. Over 76 per cent. of the Crown lands so leased were in the Western Division, and utilised almost exclusively for depasturing stock.

Slightly more than one-third of the privately rented alienated land is situated in the Coastal Division, where it amounts to nearly 9 per cent. of the total area occupied in holdings. These farms are used chiefly for dairying.

The proportions of the total area of the respective divisions occupied in holdings of various classes are shown in the following table:—

Division.	Area of Alienated* Holdings.			Crown Lands occupied as separate holdings or attached to alienated holdings.	Proportion of Total Area under Occupation.
	Occupied by Owner.	Private Rented.	Total.		
	per cent.	per cent.	per cent.	per cent.	per cent.
Coastal	39·14	5·27	44·41	13·70	58·11
Tableland... ..	52·80	2·47	55·27	21·80	77·07
Western Slopes	71·57	2·47	74·04	13·67	87·71
Central Plains and Riverina	62·13	2·28	64·41	25·12	89·53
Western	1·86	0·03	1·89	95·08	96·97
New South Wales	35·22	1·76	36·98	50·15	87·13

* See explanation, page 306.

Slightly more than 87 per cent. of the total area contained within the boundaries of the State is occupied in holdings of 1 acre and upwards, used for agricultural or pastoral purposes. The highest proportion of alienation, 74 per cent. of the area of the division, has taken place in the Western Slopes, and the lowest, 1.9 per cent., in the Western Division. But taking the total area of holdings, the Western Division shows the largest proportion of its area—97 per cent.—under occupation. The proportions are high also in the Central Plains and Riverina, 89.5 per cent., and in the Western Slopes, 87.7 per cent.

If reference be made to the table on page 683 of the Year Book for 1928-29 it will be seen that the proportion of lands used for agricultural and pastoral purposes in each division decreases as the intensity of settlement increases. At the same time it is apparent that the density of settlement bears an approximate relationship to physical configuration and average rainfall. While the greater intensity of settlement in the more easterly districts necessitates the allocation of larger proportions of land for public purposes, it is undeniable that a very considerable proportion of the remaining Crown land in the Eastern Division is so rugged or wooded as to be unfit or unprofitable for occupation. This is especially the case in the South Coast Division, which in parts is very mountainous, only 43 per cent. of the total area being occupied by rural holdings, as compared with 70 per cent. in the North Coast Division and 64 per cent. in the Hunter and Manning.

VALUE OF ALIENATED RURAL LANDS.

Information as to the improved and unimproved capital values of lands was first collected for statistical purposes in 1920-21. The particulars relate to the value, on a freehold basis, of lands absolutely alienated, in course of alienation, or held as homestead farms or homestead selections and used for agricultural and pastoral purposes.

The unimproved capital value was defined as being the amount which the land might be expected to realise if sold under such reasonable conditions as a *bona fide* seller would require, assuming that the actual improvements had not been made, and the improved capital value as the value of the land with all improvements and buildings thereon under similar conditions of sale. Where particulars of unimproved value are not available from owners, collectors are instructed to obtain them from the records of Shire Councils, so that the unimproved values quoted may be taken as representing local government assessments, except in the Western Division, where no shires exist.

Where valuations have been made by the Valuer-General it has been found that valuations formerly made for local government purposes were below actual values. In many cases the discrepancy was considerable, and in the aggregate the valuations of shires are probably under-estimated by more than 20 per cent. Since municipal lands are of comparatively small extent, and very few shires assess improved values, particulars of improved capital value were obtained from the owners. In the table which follows, then, the unimproved capital value represents in most cases the shire valuation, but the improved values are obtained from the owners' assessment of the value of the land and its improvements. It is not possible to deduce the value of the improvements from the figures.

The following table shows in divisions of the State (on the basis of Local Government areas) the distribution of alienated and Crown lands occupied

in holdings of one acre and upwards for agricultural and pastoral purposes, together with the total and average value of the alienated lands at 30th June, 1930:—

Division.	Alienated* Land in Occupation in Holdings of 1 acre and over.					Area of Crown Land.
	Area.	Unimproved Capital Value of Land.		Improved Capital Value.		
		Total.	Average per acre.	Total.	Average per acre.	
	Acres.	£	£	£	£	Acres.
<i>Coastal—</i>	000.	000.		000.		000.
North Coast ...	3,453	12,596	3·6	34,301	9·9	1,325
Hunter and Manning ...	4,217	9,746	2·3	28,889	6·8	1,118
Metropolitan ...	306	3,250	10·6	7,221	23·6	2
South Coast ...	1,920	4,695	2·4	12,818	6·7	609
Total ...	9,896	30,287	3·1	83,229	8·4	3,054
<i>Tablelands—</i>						
Northern ...	4,079	5,530	1·4	14,735	3·6	2,506
Central ...	6,058	9,492	1·6	31,017	5·1	1,580
Southern ...	4,150	5,268	1·3	17,008	4·1	1,547
Total ...	14,287	20,290	1·4	62,760	4·4	5,633
<i>Western Slopes—</i>						
North ...	6,110	10,729	1·8	25,039	4·1	2,066
Central ...	6,121	9,843	1·6	32,290	5·3	702
South ...	8,623	16,126	1·9	54,367	6·3	1,082
Total ...	20,854	36,698	1·8	111,726	5·4	3,850
<i>Plains—</i>						
North-central ...	4,822	6,046	1·3	13,302	2·8	2,652
Central ...	8,160	8,501	1·0	20,573	2·5	5,344
Riverina ...	13,693	21,517	1·6	59,544	4·3	2,403
Total ...	26,675	36,064	1·4	93,419	3·5	10,399
<i>Western Division</i> ...	1,520	865	0·6	2,575	1·7	76,368
<i>Whole State</i> ...	73,232	124,204	1·7	353,703	4·8	99,304

* See explanation, page 336.

Particulars of the rainfall, productivity, and population of each of these divisions are shown on page 312. The average value per acre is closely related to these factors. The alienated lands in the Western Division are situated mainly in its eastern confines, and the value thereof does not afford any indication of the value of the extensive Crown lands situated further west.

The unimproved value of rural holdings in series as at 30th June, 1930, is shown in the following table:—

Unimproved Value of Individual Alienated Holdings.	Number of Alienated Holdings.	Aggregate Area of Alienated Holdings.	Unimproved Value of Alienated Holdings.	Average Unimproved Value per Acre.
£		acres.	£	£ s.
Under 500 ...	25,716	3,913,997	5,554,470	1 8
500— 999 ...	13,854	6,068,268	9,877,610	1 13
1,000— 1,999 ...	15,685	11,840,078	21,732,080	1 17
2,000— 2,999 ...	6,463	8,169,585	15,361,720	1 18
3,000— 4,999 ...	4,577	9,518,284	17,041,490	1 16
5,000— 9,999 ...	2,703	10,698,331	18,051,280	1 14
10,000—14,999 ...	672	4,809,826	8,057,540	1 14
15,000—19,999 ...	346	3,514,826	5,880,050	1 13
20,000 and over ...	579	14,698,180	22,647,640	1 11
Total ...	70,595	72,231,375	124,203,880	1 14

The values shown relate to the alienated portion of the holding only. A table containing corresponding particulars for each of the sixteen statistical divisions of the State was published on page 728 of the "Statistical Register of New South Wales" for 1929-30. Owing to the wide differences between the productive uses of lands in the various divisions it is necessary to refer to this more detailed table.

CHARACTER OF SETTLEMENT.

A brief description of the character of rural settlement in New South Wales was published on page 689 of the Year Book for 1928-29 and a map showing the distribution of the rainfall, population and rural industries of the State was published opposite page 728 of the Year Book for 1924.

The following analysis of the State, according to natural divisions on the basis of Local Government areas, shows the rainfall, population, area, and production of each. A map showing these divisions is published as a frontispiece to this Year Book:—

Division.	Range of Average Annual Rainfall.	Population at Census, 1921.	Total Area.	Production (1929-30).				
				Wool. †	Wheat.	Butter.	Minerals.	Manufactures.*
	inches.	000.	acres.	lb. 000.	bushels. 000.	lb. 000.	£ 000.	£ 000.
<i>Coastal—</i>								
North Coast ...	35-76	124	6,965	191	...	61,194	1	1,237
Hunter and Manning ...	22-60	245	8,395	7,265	21	24,236	2,854	5,173
Metropolitan ...	29-50	1,060	958	266	1	408	1,321	52,987
South Coast ...	27-61	89	5,968	3,498	...	10,278		
Total ...	...	1,518	22,286	11,220	22	96,116	4,176	61,112
<i>Tablelands—</i>								
Northern ...	30-38	51	8,069	26,179	238	1,575	69	295
Central ...	23-55	131	10,716	45,598	1,351	1,340	1,248	2,156
Southern ...	19-65	46	7,062	35,433	53	377	1	350
Total ...	...	228	25,847	107,210	1,642	3,292	1,318	2,801
<i>Western Slopes—</i>								
North ...	24-33	52	9,219	49,050	5,123	1,527	107	296
Central ...	17-28	52	7,723	41,377	3,930	410	4	287
South ...	16-40	96	11,222	62,447	9,022	2,735	2	660
Total ...	...	200	28,164	152,874	18,075	4,672	113	1,243
<i>Central Plains—</i>								
Northern ...	18-28	24	9,580	35,439	1,428	95	1	140
Central ...	15-19	20	14,811	50,793	1,530	87	1	81
Riverina ...	12-22	64	17,021	63,764	11,701	742	1	335
Total ...	...	108	41,412	149,996	14,659	924	3	556
<i>Western Division ...</i>	8-19	48	80,319	61,620	9	18	1,889	1,136
Whole State ...	...	2,102	198,028†	482,920	34,407	105,022	7,499	66,848

* Value added in process of manufacture. † Excluding area of harbours not included in local government areas. ‡ 1928-29.

Manufactories are not extensive outside the metropolitan and Newcastle districts, but dairy factories operate on a large scale along the coast. Smelting and metal works of considerable importance are established on the coal-fields of the South Coast and Central Tableland and on the silver-lead fields at Broken Hill in the Western Division.

The five principal topographical divisions are strips of territory running from the northern to the southern boundary in a south-westerly direction, embracing, respectively, the coastal belt, tablelands, western slopes, central western plains and Western Division or far western plains. Except for the western plains, each is divided into three portions—northern, central, and southern—which, with the inclusion of a special metropolitan district, makes fourteen subdivisions, each of which presents fairly uniform natural features and is affected by uniform physiographic factors. In the north the region of high average rainfall extends further inland than in the south, with the result that the isohyets run in a general north and south direction. The south-western extremity of the Riverina lies about 100 miles further from the coast than does the north-western extremity of the northern plain, and, as the average annual rainfall diminishes with increasing rapidity towards the west, the northern subdivisions shown above generally receive more rain than the central, and the central more than the southern subdivisions. Rather less than one-half of the total area of the State receives average rains exceeding 20 inches per year, and rather more than one-half receives an average of more than 15 inches per year. Where the rainfall is greatest conditions generally favour the dairying industry, the areas with moderate rainfall being more suitable for sheep and wheat. In the dry western areas wool-growing is the only important rural industry.

Not only the quantity, but the season and reliableness of the rainfall, and the amount of evaporation are important considerations in determining the productive possibilities of any region. In common with most countries, New South Wales suffers periodically in one part or another from the effects of intermittent rainfall, a disability which local conditions such as the abnormal evaporation and the absorbent nature of the soils of the interior tend to aggravate. This difficulty may be overcome ultimately by water conservation and improvement in cultural methods, but at present it operates powerfully to the detriment of the western hinterland.

SETTLEMENT IN DIVISIONS.

Rainfall exerts a decisive effect on the nature of the pursuits and the extent of settlement in the various rural districts of the State, and explains their industrial characteristics.

For the purpose of considering rural settlement, the State may be distributed into five statistical divisions, viz., Coast, Tableland, Western Slopes of the Great Dividing Range, Central Plains and Riverina, and the Western Division. The statistics for 1922-23 and subsequent years have been collected upon the basis of local government areas instead of counties, as formerly, and this necessitated considerable rearrangement of divisional boundaries.

The nature of the industries and the settlement of each of the principal divisions of the State were discussed in the Official Year Book, 1922, at page 681 *et seq.*

Statistics for 1929-30 are shown below:—

Coastal Districts.

The following table presents a summary of the tenure and extent of occupied holdings in the four main divisions of the coastal belt as at 30th June, 1930:—

Division of Coast.	Total Area of Division.	Holdings of 1 acre and upwards.	Area of Land occupied in Holdings of 1 acre and upwards for Agricultural and Pastoral Purposes.					Area of Alienated Land suitable for Cultiva- tion.†
			Alienated.†			Crown Lands.	Total.	
			Freehold.	Private Rented.	Total.			
	acres. 000	No.	acres. 000	acres. 000	acres. 000	acres. 000	acres. 000	acres. 000
North	6,965	11,435	2,943	510	3,453	1,925	4,778	489
Hunter-Manning ...	8,395	9,939	3,881	336	4,217	1,118	5,335	420
Metropolitan... ..	958	4,426	266	40	306	2	308	132
South	5,968	4,877	1,632	288	1,920	609	2,529	312
Total	22,286	30,677	8,722	1,174	9,896	3,054	12,950	1,353

* Further particulars of rainfall and evaporation are published on pages 6 to 9 of this Year Book.

† See explanation, page 300.

Apart from the small area in the county of Cumberland which surrounds the metropolis, the North Coast is by far the most closely-settled part of the Coastal Division. The average areas of holdings in the various divisions are:—North Coast, 418 acres; Hunter and Manning, 537 acres; and South Coast, 518 acres. The proportion of the total area of each division occupied in holdings is 69 per cent. in the North Coast Division, 64 per cent. in that of Hunter and Manning, but only 43 per cent. on the South Coast. Of the total land in occupation about 67 per cent. is used by its owners, 24 per cent. is leased from the Crown, and 9 per cent. is rented privately.

Included in the coastal districts are 1,006 holdings, on which 1,401 share-farmers occupy 16,251 acres of cultivation and 329,582 acres as dairy farms.

Owing to the rugged nature of the country only a small proportion of the land is considered suitable for cultivation, and of this area less than one-quarter was cultivated in 1929-30.

The following analysis shows the main purposes for which these holdings were used in 1929-30:—

Principal Purpose for which Holdings were Used.*	Number of Holdings in Division.				
	North Coast.	Hunter and Manning.	Cumberland.	South Coast.	Total.
Agriculture only	597	1,773	1,984	310	4,664
Dairying only*	6,391	3,590	554	1,811	12,346
Grazing only*	1,737	2,480	340	1,547	6,104
Agriculture and dairying*	1,476	656	92	249	2,473
Agriculture and grazing*	211	255	56	183	705
Dairying and grazing*	438	425	11	180	1,054
Agriculture, dairying, and grazing*	100	96	4	40	240
Poultry	2	160	1,027	50	1,239
Poultry, Bees, Pigs, etc.	21	30	73	52	176
Unoccupied, or used mainly for other purposes	462	474	285	455	1,676
Total	11,435	9,939	4,426	4,877	30,677

* See comments on page 307.

The coastal district contains 93 per cent. of the holdings used mainly for dairying in New South Wales, and the North Coast district contains 52 per cent. of the number in the coastal division. Dairying separately or in conjunction with other farming pursuits is the predominant industry, but a considerable proportion of the farms is used for cattle-raising.

Tablelands.

Although extensive plateaux exist in the Tableland Divisions, considerable areas are rugged and rock-strewn and not adaptable to agriculture. Hence grazing has remained the staple industry, although many farmers combine agriculture with grazing, and large areas are cultivated in suitable localities. The rainfall is ample throughout, and the headwaters of most of the principal rivers make this a well-watered region. Railway communications are good, but, on the whole, settlement is sparse, fewer flourishing towns exist than on the coast, and small settlements are rarer because lands suitable for intense farming are more scattered. Neither dairying nor agriculture has been developed, and pastoral pursuits are extensive.

The following table provides an analysis of the number and tenure of rural holdings in the three main divisions of the Tablelands as at 30th June, 1930:—

Division of Tableland.	Total Area of Division.	Holdings of 1 acre and upwards.	Area of Land occupied in Holdings of 1 acre and upwards for Agricultural and Pastoral Purposes.					Area of Alienated Land, - suitable for Cultivation.*
			Alienated.*			Crown Lands.	Total.	
			Freehold.	Private Rented.	Total.			
	acres. 000	No.	acres. 000	acres. 000	acres. 000	acres. 000	acres. 000	acres. 000
Northern ...	8,069	3,826	3,929	150	4,079	2,506	6,585	387
Central ...	10,716	7,867	5,798	260	6,058	1,580	7,638	1,547
Southern ...	7,062	3,185	3,921	229	4,150	1,547	5,697	346
Total ...	25,847	14,878	13,648	639	14,287	5,633	19,920	2,280

* See explanation, page 306.

While the proportion of land occupied in each division varies from 82 per cent. in the northern and southern to 72 per cent. in the central tablelands, rural settlement is densest in the central districts, which were the first to be occupied. More than one-half of the total area of the Tableland Division is alienated, and almost one-third of the area occupied is owned by the Crown. The system of private renting is much less extensive than in the coastal districts, only 4.5 per cent. of the area alienated, or 3.2 per cent. of the total area occupied, being held in this way. In addition, there were 362 share-farmers on 256 holdings, comprising 51,248 acres of cultivation and 5,945 acres of dairy farms. As in the Coastal Division the proportion of alienated land suitable for cultivation is very small, only 19 per cent. of such land being cultivated in 1929-30.

The main purposes for which holdings were used in each division of the tablelands during 1929-30 are shown in the following table:—

*Principal Purpose for which Holdings were used.	Number of Holdings.			
	Northern Tableland.	Central Tableland.	Southern Tableland.	Total.
Agriculture only	156	1,349	59	1,564
Dairying only*	185	242	57	484
Grazing only*	2,427	3,578	2,696	8,701
Agriculture and Dairying*	98	209	3	310
Agriculture and Grazing*	652	1,801	198	2,651
Dairying and Grazing*	145	104	60	309
Agriculture, Dairying, and Grazing*	65	140	24	229
Poultry, Bees, Pigs, etc.	5	53	1	59
Unoccupied or used for other purposes	93	391	87	571
Total	3,826	7,867	3,185	14,878

* See comments on page 307.

Grazing pursuits predominate throughout, but a considerable proportion of the holdings is used for agricultural purposes.

Western Slopes.

The divisions of the Western Slopes contain gently undulating lands with a westerly trend, watered by the upper courses of the inland rivers, and an adequate and regular rainfall. These fertile areas are eminently suitable for agriculture and are the most productive portions of the interior. As yet they are only sparsely settled, and very great development is possible.

The area, number, and tenure of rural holdings in the various districts of the Western Slopes as at 30th June, 1930, are shown below:—

Division of Slopes.	Total Area of Division.	Holdings of 1 acre and upwards.	Area of Land occupied in Holdings of 1 acre and upwards for Agricultural and Pastoral purposes.				Area of Alienated Land suitable for Cultivation.*	
			Alienated.*			Crown Lands.	Total.	
			Freehold	Private Rented.	Total.			
	acres.	No.	acres.	acres.	acres.	acres.	acres.	acres.
	000		000	000	000	000	000	000
North-Western ...	9,219	4,407	5,971	139	6,110	2,066	8,176	1,470
Central-Western...	7,723	4,341	5,888	283	6,171	702	6,873	3,877
South-Western ...	11,222	8,220	8,299	324	8,623	1,082	9,705	4,843
Total ...	28,164	16,968	20,158	696	20,854	3,850	24,704	10,190

* See explanation, page 306.

In these divisions settlement is most dense on the South-western Slope, but the proportion of occupied land is greatest in the northern districts. The proportion of Crown lands occupied in the whole division is 1.6 per cent. of the total. The area of land rented from private owners represents only 3.3 per cent. of the total area alienated and 2.9 per cent. of the area occupied. The area of alienated land suitable for cultivation is considerable, constituting over 43 per cent. of the total area of such land in the State. Nearly 50 per cent. of the alienated lands of the division are suitable for cultivation, and the proportion is as great as 63 per cent. in the Central-Western Slope. Only 25 per cent. of the suitable land in alienated holdings in the Slopes Division was under crop in 1929-30.

The following statement shows the principal purposes for which rural holdings were used in the Western Slopes Division in 1929-30:—

*Principal Purpose for which Holdings were used.	Number of Holdings in Division.			
	North-Western Slope.	Central-Western Slope.	South-Western Slope.	Total.
Agriculture only	305	274	1,070	1,649
Dairying only*	81	24	256	361
Grazing only*	1,991	1,049	2,532	5,572
Agriculture and Dairying*	171	19	120	310
Agriculture and Grazing*	1,594	2,806	3,533	7,933
Dairying and Grazing*	31	9	171	211
Agriculture, Dairying, and Grazing*	65	48	282	395
Poultry, Bees, Pigs, etc.	32	7	12	51
Unoccupied or used for Other Purposes	137	105	244	486
Total	4,407	4,341	8,220	16,968

* See comments on page 307.

Mixed farming—agricultural and grazing—is the principal rural activity, but grazing predominates on the North-Western Slope, where the lands fit for agriculture are relatively of small extent. The number of holdings used principally for agricultural purposes is large, but dairying and small farming are not extensive.

Plains and Riverina.

The Plains of the Central Division, including the Riverina, constitute the eastern portion of a remarkable extent of almost level country, stretching from the last hills of the Western Slopes to the western boundary of the State, with an average width of 120 miles. They comprise the great sheep districts of the State and about 40 per cent. of the agricultural lands. Generally speaking, they are not well watered, the average rainfall is low, and its intermittency is a source of frequent loss. They are traversed by the western rivers in their lower courses, but they do not supply water to a very extensive area, as they are few and their flow is irregular. Railway facilities are not so good, as in the more easterly districts, but they are being improved steadily, particularly in the Riverina. Communication and transport to outlying districts depend mostly on motor and horse-drawn conveyances. Artesian water underlies a considerable area on the north, and bores serve to supply permanent water in a number of localities. In the south, sub-artesian bores are of great practical utility.

The following table shows the number, tenure, and extent of holdings occupied for agricultural and pastoral purposes in the division on 30th June, 1930:—

Plains of Central Division.	Total Area of Division.	Holdings of 1 acre and upwards.	Area of Land occupied in Holdings of 1 acre and upwards for Agricultural and Pastoral Purposes.					Area of Alienated Land suitable for Cultivation. *
			Alienated.*			Crown Lands.	Total.	
			Freehold.	Private rented.	Total.			
	acres.	No.	acres.	acres	acres.	acres.	acres.	acres.
	000		000	000	000	000	000	000
North ...	9,580	1,905	4,733	89	4,822	2,652	7,474	913
Central...	14,811	2,501	7,710	449	8,159	5,345	13,504	2,377
Riverina	17,021	7,352	13,288	405	13,693	2,403	16,096	6,324
Total ...	41,412	11,758	25,731	943	26,674	10,400	37,074	9,614

* See explanation, page 306.

The existence of a closely-settled but comparatively small area of irrigated lands in the Riverina partly accounts for the density of settlement in that division. There were 1,439 holdings in the Murrumbidgee Irrigation Area embracing 258,092 acres inclusive of certain attached lands outside the Irrigation Area. Seventy-two per cent. of the area occupied in the Central Plains Division has been alienated, but while the proportion alienated is 64 per cent. of the total area in the northern districts, it is 85 per cent. in the Riverina, where the land is more productive.

The area held under the system of private renting is of small extent, being less than 4 per cent. of the total area alienated. The area of Crown lands occupied is considerable in all divisions, and in the central districts it exceeded the area of occupied alienated lands until 1926-27.

Share-farming is not extensive in the north, but in the Riverina 711 holdings are occupied by 992 share-farmers, who had 324,711 acres in cultivation in 1929-30. Only 19 per cent. of the alienated land in the Northern Plains is considered suitable for agriculture, but the proportions in the Central Plains and Riverina are 29 and 46 per cent. respectively.

The following table shows the main purposes for which the holdings in the Central Plains Division were used in 1929-30:—

Principal Purpose for which Holdings were used.*	Number of Holdings in Plains of Central Division.			
	North.	Central.	Riverina.	Total.
Agriculture only	22	146	1,845	2,013
Dairying only*	8	7	71	86
Grazing only*	1,248	1,680	1,251	4,179
Agriculture and Dairying* ... ..	...	1	75	76
Agriculture and Grazing*	565	591	3,736	4,892
Dairying and Grazing*	4	8	18	30
Agriculture, Dairying, and Grazing*	2	2	165	169
Poultry, Bees, Pigs, etc.	1	...	1	2
Unoccupied or used for other purposes ..	55	66	190	311
Total	1,905	2,501	7,352	11,758

* See comments on page 306.

While grazing, with mixed farming and agriculture, predominates in the northern districts, agriculture assumes increasing importance in the south, and, combined with grazing, it predominates in the Riverina. On the irrigated lands of the Murrumbidgee a considerable number of holdings are used for small farming, and this accounts for the greater part of the holdings used for agriculture and for dairying in the Riverina. Nevertheless, taking into account the areas shown in the previous table, the existence of agricultural pursuits is seen to have a very pronounced effect on the density of settlement.

Western Division.

The plains of the Western Division will probably never be developed into a productive region maintaining a population commensurate with their area. One-third of the division receives less than 10 inches of rain per year and practically the whole of the remainder less than 15 inches. Though the soils are uniformly fertile, the lack of rain, permanent water and grasses, and the high rate of evaporation, ranging up to 90 inches per year, render it unproductive in a high degree. Except on a few small irrigated areas there is scarcely a sign of agriculture or dairying, and by reason

of the small rainfall, the sheep-carrying capacity of the land is only about one-fifth as great as that of the plains further east; but the climate is well suited to the production of high-grade merino sheep. It is a lonely region, for the most part occupied in large holdings on a long lease tenure. It presents an immense field for scientific development, but its possibilities are problematical. Whether irrigation from the Murray and the vast lake reservoirs of the South Darling, or from the artesian water zone of the north, combined with dry-farming methods, will render any extensive areas adaptable to agriculture, or whether water and fodder conservation will render it capable of maintaining large numbers of sheep and suitable for closer settlement, remain questions which are not likely to be considered until settlement in the more attractive easterly regions has made very great advance. It is contended, however, that in the south there are large areas which only require railway facilities to render them profitable for agriculture. At present, excluding the mining districts, it is a vast region comprising two-fifths of the area of the State, producing less than one-sixth of the pastoral produce, and practically nothing besides, and inhabited by less than 20,000 persons (one person to 6 square miles) or one-hundredth part of the population of the State. Near the western boundary, however, is situated one of the richest silver-lead fields of the world, and in the large mining town of Broken Hill there is a population of over 23,000 persons. In the eastern part of the division exist extensive copper deposits, which formerly maintained thriving settlements at Cobar, Canbelego, and Nymagee, but with the suspension of mining activities the population of these localities has decreased. For the rest, the division possesses only one town, Bourke, with a population exceeding 1,500, four exceeding 500, and about twenty smaller townships.

The following table shows the number and extent of holdings (as distinct from landholders) in the Western Division as at 30th June, 1927:—

Area Series (alienated and Crown lands combined).	East of Darling.		West of Darling.	
	No. of Holdings.	Area of Holdings.	No. of Holdings.	Area of Holdings.
Acres.		Acres.		Acres.
1- 3,000	392	103,851	142	85,735
3,001- 10,000	79	510,637	65	465,547
10,001- 20,000	164	2,380,575	115	1,523,670
20,001- 50,000	242	7,495,068	169	5,329,802
50,001-100,000	77	5,096,619	92	6,323,365
Over 100,000	92	18,800,169	103	29,981,139
Total	1,046	34,386,919	686	43,709,258

Although the area west of the Darling constitutes more than one-half of the total area occupied, the number of holdings in all but the two largest groups is less than in the eastern sector. Over 62 per cent. of the total area is occupied by 195 holdings averaging 250,000 acres each.

The total area of alienated land in the rural holdings in the Western Division as at 30th June, 1930, was only 1,520,357 acres, and of this 26,610 acres are privately rented. The total area of Crown lands in rural holdings was 76,367,231 acres. Of the total area of land occupied only 16,095 acres were under crop in 1929-30, although 128,266 acres of the alienated land were considered by the occupiers to be suitable for cultivation. The unimproved value of the alienated land was returned as £364,990, and the improved value as £2,575,320.

VALUE OF MACHINERY USED IN RURAL INDUSTRIES.

A comparison of the value of agricultural, pastoral, and dairying implements and machinery in use on rural holdings during various years since 1901 is shown in the following table, allowance being made for depreciation:—

Season	Farming.	Dairying (excluding Machinery in Factories).	Pastoral.*	Total Value.
	£	£	£	£
1900-01	2,065,780	237,220	754,050	3,057,050
1905-06	2,557,260	365,440	1,120,990	4,043,690
1910-11	3,414,620	534,740	1,483,080	5,432,440
1915-16	5,362,030	570,950	2,015,050	7,948,030
1920-21	7,120,380	910,260	3,141,030	11,171,670
1922-23	8,536,170	1,124,960	3,816,250	13,477,380
1923-24	8,799,350	1,088,380	3,825,920	13,713,650
1924-25	9,427,730	1,119,290	4,106,820	14,653,840
1925-26	9,588,320	1,162,850	4,329,910	15,081,080
1926-27	9,837,190	1,232,290	4,928,300	15,997,780
1927-28	10,849,510	1,229,430	4,975,180	17,054,120
1928-29	11,045,550	1,214,670	5,067,940	17,328,160
1929-30	10,955,920	920,650	4,812,060	16,688,630

* Includes in many cases farming implements used on pastoral holdings.

The foregoing figures are exclusive of the value of travelling machinery, *e.g.*, harvesters, chaffcutters, etc., for which the records show a value of £31,189 in 1929-30.

The following table indicates the approximate value of rural holdings, and of machinery and live stock thereon, in each of the past ten years:—

Year ended 30th June.	Value of Alienated Land and Improvements thereto.	Value of Farm Machinery and Implements.	Value of Livestock on Farms.*	Total.	Average Value of Alienated land per acre (as returned).	
					Unimproved.	Improved.
	£000.	£000.	£000.	£000.	£ s.	£ s.
1921 ...	272,000	11,200	51,300	334,500	1 14	4 9
1922 ...	271,900	12,300	51,400	335,600	1 13	4 8
1923 ...	278,100	13,500	63,000	354,600	1 13	4 8
1924 ...	282,700	13,700	74,500	370,900	1 13	4 8
1925 ...	291,300	14,700	69,000	375,000	1 13	4 9
1926 ...	306,900	15,100	74,800	396,800	1 13	4 12
1927 ...	319,500	16,000	56,100	391,600	1 14	4 13
1928 ...	341,500	17,000	71,000	429,500	1 14	4 16
1929 ...	353,100	17,800	62,000	432,900	1 14	4 18
1930 ...	353,700	17,300	44,500	415,500	1 14	4 17

*Number as at 30th June at prevailing market values.

In addition the unimproved value of Crown lands leased to landholders is estimated to be in the vicinity of £60,000,000.

AGRICULTURAL AND PASTORAL LABOUR.

Particulars of persons above the age of 14 years permanently engaged in farm work on rural holdings one acre or more in extent are collected annually. They are classified according to status, and the amount of the salaries and wages paid to employees in receipt of remuneration is ascertained. Returns have been obtained since 1922-23 concerning wages paid to temporary hands employed by landholders during harvesting and shearing operations and for other casual work.

Particulars in respect of persons engaged in farm work on rural holdings during the year ended 30th June, 1930, are shown below:—

Capacity.	Males.	Females.	Total.
	No.	No.	No.
Owners, Lessees, and Share-farmers	65,300	947	66,247
Permanent employees receiving wages... ..	31,387	794	32,181
Relatives not receiving wages	19,736	8,107	27,843
Total (permanently engaged)	116,423	9,848	126,271
Wages paid (including value of board and lodging):—	£	£	£
Permanent employees	5,717,410	76,406	5,793,816
Casual employees	2,790,871	9,635	2,800,506

Of the relatives not receiving wages, 9,184 males and 7,664 females above the age of 14 years were employed in the coastal districts, where dairying is the principal farming activity.

The total amount of wages paid to permanent employees during the year 1929-30 was £4,459,099, in addition to board and lodging, etc., valued at £1,334,717, or a total of £5,793,816, the average remuneration, on the basis of these figures, being £182 per annum to males and £96 per annum to females. An examination of the individual returns, however, shows that the amount assessed as the value of the board and lodging is more or less of an estimate. The wages paid to casual employees amounted to £2,496,483 in addition to "keep," valued at £304,023.

The following table provides a comparison of the number of males permanently occupied on rural holdings other than as owners, and the amount of wages paid by landholders to permanent and casual employees:—

Year ended ended 30th June.	Share farmers.	Unpaid relatives assisting owners or share farmers (males).	Permanent Male Employees working for Wages or Salary on Rural Holdings:		Salaries and Wages paid to Employees during year. (b).		
			Number.	Average amount paid per employee. (a).	Permanent.	Casual.	Total. (c).
				£	£000.	£000.	£000.
1921	2,761	16,319	37,472	(c)	6,743	(c)	(c)
1922	3,449	16,930	37,152	172	6,581	(c)	(c)
1923	3,970	18,277	34,962	175	6,297	2,246	8,543
1924	3,636	17,979	34,155	178	6,179	2,472	8,651
1925	3,828	17,673	36,733	177	6,630	2,999	9,629
1926	3,667	16,946	35,805	184	6,692	3,216	9,908
1927	4,043	17,111	35,149	192	6,867	3,440	10,307
1928	4,457	17,513	35,482	190	6,820	3,274	10,094
1929	4,402	17,495	34,234	189	6,550	3,060	9,660
1930	4,672	19,736	31,387	182	5,794	2,800	8,594

(a) Including value of keep.

(b) Including a small amount paid to females.

(c) Not available.

It would appear that in some cases the wages paid to contractors engaged in work on rural holdings are included in the amounts paid to casual workers. The total value of rural production is shown in a table in part "Production" of this Year Book (cf. page 763 of Official Year Book for 1929-30).

RURAL FINANCE.

The problem of promoting effective rural settlement in New South Wales has been associated closely with that of rural finance. While comparatively few settlers have possessed sufficient capital to purchase land outright from the Crown, there has been a general desire to acquire a freehold tenure, neither private nor State tenancy proving popular. Moreover, the proper development of rural holdings requires the investment of much capital for lengthy periods, and facilities for temporary financial accommodation, particularly during periods of drought.

The Land Act of 1861, aiming to encourage the settlement of an agricultural population beside the pastoral lessees, introduced "free selection before survey" and sales of Crown land by deposit and instalments with conditions as to residence, etc. By this means much more land was sold in the following twenty-three years than was sold at auction, and since 1889 alienation has been almost exclusively by this method of conditional purchase which is a method of selling Crown lands on terms. Beyond this little was done to provide financial aid for settlers until the end of the last century, when the agricultural and dairying industries were developing, and droughts were impeding settlement.

In 1899 an Advances to Settlers Board was appointed by the Government to make loans to farmers in necessitous circumstances or embarrassed by droughts. Advances were limited to £200 for a term of ten years at 4 per cent. interest. The scope of the Act was widened in 1902 when the Board was empowered to make advances to farmers for any approved purpose up to £500, repayable within thirty years.

In 1907 the functions of the Board were taken over by the Commissioners of the Government Savings Bank, and the limit of individual advances was raised to £2,000. By 1921, when the Rural Bank was established to carry on and extend the work, the outstanding advances amounted to £3,250,000, secured by mortgages from 7,000 borrowers. Particulars of the number and amount of advances are shown on page 355.

In 1901 a closer settlement policy was introduced by the Government with a view to acquiring and subdividing large estates and leases suitable for closer settlement. Operations under this scheme commenced actively in 1905. A summary of the operations under the various schemes is shown on pages 353 to 356 of this chapter.

Of similar character to the schemes of closer settlement was the entry by the Government upon a scheme of irrigation in connection with the Murrumbidgee River (in 1906). The first farms were made available in 1912, and at 30th June, 1931, the number held was 1861. Here settlers have been assisted by advances and by the provision of factories to handle their products.

The Government also undertakes to finance the construction of shallow bores, sunk either by its own or privately-owned plants, allowing the settlers extended terms of repayment of from five to ten years. Further, works for water supply for stock and domestic purposes and in certain cases for irrigation are provided, and bore trusts and water trusts are constituted, under which the cost of the works is repaid over a period of years (in most cases twenty-eight years) by the landholders benefiting. Further particulars of the finance provided in connection with irrigation projects are shown on pages 287 and 359 of this Year Book.

In the Commonwealth Bank of Australia a rural credit department was established in October, 1925, to assist the marketing of the products of the rural industries. For this purpose advances for a period not exceeding one year may be made to banks, co-operative associations, etc., and bills secured

on primary produce may be discounted on behalf of these institutions. Further particulars regarding the departments are shown in part "Private Finance" of this Year Book.

The Governments of the State and of the Commonwealth have provided assistance to settlers to enable them to construct fencing to protect their holdings from the ravages of rabbits and wild dogs. Details are published in the chapter of this volume entitled "Pastoral Industry."

Advances by Rural Industries Board.

In 1915 certain schemes of limited scope were initiated by the Departments of Lands and Agriculture to assist farmers by loans to cultivate new areas and to relieve necessitous farmers. During the severe drought of 1919-20 a sum of £2,000,000 was made available by two special local loans to assist farmers whose ordinary commercial credit had been destroyed by the bad seasons.

The Rural Industries Board was formed on the 1st December, 1919—

- (a) to take over, consolidate, and collect all advances by the State for drought relief, seed wheat, and clearing land since 1915, and
- (b) to extend the scope of relief to necessitous farmers.

In 1923 the Board was dissolved and its functions were continued by the Rural Industries Branch of the Department of Agriculture.

A sum of £437,006 was advanced between 1915 and 1919 under schemes controlled by the Departments of Lands and Agriculture. Of this, £259,794 were repaid or otherwise adjusted, and debit balances amounting to about £177,000 were taken over by the Board at the aforementioned date. As from 30th March, 1931, a charge of £2 15s. per ton was levied on flour for local consumption and the proceeds paid to the credit of the funds operated by the Board for Advances to Settlers. To 30th June, 1931, the sum of £238,719 had been received from this source. A summary of operations is set out in the following table:—

Year ending 30th June.	Advances.	Interest charged on Ad- vances.	Repayments.		Bad Debts written off.	Balances due (ap- prox.).	No. of Debtors.
			Principal.	Interest.			
1 Dec., 1919, to 30 June, 1922	£ 2,152,390*	£ 105,666	£ 1,817,792	£ 92,848	£ †	£ 347,416	†
1923	159,443	24,639	80,517	12,239	4,812	433,930	†
1924	237,414	32,015	118,673	16,859	1,634	566,193	†
1925	121,120	28,444	192,134	38,166	4,392	481,065	3,478
1926	151,788	22,222	242,020	18,565	14,533	379,957	3,465
1927	85,959	14,662	165,889	17,975	2,285	294,449	2,579
1928	428,350	9,251	41,027	7,117	10,758	673,148	4,800
1929	396,493	29,595	401,416	31,157	850	665,813	3,687
1930	600,594	36,421	213,102	21,265	29,018	1,639,443	5,500
1931	664,202	57,783	395,531	51,419	4,992	1,309,486	5,200
Total...	4,997,753	360,698	3,668,081	307,610	73,274	...	...

* Including balances taken over from other Departments (£177,000) and Cash Sales from stocks to persons other than necessitous farmers (£277,000). † Not available.

Originally operations were restricted to assisting wheat-growers, but, in 1920, assistance was afforded also to dairy-farmers and small graziers. More recently the scope of operations has been extended to include farmers of considerable variety whose circumstances prevented them from obtaining assistance through usual commercial channels; thus on a relatively small scale assistance has been granted to orchardists, tobacco growers, rice growers, farmers suffering loss from floods, fire and grasshopper pests, pig farmers who sustained the loss of their herds as the result of an outbreak of swine fever, etc.

Most of the advances, however, are made to wheat-farmers, and the assistance granted usually takes the form of orders issued upon suppliers of the commodities required, *i.e.*, fodder, seed wheat, fertiliser, tractor fuel, household supplies, and so on. Payment is made direct to suppliers, who render their accounts to the Branch accompanied by the farmer's acknowledgment of receipt of the goods. Cash advances are made only in exceptional circumstances.

Until recent years advances were made in cash at the rate of 5s. per acre on newly fallowed land. The object of this form of advance was to encourage better farming methods, and consequently operations were not confined to necessitous farmers only. The advantages of fallowing are now fully recognised throughout the State, and the desired results having been achieved, fallowing assistance is granted only to necessitous farmers on the lines of general assistance.

Interest on advances was formerly at the rate of 6 per cent., with an additional 1 per cent. on overdue accounts until 30th June, 1925.

Security taken for the advances mainly comprises Crop Liens and Promissory Notes, as in the majority of cases farmers receiving assistance lack the means of furnishing more tangible security which would enable them to obtain accommodation from ordinary financial institutions. Having regard to the somewhat hazardous nature of security taken the number of bad debts incurred has been relatively small.

Government Guarantee Board.

Under the Advances to Settlers (Government Guarantee) Act, passed towards the end of December, 1929, a Government Guarantee Board was constituted with power to guarantee to the banks repayment of advances made to settlers. The Board consists of the Minister for Agriculture (as Chairman); the Colonial Treasurer, and the Officer-in-Charge of the Rural Industries Branch. The amount which can be guaranteed in respect of any one settler must not exceed £3,000, and in the case of a co-operative society registered under the provisions of the Co-operation, Community Settlement, and Credit Act, 1924, it must not exceed £25,000. The total amount which may be guaranteed by the Board in any one year may not exceed £2,500,000. New guarantees may be given by the Board only during a period of two years commencing on 23rd December, 1929, but guarantees given during that period may be continued for such time as may be approved by the Board.

The total amount of effective guarantees made by the Board up to 30th June, 1931, was £395,048, inclusive of £3,780 which had been discharged up to that date.

Advances by the Rural Bank.

Under authority of the Government Savings Bank (Rural Bank) Act, 1920, steps were taken early in 1921 to establish a rural bank in New South Wales. The new bank was placed under the direction of the Commissioners of the Government Savings Bank, who continued on an extended basis the operations transacted previously by the Advances to Settlers Department.

The primary object of the bank was to afford greater financial assistance to primary producers than is usually obtainable from other institutions, and thus to promote rural settlement and development.

The Commissioners were empowered to make advances upon mortgage of land in fee-simple, and of land held under conditional purchase or lease, settlement purchase or lease, and homestead grant or selection. The advances were made to repay existing encumbrances, to purchase land, to effect improvements, to utilise resources, or to build homes. By this means material assistance was afforded to both prospective and established settlers.

Funds were obtained from deposits at current account, fixed deposits, and the issue of deposit stock, rural bank debentures, and inscribed stock. Interest was allowed on fixed deposits at current bank rates, and current accounts were subject to trading bank conditions.

Loans were made only to persons engaged in primary production, or in closely-allied pursuits. The loans were of three kinds:—(a) Overdrafts on current account with interest at the rate of $6\frac{1}{2}$ per cent.; (b) instalment loans, repayable by equal half-yearly instalments of interest at $6\frac{1}{2}$ per cent. and principal extending over thirty-one years; and (c) fixed loans for limited terms. The security required was land, either freehold or held under any Crown tenure, stock, plant, crop, wool, etc. As from 1st October, 1931, the rate of interest payable was reduced by 4s. 6d. in the £ in terms of the Interest Reduction Act, 1931.

The Commissioners were empowered to make advances to assist the subdivision of large estates. For this purpose advances up to 80 per cent. of the Commissioners' valuation of the security, or £3,000, were made on lands which had a freehold or certificated conditional purchase title. In order to facilitate negotiations for sale, the Commissioners issued a certificate to either the vendor or the purchaser, setting forth the amount they were prepared to advance upon a sound title in any such farm. The Act prescribed that a fixed or amortization loan to any individual should not exceed £2,000.

Approximately 190 branches of the Bank were opened throughout the State. In June quarter, 1931, the amount of deposits with the Rural Bank was £1,246,285 at current account and £9,773,947 at fixed deposit, while outstanding advances amounted to £14,431,517. On 23rd April, 1931, payment was suspended by the Bank and new business discontinued. By Act of Parliament (No. 14 of 1931) a moratorium was made operative as from 23rd April to 31st December, 1931. As from 7th September, 1931, business was re-commenced and a New Business Division as distinct from the Old Business Division was created in terms of Act No. 34 of 1931. It was provided, however, that any such new business of the Rural Bank by way of loans or advances to new customers or applicants (as distinct from additional loans or advances to customers of the old business division) should be undertaken only to the extent of any funds advanced by the Colonial Treasurer.

The following table shows the transactions in long term and fixed loans by the Advances to Settlers Department or the Rural Bank in various years since 1911:—

Year ended 30th June.	Advances Made.			Balances Repayable.		
	Number.	Total Amount.	Average.	Number.	Total Amount.	Average.
		£	£		£	£
1911*	838	331,693	395	3,754	1,074,359	286
1913*	1,386	771,272	556	5,094	2,051,132	403
1915	860	387,715	451	5,860	2,514,078	429
1921	1,365	813,525	596	7,242	3,423,871	473
1924	1,081	888,479	822	9,766	5,526,744	566
1925	603	587,508	974	9,749	5,721,684	587
1926	265	444,065	1,676	9,252	5,661,368	612
1927	332	598,879	1,804	8,933	5,783,776	648
1928	305	437,195	1,430	8,676	5,759,410	664
1929	685	807,550	1,179	8,609	5,951,428	691
1930	581	703,425	1,211	8,743	6,272,685	718
1931	78	84,675	1,086	8,686	6,166,523	710

* 31st December.

In addition, short-term loans in the nature of overdraft are provided by the Rural Bank to settlers or persons carrying on industries immediately associated with rural pursuits. Particulars of these are shown below:—

Year ended 30th June.	Advances made during year.			Advances current at end of year.	
	Number (New).	Number (Additional).	Amount.	No.	Amount.
			£		£
1922 ...	1,383	.....	980,375	1,364	728,584
1923 ...	1,565	356	794,499	2,743	1,381,113
1924 ...	1,827	521	1,081,335	4,205	2,144,333
1925 ...	1,710	511	1,196,280	5,291	2,830,915
1926 ...	1,746	675	1,342,692	6,277	3,618,597
1927 ...	2,115	994	1,996,925	7,401	4,746,220
1928 ...	3,465	1,273	2,231,790	8,527	6,098,405
1929 ...	2,225	1,462	2,012,505	9,424	6,938,041
1930 ...	1,970	1,895	1,992,785	10,691	7,988,275
1931 ...	811	534	486,505	10,650	8,254,745

Other Advances to Settlers.

Particulars of the number and amount of registered loans made on the security of live-stock, wool, and growing crops are published in Part "Private Finance" of this Year Book.

LAND LEGISLATION AND SETTLEMENT.

AREA OF NEW SOUTH WALES.

THE area of New South Wales, including Lord Howe Island (5 square miles) and the Federal Capital Territory (about 940 square miles), as stated on a previous page in this Year Book, is estimated at 310,372 square miles, or 198,638,080 acres, being a little over two and a half times the combined area of Great Britain and Ireland. Excluding the surface covered by rivers and lakes, etc. (2,969,080 acres), the land area within the boundaries of the State is 195,669,000 acres, or about 305,733 square miles. The formal transfer on 1st January, 1911, of 583,660 acres at Yass-Canberra, and of 17,920 acres at Jervis Bay in 1915, to the Commonwealth Government as Federal Capital Territory, reduced the land surface of the State to 195,067,420 acres.

LAND ADMINISTRATION.

At the foundation of the Colony in 1788, the whole of the lands of the State vested in the British Crown.

The administration of public lands passed entirely under local control by virtue of the Constitution Act on the establishment of responsible government in 1856. Since that year the administration has been directed by a Secretary for Lands, who is a member of the State Parliament and of Cabinet. A Department of Lands was created and a permanent Under-Secretary appointed, with defined powers subordinate to those of the Minister. This system of administration may be described as political control through a permanent salaried staff. Control of the lands of the Western Division was vested in the Western Land Board, consisting of three commissioners in 1901.

The Eastern and Central Divisions are subdivided into ninety-one Land Districts, in each of which is stationed a Crown Land Agent, whose duty it is to receive applications and furnish information regarding Crown lands. Groups of these districts are arranged in larger areas, under the control of twelve local Land Boards. There are also special Land Board Districts for the Yanco, Mirrool, and Coomealla Irrigation areas. The Boards, sitting as open courts, hear and determine, in the first instance, many minor matters as provided by the Act and Regulations.

*Land and Valuation Court.**

A Land and Valuation Court, whose awards and judgments have the same force as those of the Supreme Court, was constituted in 1921 in continuance of the Land Appeal Court. To this Court are referred appeals, references, and a number of other matters under the Crown Lands Acts, the Pastures Protection Act, the Closer Settlement Acts, the Water Act, the Public Roads Act, and certain other Acts.

Territorial Divisions.

The State is divided, for administrative purposes, into three territorial divisions, Eastern, Central, and Western, the boundary lines running approximately north and south, as shown on the map in the frontispiece. The conditions governing alienation and occupation of Crown Lands differ in each of the three divisions of the State.

The Eastern Division has an area of 60,661,946 acres (exclusive of an area of 601,580 acres of Commonwealth territory), and includes a broad

* Further particulars of Local Land Boards, and of the Land and Valuation Court, are published on page 459 of this Year Book.

belt of land between the sea-coast and a line nearly parallel to it, thus embracing the coastal districts of the State, as well as the tablelands. In this division is excellent agricultural land, and it includes all the original centres of settlement most accessible to the markets of the State.

The Central Division embraces an area of 57,055,846 acres, extending from north to south between the western limit of the Eastern Division and a line drawn along the Macintyre and Darling Rivers, Marra Creek, the Bogan River, across to the River Lachlan, along that river to Balranald, and thence to the junction of the Edward River with the Murray. The area thus defined contains the eastern part of the upper basin of the Darling River in the northern part of the State, and the basins of the Lachlan, the Murrumbidgee, and other affluents of the Murray in the southern portions. The land in this division is still devoted mainly to pastoral pursuits, but about 3,000,000 acres are cultivated for wheat in a normal season.

The Western Division is situated between the western limit of the Central Division and the South Australian border. It contains an area of 80,318,708 acres, watered by the Darling River and its tributaries, and is mainly devoted to pastoral pursuits. Water conservation and irrigation, and railway and other means of communication may ultimately make agriculture possible in parts of this large area. However, legislation in regard to the occupation of the lands of the district is based upon the assumption that for many years to come there will be little inducement for agricultural settlement.

DISPOSAL OF LANDS OF NEW SOUTH WALES.

The following table provides a brief summary of the manner in which the lands of the State were held as at 30th June, 1930, distinguishing lands in the Western Division from the remainder of the State:—

Manner of Disposal.	Area.		
	Eastern and Central Divisions.	Western Division.	Whole State.
(1) Absolutely alienated, dedicated†, &c. (less area resumed for resettlement)	Acres. 65,218,931‡	Acres. 2,031,282‡	Acres. 48,750,361§
(2) In course of alienation			23,758,931
(3) Virtually alienated (i.e., held under perpetual, conditional, and conditional purchase leases)	17,320,811	97,065	17,424,476
(4) Under Crown and settlement leases alienable wholly or in part	8,380,599	...	8,380,599
(5) Under improvement, scrub, inferior lands and prickly-pear leases with limited rights of alienation... ..	1,161,160	...	1,161,160
Total area under foregoing tenures	92,087,501‡	2,128,947‡	94,475,527§
(6) Under other long leases with no right of alienation unless with approval of Minister¶	1,204,641	76,088,785	77,293,426
(7) Under short lease and temporary tenures (annual lease, permissive occupancy and occupation license)	8,073,841	1,109,699	9,183,540
(8) Under forestry leases, etc., wholly within dedicated State forests	1,967,284	...	1,967,284
(9) Under mining leases and permits	276,678	7,623	284,301
(10) Reserves, dedicated State forests not under pastoral occupation and other lands neither alienated nor leased	14,107,847§	983,654§	14,832,422‡
Total Area	117,717,792	80,318,703	198,036,500

† Exclusive of 5,177,882 acres of dedicated State forest in Eastern and Central Divisions, and 51,150 acres in Western Division, considerable parts of which are covered by leases for pastoral purposes and included under appropriate headings below.

‡ Exclusive of lands dedicated for public and religious purposes, viz., 259,079 acres in the whole State, the divisions of which cannot be stated.

§ Inclusive of foregoing lands dedicated for public and religious purposes.

¶ Comprising special, section 18, snow lands, residential, irrigation leases at Hay and Cuthwa and Western Lands leases.

Particulars of the areas, under and the conditions attaching to, each of these tenures are given on later pages.

In considering the matter of lands remaining within the disposal of the State for new settlement, it is important to note that the Eastern and

Central land divisions embrace practically the whole of the lands in the State which receive an average annual rainfall of 15 inches or more, and that the rainfall in the Western Division ranges from that average down to 8 inches in the extreme north-west. This circumstance places important limitations upon the utility of land in the Western Division, practically none of which is utilised for agricultural purposes. It is sparsely occupied, being held in large pastoral holdings lightly stocked.

The total area of land embraced within freeholds, dedications, purchases by deferred payments, and leases alienable wholly or in part at 30th June, 1930, was 94,474,420 acres and, of this area, over 92,000,000 acres were in the Eastern and Central land divisions. By reason of the indefinite nature of the conditions governing the conversion of leases to freehold tenures, it is not possible to ascertain accurately how much of the lands embraced in this area will not revert to the disposal of the Crown, but, assuming that one-half of the areas remaining under settlement, scrub and improvement leases fulfil conditions requisite for conversion into tenures leading to freehold, it is estimated that the area of former Crown lands in the Eastern and Central Divisions placed definitely beyond State control is in the vicinity of 92,000,000 acres and probably it is appreciably more. Of the remaining area of about 27,000,000 acres in the Eastern and Central Divisions, about 3,000,000 acres are held under long leases, with no rights of conversion, and parts of these revert to the Crown for disposal year by year; approximately 8,000,000 acres are held under short lease and temporary tenures, and the balance is comprised within reserves of various kinds—commons, roads, dedicated State forests not under lease administered by the Department of Lands, unalienated town lands, and lands neither alienated nor leased, including inferior Crown Lands not held under any tenure.

In the Western Division the area placed permanently beyond State control is approximately 2,150,000 acres, but nearly 76,740,000 acres out of a total area of 80,000,000 acres are held under long-lease tenures, practically all of which expire in 1943. The area under short lease and temporary tenures is approximately 1,110,000 acres, and there remain approximately 100,000 acres of unoccupied lands of low grade and about 890,000 acres of unalienated town lands, commonages, beds of rivers, etc.

It has been estimated that the area of land in the State unfit for occupation of any sort does not exceed 5,000,000 acres.

Alienation Prior to 1861.

From the early days of settlement until the year 1861 the Crown disposed of land, under prescribed conditions, by grants and by sales, so alienating, by the end of 1861, an aggregate area of 7,146,579 acres, made up as follows:—

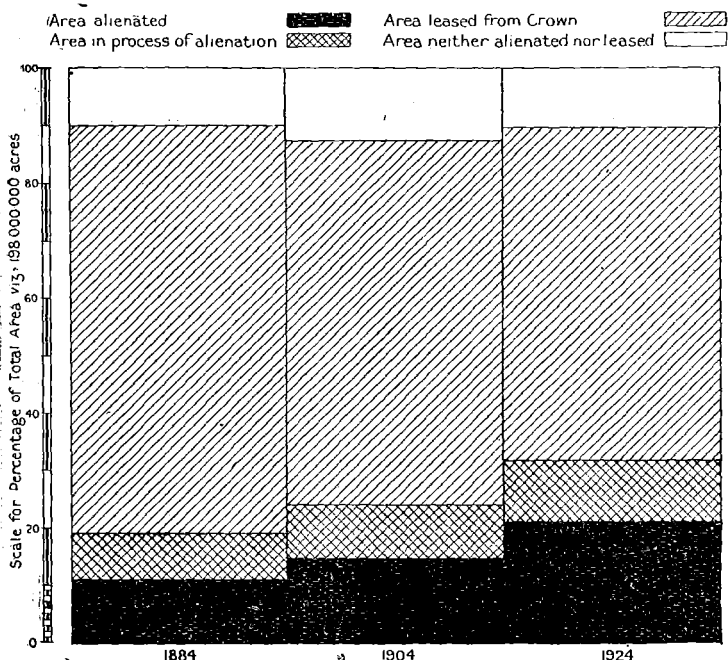
	Acre.
1. By grants, and sales by private tender to close of 1831	3,906,327
2. By grants in virtue of promises of early Governors made prior to 1831, from 1832-40 inclusive	171,071
3. By sales at auction, at 5s., 7s. 6d., and 10s. per acre, from 1832-38 inclusive	1,450,508
4. By sales at auction, at 12s. and upwards per acre, at Governor's discretion, from 1839-41 inclusive	371,447
5. By sales at auction, at 20s. per acre, from 1842-46 inclusive	20,250
6. By sales at auction and in respect of pre-emptive rights, from 1847-61 inclusive	1,219,375
7. By grants for public purposes, grants in virtue of promises of Governors made prior to the year 1831, and grants in exchange for lands resumed from 1841-61 inclusive	7,601
Total area absolutely alienated as to 31st December, 1861	7,146,579

In the year 1861 the first Crown Lands Act was passed, and from that date alienation was controlled by the laws of the State Government.

Progress of Alienation.

The following graph shows the progress of alienation at 20-yearly intervals since 1884.

LAND TENURE - 1884, 1904 & 1924



The differently shaded portions of the Graph represent the percentage of the total area of New South Wales which was alienated, in process of alienation under systems of deferred payments, and held under lease from the Crown

A brief account of the spread of settlement appears on page 679 of the Year Book for 1928-29. Details are shown hereunder of the areas of freehold land resumed for re-settlement and of the Crown Lands remaining alienated, after deducting the areas resumed for re-settlement, at intervals since 1861:—

As at 30th June.	Area of freehold resumed for re-settlement.	Area remaining absolutely alienated.	As at 30th June.	Area of freehold resumed for re-settlement.	Area remaining absolutely alienated.	As at 30th June.	Area of freehold resumed for re-settlement.	Area remaining absolutely alienated.
acres.	acres.		acres.	acres.		acres.	acres.	acres.
1861*	...	7,146,579	1901*	...	26,407,376	1926	2,502,668	42,323,857
1871*	...	8,630,604	1906	36,719	31,362,302	1927	2,506,533	42,779,522
1881*	...	19,615,299	1911	605,641	36,234,256	1928	2,508,126	43,184,213
1891*	...	23,682,516	1916	1,089,079	37,783,666	1929	2,524,197	43,491,964
1896*	...	24,698,195	1921	1,857,216	39,679,986	1930	2,579,086	43,750,361

* As at 31st December.

The area shown above as remaining alienated represents lands absolutely alienated and is exclusive of lands under perpetual lease which were formerly included in similar computations as being virtually alienated.

The Federal Territory at Canberra, containing 173,451 acres of alienated land, was transferred to the Commonwealth on 1st January, 1911. This area has, therefore, been excluded from the figures shown for 1911 and subsequent years. The principal method of alienation is by conditional purchase, which

was introduced in 1861. Lands sold by this means are not included as alienated until all payments have been made and deeds have been issued. For this reason the influence of the introduction of conditional purchases does not appear appreciable in the table until 1881. It is also understood that there is an appreciable area of land upon which all payments have been made and all conditions for alienation fulfilled, but, as deeds have not been issued, this area is included under conditional purchase in course of alienation.

The following table shows the areas of land alienated in New South Wales by each of the principal methods up to 30th June, 1930, and the area re-acquired for purposes of irrigation and closer settlement:—

Area.	Acres.
Granted and sold by private tender and public auction prior to 1862	7,146,579
Sold by auction, after auction, and under deferred payment sales since 1862	11,591,762
Sold by Improvement and Special Purchases	2,857,041
Sold by Conditional Purchase since 1862 (deeds issued)	23,741,974
Granted under Volunteer Land Regulations of 1867 ..	172,198
Dedicated for public and religious purposes since 1862..	259,079
Sold under Closer Settlement Acts (acquired and Crown Lands)	23,944
Suburban Holding Purchase	5,567
Soldiers' Group Purchase	1,519
Returned Soldiers' Special Purchases (deeds issued) ..	812
Week-end Lease Purchases (deeds issued)	438
Town Lands Lease Purchases (deeds issued)	28
Irrigation Farm Purchases	82
Sold by all other forms of sale	528,424
Total	46,329,447*
Less—	Acres.
Freehold land purchased for Closer Settlement	2,192,935
Freehold land purchased for Irrigation Settlements	212,700
Lands alienated in Federal Capital Territory prior to its transfer to the Commonwealth	173,451
	2,579,086
Land absolutely alienated as at 30th June, 1930	43,750,361

As has already been pointed out, there was, in addition, a considerable area of land under conditional purchase which awaited only the formality of the issue of deeds to make their alienation complete. This area is included in the following statement showing the areas in course of alienation by each of the principal methods as at 30th June, 1930:—

Area in course of Alienation.	Acres.
By Conditional Purchase	20,475,734
Under Closer Settlement Acts	2,833,699
As Group Settlement Purchases	425,859
As Suburban Holdings approved for purchase	10,890
As Returned Soldiers' Special Holdings approved for purchase	9,760
As Week-end Leases approved for purchase	158
Irrigation Lands Purchases	2,826
As Town Lands Leases approved for purchase	5
Total area in course of alienation at 30th June, 1930 ..	23,758,931

* Inclusive of area alienated within Federal Territory prior to 1911.

RURAL FINANCE.

The problem of promoting effective rural settlement in New South Wales has been associated closely with that of rural finance. While comparatively few settlers have possessed sufficient capital to purchase land outright from the Crown, there has been a general desire to acquire a freehold tenure, neither private nor State tenancy proving popular. Moreover, the proper development of rural holdings requires the investment of much capital for lengthy periods, and facilities for temporary financial accommodation, particularly during periods of drought.

The Land Act of 1861, aiming to encourage the settlement of an agricultural population beside the pastoral lessees, introduced "free selection before survey" and sales of Crown land by deposit and instalments with conditions as to residence, etc. By this means much more land was sold in the following twenty-three years than was sold at auction, and since 1889 alienation has been almost exclusively by this method of conditional purchase which is a method of selling Crown lands on terms. Beyond this little was done to provide financial aid for settlers until the end of the last century, when the agricultural and dairying industries were developing, and droughts were impeding settlement.

In 1899 an Advances to Settlers Board was appointed by the Government to make loans to farmers in necessitous circumstances or embarrassed by droughts. Advances were limited to £200 for a term of ten years at 4 per cent. interest. The scope of the Act was widened in 1902 when the Board was empowered to make advances to farmers for any approved purpose up to £500, repayable within thirty years.

In 1907 the functions of the Board were taken over by the Commissioners of the Government Savings Bank, and the limit of individual advances was raised to £2,000. By 1921, when the Rural Bank was established to carry on and extend the work, the outstanding advances amounted to £3,250,000, secured by mortgages from 7,000 borrowers. Particulars of the number and amount of advances are shown on page 355.

In 1901 a closer settlement policy was introduced by the Government with a view to acquiring and subdividing large estates and leases suitable for closer settlement. Operations under this scheme commenced actively in 1905. A summary of the operations under the various schemes is shown on pages 353 to 356 of this chapter.

Of similar character to the schemes of closer settlement was the entry by the Government upon a scheme of irrigation in connection with the Murrumbidgee River (in 1906). The first farms were made available in 1912, and at 30th June, 1931, the number held was 1861. Here settlers have been assisted by advances and by the provision of factories to handle their products.

The Government also undertakes to finance the construction of shallow bores, sunk either by its own or privately-owned plants, allowing the settlers extended terms of repayment of from five to ten years. Further, works for water supply for stock and domestic purposes and in certain cases for irrigation are provided, and bore trusts and water trusts are constituted, under which the cost of the works is repaid over a period of years (in most cases twenty-eight years) by the landholders benefiting. Further particulars of the finance provided in connection with irrigation projects are shown on pages 237 and 359 of this Year Book.

In the Commonwealth Bank of Australia a rural credit department was established in October, 1925, to assist the marketing of the products of the rural industries. For this purpose advances for a period not exceeding one year may be made to banks, co-operative associations, etc., and bills secured

in any individual case, together with other freehold, alienable, or leased lands with more than five years to run held by the same individual, may not exceed a home maintenance area as determined by the Local Land Board. Where there is such an excess area of lease it is converted into a conditional lease without any right of further conversion. The area of unconvertible conditional leases so created is included in the total shown in the table. The Crown Lands Amendment Act, which came into operation on 31st March, 1930, made Crown leases, homestead selections and homestead farms convertible in their entirety without restriction.

Improvement and scrub leases are granted in respect of lands which require improvement before being made available for original holdings. Usually they are held in conjunction with other lands or in large areas, and the holder is given the right to apply for the conversion of sufficient to convert a home maintenance area into an alienable tenure during the last year of the currency of the lease. The holder also has the right to sell his lease, and considerable areas are transferred to persons eligible to convert. As a consequence, considerable areas of improvement and scrub leases do not revert to the disposal of the State.

Special leases may be purchased by their holders with the approval of the Minister, and so may the residential lease. All the leases under the Western Lands Act are situated in the Western Division, and the tenure may be extended subject to certain conditions of withdrawal for settlement and periodical re-appraisal of rentals.

The short-term leases enumerated represent Crown lands reserved for various purposes, as well as lands available for settlement, but not yet taken up. The forestry leases and occupation permits include only grazing leases which are wholly within State forests, and administered by the Forestry Department.

RESERVES.

The total area of reserved lands in the State as at 30th June, 1930, was 17,450,459 acres. Reserves are not necessarily unoccupied, considerable areas being held under annual, special, scrub, or forestry leases or on occupation license or permissive occupancy. Such are included under appropriate headings in the list of leasehold tenures shown above.

The following is a classification of reserves according to the principal purpose for which reserved:—

	Acres.
Travelling Stock	5,270,818
Water	658,884
Mining	1,101,827
Forest	2,406,285
Temporary Commons	367,994
Railway	41,446
Recreation and Parks	256,890
Pending Classification and Survey	3,646,910
From Conditional Purchase, within Goldfields	584,760
From Sale or Lease other than Improvement Lease	243,021
From Sale or Lease other than 18th Section Lease	78,028
Camping	365,601
Other	2,427,995
Total	17,450,459

The statement printed above is intended to give only an approximate idea of the relative extent of reserves of various kinds, and should not be taken as a measure of their absolute magnitude, because large areas are reserved for more than one purpose. For instance, the area principally reserved for forests is stated at only 2,406,285 acres; while the actual area of dedicated

forest lands at 30th June, 1930, was 5,229,032 acres, and in addition 1,564,186 acres were under timber reserve, making a total of 6,793,218 acres. Of the area dedicated, 1,967,284 acres of leases, situated entirely within State forests, were let to graziers by the Forestry Commission, 59,121 acres of State Forests under tenures of the Crown Lands Act were administered by the Forestry Commission, and 84,999 acres, consisting of portions of leases not wholly within State forests, were administered by the Department of Lands.

Of the total area of reserves 12,230,792 acres, or 70 per cent., were situated in the Eastern and Central Divisions of the State.

An annual revision of the reserved lands is made with the object of withdrawing from reserve any area the continued reservation of which is not required in the public interest.

AREA AVAILABLE FOR SETTLEMENT.

The area of land within the disposal of the Crown without the necessity of resumptions and consequent compensation is not definitely ascertainable, since clauses providing for revocation or withdrawal have been inserted in a number of lease contracts, and considerable areas leased for long periods revert to the Crown periodically by the effluxion of time. Particulars of those areas are not available.

Apart from these, however, certain lands under reserve, in addition to the lands comprised in the following short leases, may be considered to have been within the disposal of the Crown at 30th June, 1930:—

Under Crown Lands Acts—

	Area. Acres.
Occupation license (including 35,421 acres in Western Division)	2,049,400
Preferential occupation license	723,934
Annual lease (including 34,950 acres in Western Division)	1,127,013
Permissive occupancy (including 385,369 acres in Western Division)	4,598,983

Under Western Lands Act—

Occupation licenses	526,031
Preferential occupation license	56,386
Total	9,081,747

With a view to classifying and bringing forward those areas which are suitable for settlement, systematic inspections of Crown lands are made in each district.

The following areas were available for the classes of holdings specified at 30th June, 1930:—

Original Holdings for—	For Ordinary Settlement. Acres.	For Returned Soldiers. Acres.	Total. Acres.
Crown Lease	853,938	...	853,938
Homestead Farm	22,520	...	22,520
Conditional Purchase (original)	3,406,984	...	3,406,984
Suburban Holding	2,865	...	2,865
Settlement Purchases	16,870	68	16,938
Other Forms of Lease	39,959	...	39,959
Additional Holdings (all classes)	538,417	500	539,317
Total	4,881,553	968	4,882,521

The area of 3,406,984 acres, shown above as available for original conditional purchases, consists mostly of unclassified Crown lands of a rather inferior nature. A considerable proportion of the lands comprising this area has been available for years, but has remained unselected.

EASTERN AND CENTRAL LAND DIVISIONS.

METHODS OF ACQUISITION AND OCCUPATION.

The acquisition and tenure of land in the Eastern and Central Land Divisions are controlled principally by the Crown Lands Act (consolidated in 1913) and its amendments, together with regulations thereunder. In addition, the Closer Settlement Acts, Returned Soldiers' Settlement Acts, and the Forestry, Mining, Irrigation, and Prickly Pear Destruction Acts regulate certain tenures for specific purposes.

By these Acts a great variety of tenures—more than thirty in number—have been created to suit the various circumstances of the lands and settlers of New South Wales and the changing character of rural settlement.

The principal means by which Crown lands in the Eastern and Central Divisions and lands in the Western Division remaining under the Crown Lands Act may be acquired, and the tenures under which they may be held, may be classified as follows:—

Non-Residential Tenures.	Tenures involving Residential Conditions.
Methods of Absolute Alienation.	
Auction sale.	Conditional purchase.
After-auction purchase.	Settlement purchase.
Special non-competitive sales.	Returned soldiers' special holding.§
Conditional purchase (40 to 320 acres).	Improvement purchase on goldfields.
Exchange.	Soldiers' Group Purchase.
Leases Alienable wholly or in Part.	
Improvement lease.	Conditional lease.
Scrub lease.	Settlement lease.
Inferior lands lease.	Crown lease.
Special lease.§	Homestead farm.†
Special conditional purchase lease (up to 1920 acres).	Homestead selection and grant.†
Annual lease.	Conditional purchase lease.
Town lands lease.‡	Suburban holding.‡
Week-end lease.‡	Residential lease on goldfields.§
Prickly-pear lease.	Homestead lease.†
	Irrigation Farm lease.
	Non-irrigable lease.
	Town Lands lease (Irrigation Area).
Leases not Alienable.	
Occupation license.	Pastoral lease.*
Permissive occupancy.	Lease to outgoing pastoral lessees (section 18).
Occupation permit (forest lands).	
Forestry lease.	
Snow lease.	
Mineral and auriferous lease.	
Church and school lands lease.§	

* No holdings. † Holdings in Western Division only. ‡ Perpetual. § With consent of Minister.

The rights of alienation attached to the various classes of leases shown above differ widely, and are usually subject to the qualification that the area to be alienated, together with all other lands held (other than non-convertible leases within five years of expiry), shall not exceed a home maintenance area. Conditional purchase leases, conditional leases, and (since 1930) Crown leases, homestead farms, homestead selections and grants, are almost entirely alienable, while settlement leases are subject to restriction in regard to home maintenance area. Improvement leases, scrub leases, and inferior lands leases are alienable only when about to expire and are subject to reservation, the home maintenance limitation and other restrictions inserted in individual leases.

METHODS OF PURCHASE.

Conditional Purchase.

This method of alienation was introduced by the Crown Lands Act of 1861, and has become the most extensively used of all. Briefly, it is a system of Crown land sales by deposit and annual instalment, and all the principal leasehold tenures may be converted, under certain conditions, wholly or in part into conditional purchases, which may be considered the basal tenure of land settlement in New South Wales.

The outstanding feature of the tenure is the limitation placed upon the area of land which may be held by a conditional purchaser during the currency of his purchase. Lands available for conditional purchase comprise all Crown lands in the Eastern and Central land divisions other than those reserved from sale, leased for a term of years, within the boundaries of towns or other populated areas, or set apart for other classes of holdings. The area to be purchased under residential conditions may not be less than 40 acres, and must not exceed 1,280 acres in the Eastern land division, and 2,560 acres in the Central land division, or must not exceed 320 acres in either division when the buyer does not undertake to reside on the holding. Special areas without residential conditions, ranging up to 320 acres in the Eastern land division, and up to 640 acres in the Central land division, may also be made available.

Any conditional purchaser may take up the maximum area at once, if it is available, or may make a series of additional purchases as land becomes available. To facilitate this, a special tenure (conditional lease) has been created whereby a conditional purchaser may take up land not exceeding three times the area of his conditional purchase, and this may be converted into conditional purchase. The combined area so acquired may exceed the prescribed divisional limit only to make up a home maintenance area as determined in individual cases by the Local Land Board. Holders of freehold lands of at least 40 acres are permitted also to acquire lands as additional conditional purchases and conditional leases, provided the total area of each holding so increased does not exceed the divisional maximum nor a home maintenance area.

The price of the land for a residential purchase is £1 per acre, unless otherwise notified, in addition to the value of improvements (if any) assessed by the Local Land Board. A deposit of 5 per cent. of the purchase money must be paid in addition to survey fee and stamp duty. The first annual instalment is due at the end of three years from the date of application and, at the holder's option, may be at the rate of 9d. or 1s. for each £ of the price of the land. Such payment comprises repayment of principal, with interest at the rate of $2\frac{1}{2}$ per cent. per annum. The term of purchase, according to the rate of instalment paid, is forty-one or twenty-eight years. Payment for improvements existing at date of purchase may be made in fifteen equal annual instalments, including interest at the rate of 4 per cent. Until October, 1931, the value of the land was subject to appraisal upon application from time to time, but it was then provided that the price might be appraised upon application within five years of confirmation or within two years from 2nd October, 1931.

The conditions to be observed by purchasers include *bona fide* residence upon the holding for five years after confirmation unless modified by the Local Land Board; fencing or other improvements, as prescribed, to the value of 6s. per acre (but not exceeding 30 per cent. of the price of the land or £384) effected within three years, and to the value of 10s. per acre (but not exceeding 50 per cent. of the price of the land or £640) effected within five years of confirmation; and the payment of all instalments and prescribed charges.

The price of land taken up as a non-residential purchase is double the price of the same land if taken up as a residential purchase. The term of payment is twenty-seven years. Fencing to the value of £1 per acre, or other improvements to the value of £1 10s. per acre, must be effected within five years.

All applications connected with the purchases are considered by the Local Land Board, and certificates are issued to the holder by the chairman upon survey and confirmation, and a further certificate when all conditions, other than payment of balance of purchase money or survey fees have been fulfilled. After all conditions have been fulfilled a Crown grant is issued to the holder.

Under certain conditions a residential conditional purchase may be converted into a homestead farm, and a non-residential purchase into a residential purchase or a homestead farm.

Transfer may be made after the certificate has been issued, but original purchases applied for after 31st January, 1909, may be transferred only with the consent of the Minister for Lands.

A conditional lease of not less than 40 acres may be obtained only in conjunction with a conditional purchase, subject to the various conditions set out above in respect of conditional purchases.—(Further particulars as to conditional leases are given on a later page.)

Number and Area of Conditional Purchases and Conditional Leases.

Transactions in respect of original and additional conditional purchases from 1862 to 30th June, 1930, were as follow:—

Year ended 30th June.	Completed Conditional Purchases—Deeds issued during year.		Uncompleted Conditional Purchases in existence.		Conditional Leases. Gazetted or Confirmed during year.	
	No.	Area.	No.	Area.	No.	Area.
		acres.		acres.		acres.
1862-1923	155,189	20,637,146	72,888	18,199,432	33,220	17,581,448
1924	3,374	596,124	71,202	18,122,045	231	233,123
1925	3,325	590,221	69,470	18,156,194	166	179,241
1926	2,816	460,217	69,866	19,263,629	93	46,817
1927	2,887	449,117	69,046	19,635,068	68	47,267
1928	2,645	394,306	68,278	20,057,640	89	58,181
1929	3,710	315,358	66,170	20,619,758	79	52,606
1930	2,024	299,485	66,243	20,475,734	84	26,440
Total (as at 30th June, 1930)	175,970	23,741,974	66,243	20,475,734	18,537*	11,722,588*

* Leases in existence.

The particulars of applications for conditional purchases shown above are exclusive of applications to convert the tenures into conditional purchases, whereas the figures relating to completed and uncompleted conditional purchases include large areas converted from other tenures. The total area alienated and in course of alienation by conditional purchase as at 30th June, 1930, was 44,217,408 acres, and, in addition, there were 11,722,588 acres of associated conditional leases which were almost wholly convertible into conditional purchases. The area of uncompleted conditional purchases shown above includes a number upon which payments have been completed, although deeds have not yet been issued.

The area of conditional purchases converted to other tenures has been deducted from the totals shown above.

The number of conditional purchase selections shown is several times greater than the total number of rural holdings in the State, and does not, of course, represent individual holdings. It represents the number of individual blocks, both original and additional, taken up as conditional purchases and it includes those which have been incorporated with other holdings after deeds have been issued.

Auction Sales and After-auction Purchases.

Crown lands are submitted for auction sale under two systems. Under the ordinary system the balance of purchase money is payable, without interest, within three months of the day of sale, while, under the deferred payment system, the balance is payable by instalments, with 5 per cent. interest, distributed over a period not exceeding ten years. In either case, not less than 10 per cent. of the purchase money must be deposited at the time of sale.

Auction sales were limited by law in 1884 to 200,000 acres in any one year, but the area sold by auction and after-auction purchases, although formerly extensive, has amounted to only 43,143 acres in the last thirteen years. Town lands may be sold in blocks not exceeding half an acre, at an upset price of not less than £8 per acre; and suburban lands must not exceed 20 acres in one block, the minimum upset price being £2 10s. per acre. Country lands may be submitted in areas not exceeding 640 acres, the upset price being not less than 15s. per acre. The value of improvements on the land may be added to the upset price.

Town or suburban land or portions of country land of less than 40 acres each, which have been passed at auction, may be brought with the Minister's consent, at the upset price. A deposit of 25 per cent. of such upset price is payable at the time of application, the balance being payable on the terms fixed for the auction sale.

Alienation by this method is now very restricted. Only 372 acres were sold by auction during 1929-30 in 458 lots, realising £84,162. One hundred and fifty-seven acres were sold as after-auction purchases in 197 lots, realising £4,529.

Improvement Purchases.

Holders of miners' rights or of business licenses on a gold-field, being in authorised occupation by residence on land containing improvements, may purchase such land without competition. Improvements must include a residence or place of business, and be of the value of £8 per acre on town land, and of £2 10s. per acre on any other land. Alienation by this means has never been extensive. During 1929-30 the area sold was 24 acres in 45 lots for a total sum of £1,062.

Special Non-Competitive Sales.

These comprise land reclamations, rescissions of reservations, unnecessary roads, public land to which no way of access is available, or which is insufficient in area for conditional sale, etc., also residential leases, and the area of Newcastle pasturage reserves for which the purchase money has been paid in full. The amount realised by special sales in 1929-30 was £14,364 in respect of 4,179 acres of land.

The owner in fee-simple of land having frontage to the sea, or to any tidal water or lake, who desires to reclaim and purchase any adjoining land lying below high-water mark, may apply to the Minister for Lands to do so, except in the case of Port Jackson, the control of which is vested in the Sydney Harbour Trust. Reclamations which might interrupt or interfere with navigation are not authorised.

Area Alienated by Crown Land Sales.

Particulars of areas disposed of under the three preceding headings, in quinquennial periods, since 1900, are as follow:—

Year ended 30th June.	Auction Sales.	After-auction Sales.	Improvement Purchases.	Special Sales.	Total.
	acres.	acres.	acres.	acres.	acres.
1900-04* ...	261,328	10,004	942	3,782	276,056
1905-09 ...	80,430	15,801	181	5,817	102,229
1910-14 ...	16,768	6,994	269	9,976	34,007
1915-19 ...	20,527	2,709	241	9,743	33,220
1920-24 ...	9,340	2,963	143	10,792	23,238
1925-29 ...	7,431	1,792	138	11,126	20,487
1928 ...	1,230	230	20	2,595	4,075
1929 ...	1,422	384	15	2,668	4,489
1930 ...	372	157	24	4,179	4,732

* Calendar years.

Exchange of Land between the Crown and Private Owners.

Before the granting of fixity of tenure in connection with pastoral leases, the lessees had made it a practice to secure portions of their runs by conditional purchases and purchases in fee-simple. The practice was disadvantageous to the public estate, because Crown lands were left in detached blocks severed by lessees' freehold properties; and the lessees realised that it would be convenient for them to gather their freeholds together in one or more consolidated blocks by surrender of the private lands in exchange for Crown lands elsewhere.

Under the provisions of the Crown Lands Consolidation Act, 1913, the Governor, with the consent of the owner, may exchange any Crown lands for any other lands of which a grant in fee-simple has been issued.

The Governor may accept, in exchange for Crown lands, lands in respect of which a balance of purchase money remains unpaid, if upon payment of such balance the right to a grant in fee-simple becomes absolute. In any such case a grant of Crown lands in exchange will not be issued until the balance of purchase money has been duly paid.

Under this head 46 applications, embracing 64,446 acres, were granted in 1929-30.

Settlement Purchase and Irrigation Farm Purchase.

Particulars of these methods of acquiring land are shown on later pages in relation to Closer Settlement and Irrigation Settlement.

ALIENABLE LEASES.

The principal kinds of leases which may be converted under specified conditions to freehold tenures wholly or in part are the conditional lease, Crown lease, settlement lease, improvement lease, homestead lease, homestead selection and homestead grant, annual lease, special lease, scrub lease, inferior lands lease, conditional purchase lease, irrigation farm lease, non-irrigable lease, prickly-pear lease, and homestead lease. Other leases of this class are suburban holding, residential lease, week-end lease, and leases of town lands.

Conditional Leases.

Certain particulars regarding these leases have been shown on a previous page in connection with conditional purchases. The tenure was introduced by the Act of 1884. A conditional lease may be obtained by any

holder of a conditional purchase (other than non-residential), or a conditional purchase within a special area in the Eastern Division. Lands available for conditional purchase are also available for conditional lease, with the exception of lands in the Western Division, and of lands within a special area or a reserve. Applications must be accompanied by a provisional rent of 2d. per acre and a survey fee, except where otherwise provided. The lease was formerly for a period of forty years, but it was provided in 1924 that, upon application during the last five years of its currency, a lease might be extended for a period of twenty years.

The rent is determined by the Land Board, and is payable yearly in advance. In 1931 it was provided that the rent may be appraised upon application within five years of confirmation or two years of 2nd October, 1931. Any conditional lease, with the exception of a small number of inconvertible conditional leases created by conversion from other tenures, may be converted at any time during its currency into a conditional purchase, and an Act passed in 1927 enabled conditional leases to be transferred and held separately from the original holding with which they were granted.

Applications for 93 leases were lodged during 1929-30, and 84 representing 26,440 acres, were confirmed.

Conditional leases, to the number of 777, embracing 437,980 acres, were converted into conditional purchases during 1929-30, and conditional leases containing an area of 18,968 acres, were created by conversion. Gazetted conditional leases in existence at 30th June, 1930, numbered 18,537, embracing 11,722,588 acres, at an annual rental of £182,950.

Crown Leases.

Crown leases were constituted under the Crown Lands Amendment Act, 1912, and lands are specially set apart by notification in the *Government Gazette* as available for Crown lease. Crown lands available for conditional purchase (unless otherwise specified in the *Gazette*) are also available for Crown lease. Land may be set apart for Crown lease to be acquired only as additional holdings.

The term of lease is forty-five years, and the annual rent 1½ per cent. of the capital value, as determined within five years of confirmation or approval or within two years from 2nd October, 1931. The rent payable for the first year may be remitted if, in addition to the improvements required as a condition of the lease, an equal sum be spent by the lessee in improving the land. Upon the expiration of a Crown lease the last holder thereof possesses tenant rights in all improvements other than Crown improvements. The lessee is required to reside on the land for five years, commencing within six months of the confirmation of the lease. Under the conditions attached to the lease when granted in 1912 the lessee was empowered during the last five years of the lease, unless debarred by notification setting the land apart, to apply to convert into a homestead farm so much of the land as would not exceed a home maintenance area. But by the Act of 1917 where a Crown lease is not covered by reservation of any kind, so much of it as, with other freehold or convertible leases held by the lessee, does not exceed a home maintenance area may be converted into a conditional purchase, with or without a conditional lease. Since the passing of this Act 1,352,806 acres of Crown lease have been converted into conditional purchase and conditional purchase lease. By a further Act passed in 1930 Crown leases were made convertible in their entirety without restriction. The lease may be protected against sale for debt in certain circumstances.

Leases granted and current in recent years are shown below:—

Year ended 30th June.	Applications Confirmed.		Leases current at 30th June.		
	No.	Area.	No.	Area.	Rent.
		acres.		acres.	£
1912-1925 ...	5,403	6,539,854	3,819	4,874,737	45,085
1926 ...	257	369,256	3,933	5,171,229	44,440
1927 ...	192	246,187	3,923	5,260,371	45,384
1928 ...	237	345,610	3,991	5,387,358	46,113
1929 ...	247	479,987	3,944	5,460,250	46,061
1930 ...	228	282,154	3,979	5,531,875	46,209

The figures shown above include a number of Crown leases made available specially for returned soldiers. Particulars of these are shown on a later page.

This tenure was extensively applied immediately from its inception, and it practically superseded the settlement lease under which operations were extensive until 1912. Most of the Crown lands made available each year are set apart under this tenure and that of the homestead farm, also introduced in 1912. The total area of Crown leases confirmed during the fourteen years the tenure has been in existence was 8,263,048 acres, which has been reduced by forfeitures, conversions, etc., so that the area remaining under Crown lease at 30th June, 1930, was 5,531,875 acres.

Settlement Leases.

This tenure was created in 1895. Until 1912 it was used extensively in making land available for settlement, but since the introduction of the Crown lease in that year fresh operations under it have been inconsiderable. Under its conditions farms gazetted as available for settlement lease can be obtained on application accompanied by a deposit of six months' rent, and one-tenth of survey fee. The duration of the lease is forty years, but an Act of 1930 provided that settlement leases not substantially in excess of a home maintenance area might be extended to sixty years. The leaseholder is required to reside on the lease for the first five years of its currency. Rent is payable at the rate specified upon gazettal, subject to appraisement within five years after confirmation or within two years of 2nd October, 1931, and to re-determination upon extension to a term of sixty years.

From its inception very considerable areas of land were taken up under this lease, and by 30th June, 1913, the total area of settlement leases confirmed to applicants was 8,793,663 acres. An amendment of the Crown Lands Act gave holders of settlement leases the right to convert such part of their leases as, with freehold or convertible lands already held, does not exceed a home maintenance area into a conditional purchase with an associated conditional lease, but where the total holding of freehold land so created would exceed a home maintenance area the excess is granted as conditional lease without rights of conversion.

Between 1909 and 30th June, 1930, a total area of 5,575,897 acres of settlement leases were converted under these conditions into other tenures, and 50,890 acres, chiefly of special leases, had been converted into settlement leases. Since 1913 only 106,554 acres of new settlement leases have been confirmed, while large areas have reverted to the Crown by forfeiture, &c. At 30th June, 1930, there remained under this tenure, 1,080 leases, comprising 2,848,724 acres, at an annual rental of £41,997.

During 1929-30 there were five applications for additional leases and seven leases with an area of 6,133 acres were confirmed; there were no applications for original settlement leases.

Improvement Leases.

This tenure was introduced in 1895 and, by the end of 1903, an area of 9,716,006 acres of improvement leases had been let, although the area actually current was much smaller. After that year the areas taken up annually showed a considerable falling off and, up to 30th June, 1930, the total area of improvement leases which had been let was 11,576,164 acres, of which only 759,007 acres remained current. The maximum area of improvement leases current at any time was 6,884,330 acres in 1910, the subsequent decrease having been brought about mainly by the withdrawal of leases for settlement in terms of individual leases and a number of other causes, such as forfeiture, expiry, resumption, and the transfer of improvement leases wholly within State forests to the control of the Forestry Commission and their conversion into forestry leases.

An improvement lease may consist of any land in the Eastern or Central Divisions considered unsuitable for closer settlement until improved. It may be obtained only by auction or tender, but prior to 1920 certain leases were granted at fixed rentals under improvement conditions. The rent is payable annually, and the lease is for a period of twenty-eight years, with an area not exceeding 20,480 acres. Upon the expiration of the lease the last holder is deemed to have tenant-right in improvements. During the last year of the lease the lessee may apply for a homestead grant of an area not in excess of a home maintenance area, including the area on which his dwelling-house is erected. This provision has become operative since 1921, and a total area of 759,349 acres has been converted in this way. The Advisory Board, constituted under the Closer Settlement Act, 1907, may inspect any land comprised in an improvement lease, and if it finds such land suitable for closer settlement the Minister may resume the lease, the lessee being compensated. To 30th June, 1930, a total area of 342,821 acres had been withdrawn in this way, £126,794 being paid as compensation to lessees.

During 1929-30 three improvement leases with a total area of 7,505 acres were granted at an annual rental of £37. Eighteen improvement leases, with a total area of 62,380 acres, were converted into homestead selections. At 30th June, 1930, there remained current 223 improvement leases and leases under improvement conditions, with an area of 759,007 acres, and rental £5,337.

Homestead Farms.

This tenure was created in 1912. The title of a homestead farm is a lease in perpetuity. Annual rent is charged at the rate of $2\frac{1}{2}$ per cent. of the capital value, but for the first five years the holder, in lieu of payment of rent, may expend an equal amount on improvements of a permanent character, which (except boundary fencing) are in addition to those which are required otherwise by the conditions of the lease. The capital value of the holding is subject to appraisal within five years of confirmation of approval or within two years of 2nd October, 1931.

Crown lands available for conditional purchase (unless otherwise notified in the *Gazette*) are available also for homestead farms. Land may be set apart for additional homestead farms, but is available only to applicants whose total holding, if successful, would not substantially exceed a home-maintenance area. Any Crown lands may be set apart for disposal as homestead farms before survey. There is no definite limit placed on the area of a homestead farm, but it is generally notified as available in the home-maintenance areas.

A condition of five years' residence is attached to every homestead farm, but in special cases residence, anywhere within reasonable working distance, may be allowed. A perpetual lease grant is issued after the expiration of five years from confirmation of the application, if the holder has complied with all the conditions.

Particulars relating to applications for homestead farms and conversions from other tenures during the last five years are shown below:—

Year ended 30th June.	Applications Confirmed.		Created by Conversion from other tenures.		Reversal of forfeiture and increased area.		Less—Forfeited, decrease in area, and conversions into other tenures.		Homestead Farms in existence at end of year.	
	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.
		acres.		acres.		acres.		acres.		acres.
1926	237	307,259	10	25,209	16	19,560	122	98,453	3,683	3,965,944
1927	121	140,412	11	32,357	2	3,521	112	134,680	3,705	4,007,554
1928	147	190,262	15	41,617	35	47,251	147	183,668	3,762	4,103,016
1929	120	130,364	3	10,078	4	4,918	151	252,755	3,760	3,995,621
1930	125	122,233	3	11,106	...	13,438	94	113,196	3,794	4,086,663

The total area of homestead farms confirmed to 30th June, 1930, was 5,190,912 acres and after adjustments of area by reason of conversion, forfeiture, etc., there remained in existence 4,086,663 acres under this tenure.

The holder of a conditional purchase, or conditional purchase and conditional lease, or homestead selection, or homestead grant, or conditional purchase lease, under certain conditions, may convert such holding into a homestead farm. The area of homestead farms so created to 30th June, 1930, was 221,417 acres. Under certain conditions a homestead farm may be converted into a conditional purchase lease or into a conditional purchase, with or without a conditional lease, or since February, 1927, into a Crown lease. An Act of 1930 made homestead farms convertible in their entirety without restriction; 717,963 acres of homestead farms had been converted into other tenures prior to 30th June, 1930. A homestead farm, which is a conversion of a settlement purchase under provision now repealed, may be reconverted into a settlement purchase. Two homestead farms of 449 acres and 722 acres respectively have been so converted.

Homestead Selections and Homestead Grants.

The appropriation of areas for homestead selection was a prominent feature of the Act of 1895, the land chosen for subdivision being generally agricultural land, and the maximum area of holdings limited to 1,280 acres. The tenure is lease in perpetuity with rent at the rate of $1\frac{1}{4}$ per cent. per annum for the first five years or until the issue of the homestead grant, when it is raised to $2\frac{1}{2}$ per cent. or to $3\frac{1}{2}$ per cent. of the appraised value if residence is performed by deputy. The value is subject to appraisal within five years of confirmation or two years of 2nd October, 1931. Certain residential and improvement conditions were imposed, and on compliance with these for a term of five years a homestead grant is issued.

Since 1912 practically no lands have been made available for original homestead selections, such tenure having been replaced by that of homestead farm. Applications dealt with after 1912, are either in connection with areas previously set apart for homestead selections, or as additional

areas, principally the latter. The following statement shows the applications and confirmations in regard to homestead selections and homestead grants issued up to 30th June, 1930.

Year ended 30th June.	Homestead Selections. Confirmed.		Homestead Grants issued.		Homestead Selections and Grants in existence.	
	No.	acres.	No.	acres.	No.	acres.
1895 to 1925	8,092	2,851,658	6,059	2,276,815	2,152	785,250
1926	8	5,223	37	26,554	2,149	939,519
1927	10	14,523	33	35,324	2,131	1,009,674
1928	10	23,272	27	30,798	2,156	1,179,511
1929	26	52,721	10	13,400	2,061	1,198,737
1930	5	5,128	16	25,204	2,010	1,190,090

Operations under this tenure were at first very extensive, but they gradually diminished, and in 1911-12, the year before the homestead farm was introduced, only 94,641 acres of homestead selections were confirmed. The Crown Lands Amendment Act of 1908, authorised the conversion of homestead selections and grants into conditional purchases and conditional leases, and a further amendment in 1930 made these holdings convertible in their entirety without restriction. Extensive advantage has been taken of this provision, and to 30th June, 1930, an area of 2,180,464 acres of homestead selections and grants had been so converted. This accounts for the difference between the area of homestead selections confirmed (2,952,525) and the area remaining in existence (1,190,090) the difference having been reduced latterly by the extensive conversions of improvement leases into homestead selections. Under the Crown Lands (Amendment) Act of 1912, a homestead selection or grant may be converted into a homestead farm, but there have been only thirty cases of conversion of this kind, covering 130,865 acres.

Leases of Scrub and Inferior Lands.

These tenures were introduced in 1889 in order to provide for the effective occupation and improvement of lands not suited for ordinary pastoral occupation. The duration of individual leases is fixed on gazettal, the maximum being 21 years for a scrub lease and 20 years for an inferior lands lease subject to extension to 28 years in each case or to forty years if infested with prickly pear.

The area of inferior lands leases have never been extensive, and the area under scrub leases reached its maximum of 2,273,123 acres in 1912, then diminished steadily.

At 30th June, 1930, there were in existence 87 scrub leases, with an area of 286,078 acres, and rental of £1,509, and 16 inferior lands leases, embracing 53,732 acres, at a rental of £218.

Annual Leases.

Unoccupied lands, not reserved from lease, may be obtained for pastoral purposes as annual leases on application, or they may be offered by auction or tender. No conditions of residence or improvement are attached to annual leases, which do not convey security of tenure, the land being alienable by conditional purchase, auction sale, etc. The area in any one lease is restricted to 1,920 acres. In certain circumstances an annual lease may be converted into a lease under improvement conditions for a term not exceeding ten years.

The area under annual lease fluctuates from year to year, but is diminishing steadily. It amounted to 8,687,837 acres in 1903 and 2,953,296 in 1920. The number of annual leases current at 30th June, 1930, was 2,936, embracing 1,127,013 acres, with an annual rent of £9,776, inclusive of 39 annual leases, comprising 34,950 acres in the Western Division.

Special Leases.

Special leases not exceeding an area of 1,920 acres are issued to meet cases where land is required for some industrial or business purpose. A special lease may be obtained for a period not exceeding twenty-eight years on conditions determined by the Minister.

The Crown Lands Act, passed in 1908, provides for the conversion of a special lease by a qualified leaseholder, with the consent of the Minister, into a conditional purchase lease, an original or additional conditional purchase, an original or additional homestead selection, an original or additional settlement lease, a conditional lease, or homestead farm. Under this provision 1,182,825 acres of special leases have been converted into various new tenures.

The number of special leases granted during 1929-30 was 798, with a total area of 83,273 acres, and 470 leases, representing 78,698 acres, were converted into other tenures. After allowance has been made for leases which had terminated, were forfeited, surrendered, etc., and those which expired by effluxion of time, 7,358 leases, with an area of 707,417 acres and rental of £47,204, were current at 30th June, 1930.

Conditional Purchase Leases.

This form of tenure was created in 1905; but, as in the case of homestead selections and settlement leases, it is obsolete for the purpose of selection, as lands are not now made available under it. The area held under conditional purchase lease reached a maximum of 677,961 acres in 1911, and since then it has decreased steadily.

The term of the lease was originally forty years, but in 1924 it was increased to fifty years with rent at $2\frac{1}{2}$ per cent. per annum of the capital value, which is fixed upon notification subject to review within five years of confirmation of the lease or two years of 2nd October, 1931. No fixed limit was placed on areas made available, but conditions as to residence, cultivation, etc., were prescribed. Conversion to the tenures of conditional purchase and homestead farms is permitted, the total area so converted being 509,464 acres.

A special conditional purchase lease may be granted without obligation of residence in respect of areas not exceeding 320 acres on condition that improvements to the value of 10s. or more per acre, as determined by the Minister, are effected within three years of application.

The annual operations under this tenure are now very small. The leases holding good at 30th June, 1930, numbered 245, with an area of 173,333 acres; the annual rent amounting to £5,092.

Prickly Pear Leases.

Under the Prickly Pear Destruction Act, 1901, certain common or Crown lands infested with prickly pear may be offered for lease by auction or tender, and may be let for a term not exceeding twenty-one years, subject to prescribed conditions as to improvements, rent, etc. At 30th June, 1930, the number of prickly pear leases was 55, and the area so leased was 62,343 acres, at a total annual rental of £281. Under certain conditions a prickly

pear lease may be converted to a homestead selection, and five leases of 1,746 acres have been so converted. In 1930 Acts were passed which made these leases convertible into homestead farm, Crown lease or conditional purchase and conditional lease and the Commissioner was given power to extend leases and reduce rentals and purchase prices as compensation for the clearing of prickly pear lands.

Homestead Leases.

The last leases under this tenure in the Eastern and Central Land Divisions terminated during 1923-24.

Suburban Holdings.

The tenure of suburban holding was introduced in 1912. It is a lease in perpetuity with fixed conditions as to residence and perpetual payment of rent. Under certain conditions the leaseholder may be permitted to purchase his holding. Any suburban Crown lands, or Crown lands within population boundaries, or within the Newcastle pasturage reserve, or any other Crown land, may be set apart for disposal by way of suburban holding.

The area of a suburban holding is determined by the Minister for Lands. The rent—minimum, 5s. per annum—is calculated at the rate of $2\frac{1}{2}$ per cent. of the capital value, which is fixed upon notification and may be appraised within five years of confirmation or two years of 2nd October, 1931. After the expiration of five years from date of confirmation, and subject to fulfilment of all conditions, a perpetual lease grant is issued. The right to purchase suburban holdings was conferred in 1917.

No rent is chargeable on holdings in course of purchase, the principal with interest at the rate of $2\frac{1}{2}$ per cent. per annum on the balance being paid by annual instalments extending over a period of ten years.

The number of confirmations and purchases of suburban holdings since the introduction of the tenure were as under:—

Year ended 30th June.	Confirmations.		Suburban Holdings in existence at the end of year.*			Suburban Holdings—Purchases approved to the end of the year.	
	No.	Area.	No.	Area.	Annual Rent.	No.	Area.
		acres.		acres.	£		acres.
1912-1925	3,790	78,131	2,370	53,994	5,734	662	10,739
1926	33	419	2,191	52,998	5,466	740	11,069
1927	81	1,547	2,252	54,865	5,387	792	11,933
1928	95	1,281	2,260	54,253	5,045	852	13,227
1929	53	515	2,272	53,422	5,610	891	14,409
1930	63	824	2,211	51,779	5,506	983	16,457

* Exclusive of purchases approved.

To 30th June, 1930, deeds of purchase had been issued in respect of suburban holdings, embracing 5,587 acres; these are excluded from the above table.

Residential Leases.

The holder of a "miner's right" within a gold or mineral field may obtain a residential lease. A provisional rent of 1s. per acre is charged, the maximum area allowed is 20 acres, and the longest term of the lease twenty-eight years; the annual rent is appraised by the Land Board. The principal conditions of the lease are residence during its currency, and the erection within twelve months of necessary buildings and fences. Tenant-right in

improvements is conferred upon the lessee. The holder of any residential lease may, after five years, acquire the land by improvement purchase with the consent of the Minister as described on a previous page.

There were 623 leases, embracing 8,624 acres at a rental of £1,260, current at 30th June, 1930.

Week-end Leases.

This tenure, created by the Crown Lands Amendment Act, 1916, is a lease in perpetuity of an area not exceeding 60 acres, subject to payment of rent at the rate of $2\frac{1}{2}$ per cent. of the capital value, to the effecting of substantial improvements worth £1 per acre within five years from confirmation, and to the performance of such special conditions as may be notified. Residence is not necessary. The minimum rent is £1 per holding. Any adult (except a married woman not judicially separated from her husband) may apply, but persons who already hold land within area defined in a notification setting apart the land for week-end leases are generally disqualified.

Week-end leases, on approval by the Minister, may be purchased, and payment must be made within three months from date of demand, or within such further period as the Minister may allow.

Transfers may be made at any time with the Minister's consent, but must be to a qualified person, except in cases of devolution under a will or intestacy. The consideration for a transfer must not exceed the capital value of the improvements on the land.

During the year ended 30th June, 1930, confirmation was made in five cases with an area of 44 acres at an annual rental of £10. At 30th June, 1930, the leases current numbered 104, of an area of 202 acres, and annual rental £118. In addition, 66 leases of 438 acres had been made freehold, and approval to purchase had been granted in the case of 9 leases of 27 acres.

Leases of Town Lands.

Crown lands within the boundaries of any town may be leased by public auction or by tender. The lease is perpetual, and the area included must not exceed half an acre. The amount bid at auction or offered by tender (not being less than the upset value) is the capital value on which the annual rent at the rate of $2\frac{1}{2}$ per cent. is based for the first period of twenty years. The capital value for each subsequent twenty years' period is determined by the Land Board.

The lease may contain such covenants and provisions as may be gazetted prior to sale or tender. Residence is not necessary. No person is allowed to hold more than one lease, unless with the permission of the Minister on recommendation by the Land Board. The holder of a town lease may be allowed to purchase it.

In the year 1929-30 no after-auction tenders were accepted. Up to 30th June, 1930, deeds of purchase had been issued for 78 lots embracing 29 acres. On 30th June, 1930, there were 305 leases, containing 112 acres, the annual rental being £279.

INALIENABLE LEASES.

The term "inalienable leases" is here used to signify that the statutory conditions attached to the leases so classified do not give the leaseholder the right to purchase any part of his lease nor to convert into another leasehold tenure involving the right of purchase.

On the foundation of the Colony all lands vested in the Crown, and for many years permits to occupy unsold Crown lands were issued on various conditions.

The principal inalienable tenures now in existence are described below.

18th Section and Pastoral Leases.

Under the Crown Lands Amendment Act of 1903, the registered holder of any pastoral lease, preferential occupation license, or occupation license, could apply for a lease, for not more than twenty-eight years, of an area not exceeding one-third of the total area of the land comprised within the lease or license, subject to such rent, conditions or improvements, and withdrawal for settlement as may have been determined. These are known as 18th Section Leases, having been granted under the Land Act of 1903, which has been repealed. The area of land held under this tenure has decreased rapidly since 1914, when the area so held exceeded a million acres.

At 30th June, 1930, these leases, also known as "Leases to Outgoing Pastoral Lessees," numbered 53, with an area of 147,294 acres, and rental of £1,560. Upon the recommendation of the Closer Settlement Advisory Board the Minister may resume for closer settlement any 18th Section lease.

Forestry Leases and Occupation Permits.

Unoccupied areas and leases situated entirely within dedicated forests are controlled exclusively by the Forestry Commission, which has power to lease or otherwise permit their use for pastoral or other approved purposes.

Forestry leases limited to twenty years have been granted for grazing purposes, and occupation permits usually on an annual tenancy, but sometimes for a period of several years, have been granted for grazing, bee-farming, and forest saw-mills. For grazing purposes the rent is usually fixed in relation to the grazing capacity of the land.

The area of forestry leases and occupation permits wholly within State forests, at 30th June, 1930, was 1,967,284 acres under the Forestry Acts, besides 59,121 acres under the Crown Lands Act administered by the Forestry Commission. In addition, an area of 84,999 acres, consisting of portions of other leases not wholly within State forests were administered by the Department of Lands.

Snow Leases.

Vacant Crown lands on the Southern Highlands, which for a portion of each year are usually covered with snow, and are thereby unfit for continuous use or occupation, may be leased by auction or tender as snow leases. Not more than one snow lease may be held by the same person. The maximum area of any snow lease is 10,240 acres. The term of the lease is fourteen years.

At 30th June, 1930, there were 62 leases current, embracing 272,300 acres; and rent, £5,949. This tenure was introduced in 1889.

Mineral and Auriferous Leases.

Under the Mining Act, the Minister for Mines is empowered to grant certain rights for the operations of mines on any lands within the State. These are known as mineral and auriferous leases and generally they take precedence over other forms of tenure. The area so held has steadily increased since 1914, when it was 199,060 acres. At 30th June, 1930, there

were 284,301 acres held as mineral and auriferous leases, exclusive of leases to mine on private lands. The area leased in this way is not included in the area covered by other land tenures. Authorities to mine under roads and reserves covered an area of 860 acres.

Church and School Lands Leases.

The history of Church and School lands leases, showing the present status of leaseholders, was published on page 859 of the Year Book for 1921.

The total area of Church and School lands held under lease at 30th June, 1930, in the Eastern Division, was 1 acre, at a rental of £315 per annum.

Occupation Licenses.

Occupation licenses may be of two kinds (a) preferential occupation licenses, consisting of the area within an expired pastoral lease, and (b) ordinary occupation licenses, which relate to the parts of the holdings formerly known as resumed areas. They may be acquired by auction or tender. Occupation licenses extend from January to December, being renewable annually at a rent determined by the Land Board.

An occupation license entitles the holder to occupy Crown lands so granted for grazing purposes, but it does not exempt such lands from sale or lease of any other kind. The licensee, however, is granted tenant rights in any improvements made to his holding with the written consent of the Crown.

The area under occupation license (Crown Lands Act) was represented at 30th June, 1930, by 424 ordinary licenses for 2,049,400 acres, rental £4,347, and 237 preferential licenses, representing 723,934 acres, and rent £5,501. The area occupied in this way was formerly very extensive, being nearly 10,000,000 acres in 1904.

Permissive Occupancy.

Permissive occupancy is a form of tenancy at will from the Crown, at a fixed rental for a short period, terminable at any time by a written demand for possession from the Secretary for Lands or by written notice from the tenant. The occupant has tenant rights in improvements effected by him.

The number of permissive occupancies in existence at 30th June, 1930, was 8,479 comprising 4,213,614 acres, with a rental of £25,803. The area held under this tenure is increasing steadily.

CONVERSION OF TENURES.

In describing the various methods of acquisition and occupation, details have been given of provisions of the Crown Lands Act which confer on certain holders of Crown lands the right of conversion into more desirable tenures. These may be summarised briefly thus:—

A conditional lease or a conditional purchase lease may be converted, at the option of the holder, into a conditional purchase. A homestead farm, a homestead selection, a settlement lease, or a Crown lease may be converted into a conditional purchase with (if desired) an associated conditional lease, subject to the proviso as to a home maintenance area described below. A homestead farm or homestead selection may, in certain circumstances, be converted into a conditional purchase lease and a conditional purchase lease may be converted into a homestead farm. During the last five years of its currency a Crown lease may, with the approval of the Minister, be converted into a homestead farm, while up to 1,280 acres of a settlement lease may (after five years) be converted into a homestead grant. A special lease, unless debarred, may be converted, at the discretion of the Minister, into a conditional purchase lease, conditional purchase, conditional lease, homestead selection, settlement lease, or homestead farm. Under various conditions an improvement lease, scrub lease or prickly pear lease not otherwise

reserved may be converted into a homestead selection not exceeding in extent a home maintenance area. Since February, 1927, it has been possible in certain circumstances to convert a homestead farm into a Crown lease.

In the case of a homestead farm, homestead selection, Crown lease or settlement lease the area that may be converted into freehold, together with the area held by the applicant under any other tenure (other than a lease having less than five years to run without the right to purchase the freehold), must not exceed a home maintenance area as determined by the Local Land Board. The Crown Lands Amendment Act of 1930 authorised the conversion of homestead selections, homestead farms and Crown leases in their entirety without restriction and made non-convertible conditional leases convertible in certain circumstances. Prickly pear leases were made convertible into homestead farms, Crown leases or conditional purchases and conditional leases.

The following statement shows the number and area of holdings in respect of which conversions were confirmed during the year 1929-30:—

Tenure of Holding Converted.	New Tenure Confirmed.													
	Conditional Purchase.		Con- ditional Purchase and Associated Con- ditional Lease.		Con- ditional and Con- ditional Purchase Leases.		Home- stead Selection.		Crown Lease.		Home- stead Farm.		Total Confirma- tions.	
	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.
	777	acres. 437,980	...	...	...	...	...	...	...	...	...	...	777	acres. 437,980
Conditional Leases ...	3	1,920	1	2,206	...	...	...	...	...	...	...	...	4	4,126
Conditional Purchase Leases ...	1	300	...	...	...	...	...	...	...	...	...	...	1	300
Non-residential Con- ditional Purchases..	42	20,122	21	34,044	...	...	...	...	...	...	2	10,829	65	64,995
Homestead Selections or Grants ...	11	14,809	36	116,664	...	...	...	...	...	...	...	...	47	131,463
Settlement Leases ...	...	...	...	...	...	...	1	91	...	...	...	...	1	91
Prickly Pear Leases...	433	60,096	...	...	34	17,830	2	495	...	...	1	277	470	78,693
Special Leases ...	...	...	...	...	...	...	4	23,604	...	...	...	...	4	23,604
Scrub Leases ...	...	...	...	...	...	...	18	62,380	...	...	...	...	18	62,380
Improvement Leases ...	101	78,354	56	102,989	1	642	...	...	...	...	...	...	158	241,985
Crown Leases ...	41	46,529	26	46,079	2	496	...	...	1	5,686	...	...	70	98,790
Homestead Farms ...														
Total ...	1,409	660,110	140	361,972	37	18,968	25	86,570	1	5,686	3	11,106	1,015	1,144,412

Particulars of the number and area of new tenures obtained by conversion during each of the past ten years are shown below:—

Year ended 30th June.	New Tenure Confirmed.													
	Conditional Purchase.*		Conditional Purchase and Associated Conditional Lease.†		Con- ditional and Con- ditional Purchase Lease.		Home- stead Selection.		Settlement Lease.		Home- stead Farm.		Total Confirmations.	
	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.
		acres.		acres.		acres.		acres.		acres.		acres.		acres.
1921	1,598	501,851	78	174,756	34	11,074	23	36,986	3	2,890	1	151	1,737	727,722
1922	1,302	455,018	50	122,923	30	8,297	29	39,371	23	19,238	8	9,505	1,449†	†653,801
1923	1,201	393,649	43	115,421	24	8,339	27	46,973	15	4,298	12	10,690	1,323†	†580,092
1924	1,260	438,722	68	169,383	38	10,787	22	55,783	4	5,928	4	2,862	1,396	683,465
1925	1,332	514,312	86	278,421	38	12,550	26	40,632	5	1,211	12	31,729	1,499	878,855
1926	1,359	662,934	70	193,552	30	13,419	30	219,803	4	1,171	10	25,209	1,533	1,016,388
1927	1,526	734,045	95	209,682	26	12,703	41	131,312	2	253	11	32,357	1,701	1,120,447
1928	1,432	679,685	164	372,557	34	26,237	57	214,444	5†	18,014	15	41,617	1,707	1,352,854
1929	1,522	833,463	199	565,110	30	14,970	21	63,274	...	...	3	10,078	1,775	1,466,895
1930	1,409	660,110	140	361,972	37	18,968	25	86,570	1†	5,686	3	11,106	1,015	1,144,412

* Including non-residential conditional purchases. † Including 1 homestead farm converted to a settlement purchase of 449 acres in 1922, and 1 of 722 acres in 1923. ‡ Crown Lease.

The above table includes particulars of leases converted under the original conditions on which they were granted as well as of leases granted under the special conversion privileges allowed by the Acts of 1909 and 1916. For instance, the right to convert conditional leases and conditional purchase leases into conditional purchases was granted when they were first introduced, as also was the right to convert scrub and improvement leases under certain conditions into homestead selections. On the other hand, the Crown Lands Amendment Act of 1908 conferred on holders the right to convert homestead selections, settlement leases and non-residential conditional purchases into conditional purchases, while special leases were made convertible into any of a number of tenures with the consent of the Minister.

In 1916 Crown leases and homestead farms which had been created as leases in 1912 were made convertible into conditional purchases.

WESTERN LAND DIVISION.

The lands of the Western Division, comprising 80,318,708 acres, or two-fifths of the area of the State, are for the most part sparsely settled, and occupation is somewhat precarious on account of the low and uncertain rainfall.

The administration of these lands is regulated by the Western Lands Act, 1901, and is controlled by three Commissioners, constituting the Western Land Board of New South Wales, who, sitting in open Court, exercise all the powers conferred upon Local Land Boards by the Crown Lands Acts.

Subject to existing rights and extension of tenure granted under certain conditions, all forms of alienation (other than by auction) and lease prescribed by the Crown Lands Acts, ceased to operate within the Western Lands Division from 1st January, 1902.

The registered holder of a homestead selection or grant, pastoral, homestead, settlement, residential, special, artesian well, improvement, scrub, or inferior lands lease or occupation license of land in the Western Division, may apply to bring his lease or license under the provisions of the Western Lands Acts. In cases where application has not been made, such lease or license is treated as if the Acts had not been passed.

Crown lands within this division are not available for lease until so notified in the *Gazette*, but leases for special purposes may be granted upon certain conditions, and holders of areas which are considered too small to maintain a home or to make a livelihood may obtain an additional area under certain conditions as a lease. Lands are gazetted as open for lease at a stated rental under specified conditions with respect to residence, transfer, mortgage, and sub-letting.

All leases issued or brought under the provisions of the Western Lands Acts except special leases, will expire on 30th June, 1943. Conditional leases, which number 75 and embrace 102,482 acres, however, may be converted into conditional purchase before expiry. In cases where a withdrawal is made for the purpose of sale by auction or to provide small holdings, the lease of the remainder may, as compensation, be extended for a term not exceeding six years.

The rent on all leases brought under the provisions of the Act is determined by the Commissioners for the unexpired portion. The minimum rent or license fee is 2s. 6d. per square mile or part thereof; the maximum is 7d. per sheep on the carrying capacity determined by the Commissioners.

Holdings under the Western Lands Acts as at 30th June, 1930, were classified as follow:—

Class of Holding.	Leases issued.	Area.	Annual Rental.
New Leases issued under Western Lands Act :—	No.	acres.	£
Special Leases	377	797,574	2,302
Section 32, Western Lands Act Leases (additional)	292	2,804,990	2,875
Part VII, " " " "	766	21,995,575	20,702
Part VII, new Leases being issued	50	56,386	1,293
Preferential Occupation Licenses	14	71,542	60
Leases under Crown Lands Act brought under Western Lands Act :—			
Pastoral Leases	265	29,539,622	48,073
Subdivisional Leases	163	8,096,610	12,240
Homestead Leases	1,111	10,297,512	27,809
Improvement Leases	112	1,898,784	1,214
Scrub Leases... ..	3	17,431	31
Inferior Lands Leases	2	159,439	34
Settlement Leases	7	37,247	142
Artesian Well Leases	31	307,866	495
Special Leases (Conversion)	31	8,888	169
Occupation Licenses	60	526,031	306
Homestead Selections and Homestead Grants ...	34	24,765	156
Conditional Leases	75	102,482	502
Permissive Occupancies	62	385,369	375
Total... ..	3,455	77,128,113	118,778

In addition there were 2,031,282 acres of land alienated, or in course of alienation; 103,150 acres of unoccupied land of low grade; 888,127 acres of unalienated town lands, beds of rivers, commonages, etc., 168,036 acres of land still under the Crown Lands Act, yielding annual rentals amounting to £1,050.

PRICKLY PEAR LANDS.

Public attention was first called in Parliament to the growth of prickly pear as a pest in 1882, and in 1885 it was stated that an area of 5,000 acres had become infested in the Upper Hunter district. In 1886 a Prickly Pear Destruction Act was passed, and with some modification in 1901 this remained the law relating to the pest until 1924. The law, however, was not put into operation extensively, and the spread of the pest continued practically unchecked. In 1911 it was estimated that 2,000,000 acres of land were infested with pear, and at the end of 1924 the area so infested was stated to be 7,600,000 acres, the greater part of which, however, was lightly infested.

At this juncture the law was completely revised and the Prickly Pear Act, 1924, was designed to provide means for preventing the further spread of the pest and for eradicating it where possible. This Act (as subsequently amended) related to all lands infested with prickly pear and provided for the appointment of a Commissioner to administer its provisions. It was made an obligation for owners and occupiers of all lands within the State to keep uninfested land entirely free from prickly pear, and all owners and occupiers of freehold or leased lands already infested are required to make an

annual return to the Commissioner showing the area of their holdings upon which prickly pear is growing, together with information as to the steps being taken to deal with it.

The Commissioner has delimited 67 prickly pear zones and classified the land within such zones into four grades, according to whether it is free from prickly pear, lightly infested, heavily infested or very heavily infested. The Commissioner has power to require landholders to clear their lands and to afford them assistance by way of loans or by performing the work at actual cost. In addition, the Commissioner purchases poisons and appliances in bulk so that they may be supplied to landholders at the cheapest possible rates. The Commission estimated that by June, 1930, 1,000,000 acres of infested land had received its first treatment, and the opinion was expressed that not only had the spread of prickly pear been checked but that the area infested had been reduced. By agreement with the holder, the terms and conditions of leases of any infested lands leased from the Crown may be varied in any manner approved by the Governor. Crown lands already infested may be leased under the Prickly Pear Act, under special conditions. The Commission has taken action to clear Crown lands of the pest, and to this end co-operates with local bodies.

Where any private land is classified as very heavily infested, *i.e.*, as land of less value than the cost of freeing it from pear, the owner may divest himself thereof by surrendering it to the Crown, and in such case he is required to fence off the surrendered portion and to maintain free of pear a strip of land 10 feet wide within and around such surrendered portion. Crown lands classified as very heavily infested may be granted by the Minister to any person who has freed them from pear.

The Act established a Prickly Pear Destruction Fund by providing for five years from 1st January, 1925, an annual appropriation of £30,000 from Consolidated Revenue, and as from 1st January, 1930, an annual sum not exceeding £30,000. This fund is under control of the Minister, to be applied by him for the administration of the Act. The Minister is empowered to make grants from this fund for the purpose of assisting councils, pastures protection boards, and the trustees of cemeteries, commons, or reserves to meet their obligations under the Act.

During the year ended 30th June, 1930, the total expenditure was £63,306, including £25,754 for poisons. At the end of the year there was a credit balance of £4,840. An area of 170,000 acres, including 40,000 acres of Crown lands, had been cleared up to 30th June, 1930.

CLOSER SETTLEMENT.

The circumstances leading to the adoption of what is known as the "Closer Settlement Policy" are described on page 680 of the Year Book for 1928-29. Further reference to the subject may be found in previous Year Books.

The Closer Settlement Acts provide that the Minister for Lands, with the sanction of the Governor and the approval of Parliament, may purchase private estates at a price approved by Parliament. But any alienated estate whose unimproved value exceeds £20,000 may be compulsorily resumed for closer settlement.

Land comprised in any improvement or scrub lease, or section 18 lease, may be resumed or purchased under agreement for closer settlement upon the recommendation of the Closer Settlement Advisory Board. To 30th June, 1930, an area of 564,695 acres comprised in 64 long-term leases had been re-acquired in this way at a cost of £200,799, and had been disposed of in 605 farms consisting of homestead farms and Crown leases under the Crown Lands Consolidation Act.

Within six months after the passing of an Act sanctioning the construction of a line of railway, the Governor may notify a list of estates within 15 miles of the railway line; within six months of this notification the Governor may notify his intention to consider the advisableness of acquiring for purposes of closer settlement land so notified, the property of one owner, and exceeding £10,000 in value. The area of land under notification at 30th June, 1930, was 1,499,652 acres, embraced in 116 estates.

At any time after a proclamation of intention to consider the advisableness of acquiring an estate, if an agreement be made that the land shall be subdivided for closer settlement by the owner, the power of resumption may be suspended for a term not exceeding two years. Any sale or lease made under such agreement, and any subsequent sale, lease, or transfer made within five years of the original sale or lease, must be submitted to the Minister, and if it be found that the owner has failed to fulfil the conditions, the suspension of the power of resumption shall cease.

The total area acquired to 30th June, 1930, under the ordinary provisions of the Closer Settlement Acts, was 1,367,725 acres, at an aggregate purchase price of £5,197,654. This area, originally consisting of seventy-three estates, was divided into 2,631 farms. During 1929-30 five estates were acquired with a total area of 53,090 acres at a cost of £275,276; these were divided into seventy-three farms. Operations under the ordinary provisions of the Closer Settlement Acts have, for some years past, been confined mainly to promotion proposals, i.e., cases where owners agree to sell estates under closer settlement conditions. Particulars of the provisions of the earlier Closer Settlement Acts and details of the operations thereunder are given in previous Year Books.

Closer Settlement Promotion.

The provisions of the Closer Settlement Acts of 1918 and 1919, which replace the Closer Settlement Promotion Act, 1910 (repealed), enable three or more persons, or one or more discharged soldiers, each of whom is qualified to hold a settlement purchase, to negotiate with an owner of private lands, and under certain conditions to enter into agreements with him to purchase a specified area on a freehold basis, for a price to be set out in each agreement. Any one or more discharged soldiers or sailors may also enter into agreements to purchase on a present title basis from the holder a conditional purchase; a conditional purchase lease; a conditional purchase and conditional lease, including an inconvertible conditional lease; a homestead selection; a homestead farm; a settlement lease; a Crown lease, or any part of one or more of such holdings, or an improvement or scrub lease, not substantially more than sufficient for the maintenance of a home.

Upon approval by the Minister, the vendor, in the case of private land, surrenders the area to the Crown, and the purchaser acquires it as a settlement purchase. In the case of land acquired on present title basis, the vendor transfers it to the purchaser. The vendor is paid by the Crown, either in cash or in Closer Settlement Debentures, and the freehold value of the land, inclusive of improvements thereon, purchased for any one person must not exceed £3,000, except in special cases where the improvements warrant it, when the freehold value may be up to £3,500; if the land is found suitable for grazing only, the freehold value may be up to £4,000.

Each farm is worked independently, the co-operation of the applicants ceasing with the allotment of an area. Each applicant has to pay a deposit of 6½ per cent. of the Crown valuation of the farm granted to him, except discharged soldiers or sailors, who are not required to pay any deposit. Repayments of the balance of the purchase money to the Crown are subject

to the regulations in force at the date of commencement of title. At present the regulations provide for repayment at the rate of $6\frac{1}{2}$ per cent. per annum of the capital value of the farm, where the purchase money is paid in cash; this includes interest at the rate of $5\frac{1}{2}$ per cent. on the outstanding balance, the whole indebtedness being discharged in thirty-two years, where the initial deposit is paid. If the land is paid for by debentures, the deposit and annual instalments to be paid by applicants are $1\frac{1}{2}$ per cent. in advance of the rate of interest paid by the Crown in connection with the debentures, and the interest to be paid on the unpaid balance of purchase money is $\frac{1}{2}$ per cent. in advance of the rate of interest paid by the Crown as aforesaid.

Postponement of the payment of instalments and of interest for a period may be sanctioned in special circumstances, and holders of farms may obtain advances from the Rural Bank Commissioners on account of improvements effected.

The total number of promotion proposals under the Closer Settlement Acts allotted and finally dealt with for which payment had been made by the Government Savings Banks and from the Closer Settlement Fund as at 30th June, 1930, were 3,863 farms, representing 1,954,639 acres in respect of which a sum of £8,638,571 had been advanced; of this number 1,149 farms, embracing an area of 471,104 acres at a cost of £2,439,230, were paid for by the Government Savings Bank, and payment was made from the Closer Settlement Fund in respect of the balance. Fresh activities in this connection by the Government Savings Bank have been suspended since November, 1929, and operations by the Government have been necessarily restricted by the limited funds made available by Parliament.

In all (exclusive of irrigation projects) 1,861 estates and leases had been acquired by the Government for purposes of closer settlement of civilians and returned soldiers. These estates embraced 4,073,971 acres, for which the purchase price was £14,503,599, and there were added 104,326 acres of adjacent Crown lands. The total number of farmers made available was 7,928.

Summary of Closer Settlement Operations.

The following table provides a summary of the various closer settlement operations to 30th June, 1930, including lands acquired and administered under the Closer Settlement and Returned Soldiers' Settlement Acts, lands acquired by executive authority and by virtue of section 197 of the Crown Lands Act, and administered by the Department of Lands, including long-term leases acquired under Closer Settlement Act, 1912, and disposed of under the Crown Lands Act.

Mode of Acquisition.	Estates Acquired	Area.		Price paid for Acquired Land.	Farm blocks made available.		
		Acquired.	Adjacent Crown Lands.		No.	Area.	Value.
	No.	Acres.	Acres.	£		Acres.	£
Direct Purchase* ...	28	264,923	44,473	451,606	452	308,426	1,305,187
Crown Lands Act (s. 197)†	22	58,222		293,427	444		
Closer Settlement Act—							
Promotion Provisions...	1,674	1,818,406	12,892	8,450,113	3,796	1,341,951	8,342,132
Ordinary Provisions ...	73	1,367,725	111,416	5,197,654	2,681	1,441,501	5,520,009
Resumption of Long Leases ...	64	564,695	34,290	200,799	605	539,715	765,844
Total ...	1,861	4,073,971	202,571	14,593,599	7,928	4,131,623	15,984,122

* Including 10,646 acres of improvement lease, and 180,028 of scrub lease acquired at nominal value

† Including one estate of 21,309 acres, surrendered at nominal value for returned soldiers.

The foregoing figures were revised after departmental inquiry in 1929-30, and during that year there were small transactions under both promotion and ordinary provisions of the Closer Settlement Acts.

The number of estates acquired under the promotion provisions of the Closer Settlement Act is comparatively large, because 953 individual holdings, besides holdings containing only a few farms, were acquired mainly for soldier settlers. In some cases two or more farm blocks have been amalgamated and made available as one farm.

Following on completion of an audit it has been ascertained that the lands covered by the above table were disposed of as follows at 30th June, 1930:—

Manner of Disposal.	No. of Blocks.	Area.	Capital Value.
		acres.	£
Holdings alienated or in course of alienation by settlement purchase, group purchase, auction, tender, &c.	8,748	4,027,177	15,229,956
Holdings which have reverted to the Crown and await disposal	237	59,746	394,045
Unallotted farms (including provisionally allotted, under cultural system, or never allotted)	291	46,082	352,475
Areas retained for roads ... ..	...	33,741	115,913
Areas appropriated for railway purposes... ..	...	1,513	7,213
Areas retained for reserves ... ..	...	37,708	98,004
Vacant village lands, remnant areas, &c. ... ..	...	30,345	146,825
Totals	9,276	4,236,312	16,344,431

Included in the number of blocks shown above are approximately small blocks made available as town lots, &c., and not as farms.

The total amount paid in respect of interest and principal on the above lands to 30th June, 1930, was £7,027,761, and instalments totalling £563,372 had been postponed to the end of the terms of purchase. Amounts overdue at the end of the year were: Annual instalments of principal £263,371; of interest £822,016, and annual payments of funded interest to £82,534, making a total of £1,167,921. These arrears were due in respect of 3,762 farms out of a total of 6,566.

Other Closer Settlement Operations.

Between April, 1923, and November, 1929, the Rural Bank operated a scheme of advances to facilitate subdivision of private estates, and the first Rural Bank loan of £1,000,000 at 5½ per cent. was raised locally for the purpose.

Under this scheme the Bank, after inspection, issued certificates as to the amount it was willing to advance to purchasers of land under subdivisional plans approved by the Land Settlement Board and the Bank. Interest was charged at the rate of 6½ per cent., and the maximum advance was £3,000, or two-thirds of the Bank's valuation of the property, whichever was the less. In the case of properties not fully improved the advance might be as great as 80 per cent. of the Bank's valuation, subject to specified improvements being carried out at the purchaser's expense.

By 30th June, 1930, Rural Bank certificates had been issued in connection with the proposed subdivision of 175 estates into 755 farms, containing 608,443 acres, valued at £2,464,951. The amount of loans covered by the certificates was £1,800,345. Altogether 754 farms, covering 608,251 acres, had been selected under the scheme. Applications for advances of £1,799,150 on 754 farms have been made and payments amounting to £1,722,760 have been completed for 726 farms.

SETTLEMENT OF RETURNED SOLDIERS.

To 30th June, 1930, farms had been allotted to 9,348 returned soldiers, and there remained 5,540 returned soldier settlers on an area of 8,039,358 acres, approximately half of which was in the Western Division. These totals exclude 651 soldier settlers on private lands to whom advances only were made. The total expenditure is shown below:— £

Resumption of holdings for settlement	..	8,085,103
Advances to settlers	.. .. .	7,392,191

Under the Returned Soldiers' Settlement Acts, special provision is made for the settlement of discharged soldiers on Crown lands, including the Murrumbidgee Irrigation Areas, and on lands acquired under the Closer Settlement Acts and otherwise.

Land has been made available principally under the following tenures:—

1. Homestead Farm.—Lease in perpetuity.
2. Crown Lease.—Lease for 45 years.
3. Returned Soldiers' Special Holding.—Purchase or lease.
4. Suburban Holding.—Lease in perpetuity.
5. Irrigation Farm.—Purchase or lease in perpetuity.
6. Group purchase.
7. Settlement purchase.

Provision also exists in the Closer Settlement Acts under which one or more discharged soldiers may purchase privately-owned land upon terms approved by the Minister for Lands, the Crown providing the whole of the purchase money. Transactions of this nature are permitted only in cases in which additional settlement is provided. The Minister has discretionary power to refuse any such proposal. Operations have been restricted in recent years by the limited funds made available by Parliament, and activities were suspended altogether in 1931.

An advance not exceeding £625 may be made available for each soldier settler, but it must be used only for the general improvement of the land, purchase of implements, stock, seed, and other necessities, or in the erection of buildings. The total amount advanced by the Department of Lands under the Returned Soldiers' Settlement Act to 30th June, 1930, was £3,159,488, and of this sum £1,413,415 had been repaid while interest amounting to £510,911 had been paid.

Terms of repayment are usually as follows:—

House and other Permanent Improvements.—By payments over twenty-five years, interest only being charged during first five years.

Stock and Implements.—Six years, interest only being charged during first year.

Seeds, Plants, &c.—One year.

From April, 1923, a scheme of consolidating advances was introduced, and the terms upon which loans were granted were liberalised, being usually extended to twenty-five years on the security of a mortgage over the holding.

Interest as fixed under the Acts may not exceed $3\frac{1}{2}$ per cent. for the first year and 4 per cent. for the second year, and it increases progressively by not more than $\frac{1}{2}$ per cent. for each subsequent year, the maximum rate at present being $5\frac{1}{2}$ per cent.

Subject to such conditions as to security and terms of repayment as the Commission may think fit to impose, soldier settlers on the Murrumbidgee and Cullwaa Irrigation Areas may obtain an advance, or have payment of rent and water rates suspended. The expenditure by the Irrigation Commission on returned soldiers' settlement during 1929-30 was £86,016, making a total of £4,404,098 to 30th June, 1930. Repayments and collections to the same date amounted to £916,383.

The following table affords a summary of the number, area, and cost of private estates acquired for soldiers' settlement to 30th June, 1930:—

Class of Acquisition.	Estates.	Area.	Purchase Money.	Farms made available.
	No.	acres.	£	No.
Promotion Provisions Closer Settlement Acts* ...	1,457	1,198,502	5,678,946	2,282
Group Settlement—Closer Settlement Acts ...	25	395,970	1,809,710	746
Section 197, Crown Lands Act† ...	19	53,366	247,033	423
Direct Purchase under authority of Executive Council† ...	25	264,826	449,419	450
Total ...	1,526	1,912,664	8,085,108	3,901

* Includes 953 single farms. † Includes one estate surrendered at nominal value, practically as a gift.
 ‡ Includes 179,674 acres long-term leases at nominal value.

There were no further transactions in 1928-29 or 1929-30.

IRRIGATION AREAS.

The principal irrigation scheme is on the Murrumbidgee River. It covers an area of 359,000 acres, of which 301,000 acres were formerly freehold and leasehold land. Approximately one-third of the total area has been converted into irrigation farms. The Coomealla irrigation area near Euston comprises 34,800 acres, but the area subdivided as at 30th June, 1931, embraces 3,090, acres of which 2,037 acres were occupied as irrigated horticultural holdings and 162 acres as dry areas. There are also small irrigation settlements at Hay and Curlwaa.

The disposal of Crown lands within the Murrumbidgee and Coomealla irrigation areas is regulated by the Crown Lands Consolidation Act, 1913, and the Irrigation Act, 1912-1931. There are separate special Acts dealing with the Hay and Curlwaa areas. All four areas are administered by the Water Conservation and Irrigation Commission.

Murrumbidgee and Coomealla.

The permanent tenures of land on the Murrumbidgee and Curlwaa Irrigation Areas are as follows:—

Irrigation Farm Lease: The area occupied under this tenure as at 30th June, 1931, was 181,389 acres on the Murrumbidgee Area and 1,971 at Coomealla.

Non-Irrigable Lease under which are available lands used for industrial purposes and lands held by holders of irrigation farms for agriculture or grazing in conjunction with their irrigable holdings. The areas held under this tenure as at 30th June, 1931, were 11,709 acres in the Murrumbidgee settlement and 162 acres at Coomealla.

Town Lands Leases which were current in 858 cases at 30th June, 1931. These are all leases in perpetuity with statutory rights of purchase by their occupiers upon compliance with certain conditions. As at 30th June, 1931, purchases had been completed in respect of 56 acres of former irrigation farm lease, and 2 acres of former non-irrigable lease, and the areas in course of purchase were, respectively, 3,016 acres and 878 acres. The total area comprised under these permanent leaseholds and purchases as at 30th June, 1931, was 196,346 acres.

Temporary tenures of various kinds have been granted over considerable areas of land which are within the Murrumbidgee Area, but not yet developed as irrigation farms. These include (a) 43,667 acres of leases under the Irrigation Act for periods ranging from a few months to several years over lands not under irrigation and irrigation lands awaiting disposal, (b) 25,999

acres held under permissive occupancy by 77 settlers in anticipation of land being granted to them as original holdings, and (c) 17,694 acres held under permissive occupancy prior to being added to existing holdings.

Hay and Curlwaa.

The Hay and Curlwaa irrigation settlements are administered mainly under the Hay Irrigation Act and the Wentworth Irrigation Act.

The Hay Irrigation Area consists of an area of 8,456 acres; and at 30th June, 1931, 1,036 acres were held by sixty-three settlers in 108 irrigation blocks, ranging from 3 up to 33 acres, all, with the exception of one holding which is freehold, with a leasehold tenure of thirty years, while 2,908 acres were leased as fifty-six non-irrigated blocks for short terms up to five years. The Curlwaa Area comprises 10,550 acres; and at 30th June, 1931, an area of 2,404 acres was under occupation as irrigated holdings. In addition, 6,994 acres were leased as non-irrigated holdings. Holders of leases on these areas have the right to purchase them on terms extending over 36½ years at a price agreed upon between the holder and the Irrigation Commission or as determined by the Land and Valuation Court.

The following table shows the number and area of farms in occupation on each of the irrigation areas at 30th June in each of the five years to 1931:—

Year ended 30th June.	Murrumbidgee.				Hay.		Curlwaa.		Coomoalla.		
	Farms.		Town Blocks.		Farms.		Farms.		Farms.		
	No. *	Acres.	No.	Acres.	No.	Acres.†	No.	Acres.†	No.	Acres.	
1927‡	...	1,937	117,539	871	225	63	3,911	115	9,512	80	1,362
1928‡	...	1,854	115,755	894	233	65	3,911	121	8,858	102	1,728
1929‡	...	1,814	120,860	932	245	62	3,913	124	9,172	109	1,859
1930	...	1,793	166,062	938	247	63	3,951	130	9,155	118	2,051
1931	...	1,784	182,569	923	...	63	3,944	129	9,398	124	2,199

* Reduction in number of farms is due to forfeitures, surrenders, etc.

† Revised.

‡ Balance of area not occupied as farms, comprises roads, channels, and other reserves, including permissive occupancy.

Further information concerning the irrigation schemes of the State will be found in chapter "Water Conservation and Irrigation" of this Year Book.

Irrigation Amendment Act, 1931.

This Act, which was assented to on 14th September, 1931, amended the law in respect of the determination of capital and rental values of lands in the Murrumbidgee and Coomoalla Irrigation Areas, and made further provision for the reduction of the indebtedness of settlers in the irrigation areas.

Settlers occupying living areas are given the right to apply at any time before 31st December, 1932, for re-appraisalment of rent or purchase price of their holdings upon a capital valuation based upon the productivity of the land. The re-appraisalment may be made by agreement between the settler concerned and the Irrigation Commission or by a special committee of three, subject to appeal to the Land and Valuation Court.

The right of the Crown to re-appraise land held as irrigation farm leases after the period of the first twenty-five years, and the obligation to re-appraise the value of such land upon transfer within the first fifteen years of the lease were abolished so far as irrigation farming lands are concerned.

The Minister is empowered under the Act to remit indebtedness other than overdue rent and water rates and, provided funds are voted by Parliament for the purpose, settlers may be relieved of part of their indebtedness to the Rural Bank.

LAND RESUMPTIONS AND APPROPRIATIONS.

Alienated land required by the State may be obtained by resumption, purchase, exchange, surrender, or gift. Resumptions are made under the Public Works, Lands for Public Purposes Acquisition, and Local Governments Acts, and except when made for purposes of Public Instruction or Railways they are treated by the Valuer-General. Resumptions for Federal purposes are made under the Commonwealth Lands Acquisition Act, 1906-16, Lands Acquisition (Defence) Act, 1918, and War Service Homes Act, 1918-20. Any Crown lands may be appropriated for public purposes.

The following statement shows the area of resumptions and appropriations and of the principal purchases which were made during the past five years. Purchases of land for hospitals and other semi-public purposes are not included.

Year ended 30th June.	Resumptions and Purchases.			Crown Lands Appropriated.			Gifts.			Total.		
	a.	r.	p.	a.	r.	p.	a.	r.	p.	a.	r.	p.
1926	2,182	2	21	983	1	2	9	0	3	3,174	3	26
1927	8,122	0	24	805	1	15	6	3	32	8,934	1	31
1928	2,286	3	13	617	2	11	29	1	37	2,933	3	21
1929	3,939	3	36	1,216	2	4	10	0	34	5,166	2	34
1930	5,703	1	5	745	1	16	17	2	32	6,466	1	13

The purposes of resumptions, appropriations, and purchases during 1929-30 were:—

Area.				Area.			
	a.	r.	p.		a.	r.	p.
Aborigines' Reserve...	10	0	0	Recreation Grounds	27	2	1
Cattle Sale Yards	42	3	5	Savings Bank	0	0	34
Drainage	0	2	13	Sewerage	192	1	6
Electricity Supply	6	2	35	Shire and Municipal Quarry			
Fire Stations...	0	3	0	and Gravel Pit	6	1	5
Hospital	1	0	2	Shire and Municipal Roads,			
Inspector of Fisheries Resi-				Stores and Depots...	190	1	33
dence	1	0	0	State Sawmills	14	1	28
Main Roads	527	2	20	Stormwater Channels	4	3	21
Police Stations	0	2	30	Water and Storage Dams	3,282	2	30
Postal	8	3	22	Water Supply	475	3	30
Public Schools	373	2	3				
Railway and Tramways	1,298	0	15	Total	6,466	1	13

Land resumptions, purchases, and gifts in quinquennial groups from the year 1905 inclusive, were as follow:—

Year.	Resumptions, Appropriations, and Purchases.			Gifts.			Total.		
	a.	r.	p.	a.	r.	p.	a.	r.	p.
1905-09	105,848	3	8	439	1	27	106,288	0	35
1910-14	282,008	3	17	117	0	10	282,125	3	27
1915-19	64,194	0	35	81	0	35	64,275	1	30
1920-24	84,046	1	6	91	1	32	84,137	2	38
1925-29	25,857	2	35	63	0	26	25,920	3	21
1929-30	6,448	2	21	17	2	32	6,466	1	13

The total area of land dealt with in this way between 1890 and June, 1930, was approximately 590,000 acres, including about 291,000 acres for water conservation and irrigation projects, 53,000 acres for defence, 59,000 acres for railways and tramways, 33,000 acres for town water supplies, and 89,000 acres for closer settlement.

REVENUE FROM PUBLIC LANDS.

The revenue received from public lands during recent years is shown in part Public Finance of this Year Book.

SOCIAL CONDITION.

THE social condition of the people of New South Wales, judged from the standpoint of health and living conditions, compares favourably with that of any other part of the world. The climate is salubrious with abundant sunshine, and sufficient food is produced to supply the whole community. Wages, hours of labour, and other industrial conditions are regulated with the object of preserving the health of the workers and of enabling even the lowest paid employee to maintain a family according to a fairly comfortable standard of living. Family allowances are paid for the benefit of dependent children in families with small incomes, and provision is made to safeguard the welfare of juveniles and of women in industrial occupations. During the last two years, when an unusual degree of unemployment developed rapidly as a result of economic causes mainly world-wide in effect, the central and local governing bodies and private organisations became active in undertaking relief works, and a special tax was levied on wages and other incomes in order to provide funds to give employment, or sustenance where work is not available.

The system of government is based on a broad franchise which embraces every adult citizen. The legal system is based on principles which give equal status to all citizens, the land laws are designed to promote a healthy growth of rural settlement. The railways, being owned by the State, are used to develop national resources, and the tariff laws aim at the extension of local industries without any encroachment upon existing standards of industrial employment. Legal restrictions have been placed upon gambling, and upon the manufacture and sale of intoxicating liquors and deleterious drugs, in order to minimise the social evils attendant upon poverty and drunkenness. Education is free at both primary and secondary public schools.

The mildness of the climate enables the people to engage in outdoor recreation at all times of the year. Measures for the prevention of sickness and the encouragement of hygienic conditions of life find their reflex in low death rates, in the decreasing incidence of preventable diseases, and in the absence of certain endemic diseases, such as typhus. For persons who need special treatment, on account of sickness, etc., hospitals and other institutions have been established, and pensions are paid to the aged and infirm and to widows with dependent children.

HOSPITALS AND CHARITIES.

PUBLIC HEALTH SERVICES.

The principal State services in relation to public health in New South Wales are organised as the Department of Public Health under the control of a Minister of the Crown. The department includes two branches, one directed by the Board of Health and the other by the Director-General of Public Health. Their functions, though distinct, are closely co-ordinated, and the Director-General, who is a medical practitioner and a permanent salaried officer of the Government, is *ex officio* President of the Board of Health. The Board consists of ten members, including five legally qualified medical practitioners, all being nominated by the Government. It is the executive and administrative authority in connection with the health laws. It acts in an advisory capacity towards the Minister for Public Health and the Government, and exercises general supervision in regard to public health matters. The Director-General of Public Health controls the State medical services and the State institutions for the treatment of the sick and infirm, and a microbiological laboratory.

Other Government departments administer measures in connection with public welfare, charitable relief, and the medical inspection of school children, and a special department has been organised for the care of children.

The executive personnel of the Department of Public Health includes medical officers and sanitary inspectors. The former are appointed by the Government, and are permanent salaried officers, who devote the whole of their time to matters relating to public health.

Medical officers exercise constant supervision in the Metropolitan area, in the Hunter River district, which includes Newcastle, and in Broken Hill. Outside these areas expert advice may be obtained from medical officers attached to the central staff of the Public Health Department, who visit localities when required. In every town a local medical practitioner is appointed as a Government medical officer for the purpose of attending to Government medical work, *e.g.*, inquests, sickness in gaols, etc.; they have no regular duties nor special legal powers, and are paid in fees for services rendered.

In the Department of Public Health the principal activities are organised in special divisions, *e.g.*, industrial hygiene, maternal and baby welfare, tuberculosis, laboratories, sanitation, and pure food, each in charge of a specially-qualified officer. The medical officers of the Department act also as medical referees in regard to claims under the Workers' Compensation Act.

The most important legislative enactments relating to public health are the Public Health Act, dealing with public health and sanitation; Acts relating to dairies supervision, noxious trades, diseased animals and meat, pure food, and to hospitals; and provisions of the Local Government Act which specify the powers and duties of the municipal and shire councils for safeguarding health in the incorporated areas. The authorities are empowered to take steps to prevent the spread of infectious diseases, to regulate the erection of dwellings, and to order the demolition or improvement of insanitary buildings, to prohibit the manufacture or distribution of unwholesome or adulterated foods and drugs, (with special powers in relation to milk and meat) to regulate the conduct of noxious trades, to deal with nuisances, etc. Control of sanitation by means of by-laws and regulations is the method adopted generally, as being readily adaptable to the varying conditions of a widely-scattered community.

Executive duties in relation to public health devolve primarily upon the local authorities, who carry out the functions under supervision of the Board of Health as the central controlling authority. Within municipalities the duties are undertaken by the local councils, and outside municipal areas they are performed either by the shire councils or by persons or bodies specially appointed for the purpose.

In addition to the organisation under the control of the State Government there is a Federal Department of Public Health, which discharges important functions in regard to quarantine, industrial hygiene, etc., and conducts research relating to causes of diseases and of deaths, and to methods of prevention and cure.

A Federal Health Council was constituted in November, 1926, to advise the Commonwealth and State Governments on health questions generally and to devise measures for co-operation and for promoting uniformity in legislation and administration. The membership includes the principal health officers of each State, with the Federal Director-General of Health as chairman.

Government Expenditure on Charitable Relief.

The expenditure from public revenue on eleemosynary objects in New South Wales includes the expenditure from consolidated revenue on hospitals and charitable relief which covers the cost of maintenance of the State institutions, and subsidies granted to other institutions, the subvention to friendly societies and pensions to widows which are paid by the State Government, and the old-age and invalidity pensions and maternity allowances provided by the Commonwealth Government. The expenditure from consolidated revenue amounted to £8,109,965, or £3 5s. 6d. per head in 1929-30; and to £7,600,835, or £3 0s. 10d. per head in 1930-31. A classification of the items is shown below in comparison with the expenditure in 1911-12 and 1921-22. Expenditure in connection with the medical inspection of school children is not included, nor costs of administration, except in regard to the Child Welfare Department, the mental hospitals, and the protection of aborigines.

Head of Expenditure.	Payments from Consolidated Revenue.				
	1911-12.	1921-22.	1928-29.	1929-30.	1930-31.
	£	£	£	£	£
General Hospitals and Charitable Institution	130,363	511,971	819,627	827,973	680,621
Mental Hospitals... ..	212,616	537,096	703,584	717,674	644,397
Child Welfare... ..	106,557	472,268	546,265	584,933	571,729
Government Asylums for the Infirm	87,708	164,679	215,922	204,026	165,762
Charitable Relief, Medical Services, etc.	36,905	175,266	481,038	714,460	88,518
Aborigines' Protection	16,475	22,506	31,011	31,144	31,314
Subvention to Friendly Societies	14,000	56,801	67,306	71,763	77,433
Widows' Pensions ... ..	...	...	637,551	611,947	620,258
Miscellaneous	2,401	22,117	7,448	12,592	5,853
State	607,030	1,962,704	3,509,752	3,776,512	2,885,885
Old-age and Invalid Pensions ...	821,993	2,029,077	3,868,140	4,071,778	4,456,650
Maternity Allowances ... ..	...	277,065	271,375	261,675	258,300
Commonwealth	821,993	2,306,142	4,139,515	4,333,453	4,714,950
Total	1,429,023	4,268,846	7,649,267	8,109,965	7,600,835
Expenditure per head of Population—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
State	0 7 2	0 18 5	1 8 8	1 10 6	1 3 1
Commonwealth	0 9 8	1 1 8	1 13 10	1 15 0	1 17 9
Total	0 16 10	2 0 1	3 2 6	3 5 6	3 0 10

In addition to expenditure from consolidated revenue as shown above, the State Government has provided moneys from time to time for relief works for the unemployed. Such moneys were expended partly from consolidated revenue and partly from loan funds until 18th July, 1930, when the Unemployment Relief Fund was established from proceeds of the unemployment relief tax. The expenditure from this fund during the year 1930-31 amounted to £4,357,084, including £1,837,886 for the maintenance of the unemployed; £101,858 for the relief of necessitous families with children under 14 years of age; £2,373,030 for relief works, advances, etc; and £44,310 for administration. As a result of the establishment of this fund there was a reduction in the amount expended from the

consolidated revenue of the State in 1930-31 on charitable relief which in the two preceding years had been a heavy charge upon ordinary revenues. Particulars of unemployment relief are shown in a later chapter.

TREATMENT OF SICKNESS.

Institutions for the treatment of sickness and disease have been established in various localities throughout the State. There are private hospitals which are owned by private persons and conducted as business enterprises; public hospitals which are maintained by the State, or by the people resident in the districts in which the hospitals are located, with the assistance of subsidy from the public funds, or by charitable organisations; special hospitals, State and private, for the treatment of mental and nervous ailments; and a State lazaret for the segregation of persons afflicted with leprosy.

The State exercises a measure of supervision over the practice of professional persons engaged in the treatment of sickness and disease, and medical practitioners, dentists, and pharmacists are required to register with a board established for each profession under statutory authority. At the end of the year 1930 there were on the registers 3,158 medical practitioners, 1,413 dentists, and 1,903 pharmacists. There were in addition 371 dealers in poisons, and 7 persons were licensed, under an Act relating to drugs, to manufacture and 32 to distribute opium and other dangerous drugs.

Nurses also are required to register in terms of the Nurses Registration Act, 1924. Four classes of nurses may be registered, viz., general, mental, midwifery, and infants. In the case of midwifery nurses, registration must be renewed annually. The Registration Board may suspend nurses temporarily from practice in order to prevent the spread of infection and may pay compensation to midwifery nurses suspended for that reason. The number of registrations at 31st December, 1930, was as follows:—General nurses 5,746, midwifery 3,857, mental 786, infants 62. Information is not available as to the actual number of nurses as many are registered under more than one classification.

Special efforts are made to provide for the treatment of sickness and accident in sparsely populated districts. The Government subsidises medical practitioners with a view to encouraging them to practise in outlying bush settlements. Usually the subsidy is the amount necessary to bring their earnings to a certain sum.

The Bush Nursing Association appoints nurses in country localities. The nurse in each district works under the supervision of a local committee, who pay expenses and fix charges for her services, etc., persons in necessitous circumstances being exempt from the payment of fees. Similar provision is made by the Country Women's Association, and both these organisations have arranged for the maintenance of cottage homes in a number of remote localities. The cottages serve as residences for the nurses and as accommodation for patients in cases of emergency.

Private Hospitals.

A private hospital may not be conducted except under license in accordance with the Private Hospitals Act of 1908, as amended by the Nurses Registration Act, 1924. The legislation applies to all establishments in which a charge is made for treatment, except those maintained or subsidised by the State or licensed under the Lunacy Act or the Inebriates Act. The licenses are issued annually by the Minister for Public Health on the recommendation of the Board of Health, and it is prescribed that every private hospital must be under the direct control of a person approved by the Board. Licensees are required to comply with regulations as to structure, management, and inspection.

At 31st December, 1930, the private hospitals numbered 654, viz., 277 in the metropolitan district and 377 in the country. The classification of the hospitals and their accommodation, according to the nature of the cases received, are shown in the following statement:—

District.	Private Hospitals.				Number of Beds.			
	Medical, Surgical, and Lying-in.	Medical and Surgical.	Lying-in.	Total.	Medical, Surgical, and Lying-in.	Medical and Surgical.	Lying-in.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.
Sydney	91	21	165	277	1,796	302	669	2,767
Country	169	14	194	377	1,568	188	825	2,581
Total	260	35	359	654	3,364	490	1,494	5,348

There has been an increase of 211 in the number of private hospitals since 1911, when there were 114 in Sydney and 329 in the country. In 613 hospitals the accommodation at the end of 1930 did not exceed 10 beds, 110 had from 11 to 20 beds, and 41 hospitals had over 20 beds. The accommodation in registered private hospitals showed a decrease of 236 beds in 1930 as compared with the previous year. This was due to the fact that private hospitals attached to institutions listed in the schedules of the Public Hospitals Act of 1929 are no longer required to be licensed under the Private Hospitals Act.

Public Hospitals.

Institutions for the care of the sick are classed as public hospitals, unless they are owned and maintained entirely by private persons. Some are maintained wholly by the State, those in the metropolitan district being the Coast Hospital, with a branch at the Prince Edward (Military) Hospital, for medical, surgical, and infectious cases, the Lady Edeline Hospital for babies, and two convalescent hospitals. There are two State institutions in the country, viz., the Waterfall Hospital for Consumptives and the David Berry Hospital at Berry for general treatment. Some of the public hospitals are under the ægis of religious denominations, and are conducted by religious communities who own the establishments or by committees nominated by subscribers. They are open to persons of all creeds, and the majority of them receive a small subsidy from the State.

The Public Hospitals Act of 1898 and an amending Act passed in 1900 defined the procedure for the election of officers for the management of the institutions.

In 1929 this Act was replaced by a new law, which is designed with the object of a systematic organisation of the hospital services. The Hospitals Commission of five members has been appointed to administer the Act. The chairman is a full-time officer, appointed for a term of five years. The other members are remunerated by fees, viz., a medical practitioner; one member representing the hospitals within the county of Cumberland, and another the hospitals outside the county; and a woman.

The public hospitals are classified in two main groups, according to the schedules of the Act. One group termed the "incorporated hospitals" consists entirely of suburban and country general hospitals incorporated by the Act. The second group, known as "separate institutions," includes the large general hospitals in or around the metropolis; the Newcastle Hospital; the hospitals for women, children, tubercular cases, convalescents, or incurables; the dental hospital; the hospitals conducted by religious organisations; and a few country hospitals.

Each incorporated hospital is managed by a board of directors elected annually by the subscribers, power being reserved to the Governor, in

recommendation of the Commission, to appoint any or all the directors of a hospital or to remove them from office and place the hospital under the management of the Commission, or a person nominated by the Commission. A person who contributes, otherwise than by way of payment for relief, an amount of at least ten shillings in one sum is deemed to be a subscriber for the year in which his subscription is paid; also persons nominated by firms or associations who contributed to the funds of the hospital, the number of nominees being fixed according to the amount contributed. Persons who render meritorious service to a hospital or contribute £10 in one sum may become life members.

It is the duty of the Hospitals Commission to inspect the hospitals which receive or apply for subsidy, to report to the Government as to the amount of State aid required to meet the needs of the hospitals, to determine which hospital shall be subsidised, and the amount of subsidy to be paid to each institution. Under certain conditions the Commission may exercise special powers to close or amalgamate incorporated hospitals with a view to effective and economical administration, or to authorise the board of a hospital to provide accommodation for the treatment of infectious diseases, or convalescent or incurable cases, or to define the functions and activities of a hospital. Moneys appropriated by Parliament for the assistance of hospitals are paid into the Hospital Fund administered by the Commission.

The Act defines the liability of patients to pay a reasonable sum for the cost of hospital services, and such sum is recoverable in the courts of law, though destitute persons may not be refused relief by reason only of inability to pay therefor. On the authority of the Commission portion of a hospital may be set aside for paying patients, who may contract for private or intermediate accommodation.

Statistics of public hospitals, as shown below, were compiled from annual returns collected by the Government Statistician, the latest being for the calendar year 1929. Then the collection of the returns became a function of the Hospitals Commission and statistics are not yet available for any subsequent period. The figures shown in the following tables do not include particulars relating to institutions used exclusively for soldiers and sailors, nor of the following State institutions, viz., the convalescent hospitals (two in number), a maternity hospital, the leper lazaret, and the three asylum hospitals. Excluding those institutions there were 166 public hospitals in New South Wales at the end of 1929, viz., 31 in the metropolitan district, with 5,157 beds, and 135 in the country, with 5,284 beds.

The hospitals in the metropolitan district included 18 general hospitals, with 3,682 beds; 3 hospitals for children, 464 beds; 5 for women, 738 beds; 3 for incurable cases, 197 beds; 1 institution for convalescents, 76 beds; and a dental hospital. All the hospitals in the country provided general treatment, except 4 for consumptives, 554 beds, and 1 for convalescents, 110 beds.

The extent to which the hospital services increased between 1901 and 1929 is shown below:—

Year.	Public Hospitals.			Beds.		
	Metro- politan.	Country.	Total.	Metro- politan.	Country.	Total.
1901	15	103	118	1,453	1,938	3,391
1911	21	120	141	2,113	2,976	5,089
1921	26	128	154	3,841	4,234	8,075
1926	27	134	161	4,515	4,959	9,474
1927	27	138	165	4,625	5,322	9,947
1928	27	138	165	4,617	5,244	9,861
1929	31	135	166	5,157	5,284	10,441

The figures show a remarkable expansion in regard to hospital accommodation, the tendency being to enlarge existing institutions rather than to establish new hospitals. In 1929 only one new hospital was opened in the metropolitan area, but the number classified as metropolitan was increased also by the inclusion of three in Auburn and Parramatta (233 beds) included in former years with the country hospitals. The average number of beds per hospital in 1929 was 63, as compared with 29 in 1901. The accommodation as stated includes beds in the open air, which numbered 1,453 in 1929.

The medical staffs of the public hospitals consist for the most part of practitioners who give their services free of charge, the proportion of honorary medical officers being greater in the metropolitan district than in the country. The following statement shows particulars of the medical and nursing staffs attached to the public hospitals during 1929:—

Hospitals.	Medical Staff.		Nursing Staff.		
	Honorary.	Salaried.	Nurses.	Wardsmen & Wardmaids.	Total.
Metropolitan ...	795	150	1,942	109	2,031
Country... ..	406	127	1,505	89	1,614
Total ...	1,201	277	3,447	198	3,645

The number of indoor patients treated, as shown below, represents the aggregate of the number of cases treated at each hospital, those admitted more than once during a year being counted each time admitted. The figures include transfers, of which particulars are not available, but the patients treated in the convalescent hospitals are excluded, as the majority of such cases are known to have been transferred from other hospitals. The figures relating to outdoor patients are exclusive of those treated at the dental hospital, who numbered 21,250 in 1928 and 24,437 in 1929.

Year.	Indoor Patients.					Outdoor Patients treated during the Year.
	Treated during the Year.	Died.	Remain- ing at end of Year.	Average per day.		
				Number.	Per 1,000 of mean popula- tion.	
1901	32,012	2,477	2,247	2,045	1.50	80,259
1911	56,564	3,550	3,409	3,302	1.98	116,346
1921	97,034	5,493	4,859	5,763	2.73	250,035
1926	131,003	6,559	5,892	6,862	2.96	399,663
1927	137,954	6,897	6,330	7,174	2.99	407,415
1928	148,461	7,075	6,763	7,381	3.04	401,973
1929	152,155	7,773	6,859	7,501	3.04	407,858

There has been a rapid increase in the number of cases treated in the public hospitals, and the average daily number of patients per 1,000 of the population increased by more than 50 per cent. between 1911 and 1929.

The number of outdoor patients, as stated, represents the aggregate of the number of distinct persons who received outdoor relief at each hospital where records are kept. The number is incomplete, as records of this form of relief are not kept at many hospitals, especially in country districts. The bulk of the cases are treated at five metropolitan hospitals in or close to the city, where the numbers recorded in 1929 were as follows:—Sydney Hospital, 64,804; St. Vincent's, 82,886; Royal Prince Alfred, 54,241; Royal Alexandra for Children, 35,556; Lewisham, 25,009. The total number of outdoor patients recorded in the metropolitan district was 363,139, and in the country 44,719, including 21,813 at the Newcastle Hospital.

The following statement shows the receipts and expenditure (including loans) of the public hospitals during the year 1929. The figures include particulars of the State hospitals, except those connected with the asylums for the infirm, which were excluded because it is not practicable to separate the expenditure incurred in the treatment of sickness from the expenses in respect of the ordinary functions of the asylums.

The receipts and expenditure of the Thomas Walker Convalescent Hospital, which is privately endowed, are excluded also.

Items.	Amount.			Per cent. of Total.		
	Metro- politan.	Country.	Total.	Metro- politan.	Country.	Total.
Receipts (including loans)—	£	£	£			
State Aid	518,924	384,154	903,078	46.6	49.4	47.8
Subscriptions, Donations, and Entertainments ...	343,457	220,722	564,179	30.8	28.3	29.8
Contributions by Patients...	162,591	125,222	287,813	14.6	16.1	15.2
Miscellaneous	88,591	48,199	136,790	8.0	6.2	7.2
Total Receipts £	1,113,563	778,297	1,891,860	100	100	100
Expenditure—						
Buildings and Repairs ...	250,024	159,599	409,623	23.2	20.7	22.2
Salaries and Wages ...	431,569	288,664	720,233	40.1	37.4	38.9
Provisions, Stores, and Out- patients	296,921	271,424	568,345	27.6	35.1	30.7
Miscellaneous	98,685	52,771	151,456	9.1	6.8	8.2
Total Expenditure £	1,077,199	772,458	1,849,657	100	100	100

According to the hospital accounts the State aid received by the metropolitan institutions in 1929 amounted to £518,924, or 47 per cent. of their total receipts. Of this sum £119,346 represented the expenditure in connection with the Coast Hospital and the Lady Edeline Hospital; the Sydney Hospital received £77,803; the Royal Prince Alfred, £79,822; the Royal Alexandra Hospital for Children, £20,390; the Royal North Shore, £28,714; the Women's Hospital, £33,369; the Canterbury District Memorial Hospital, £35,963; Balmain and District Hospital, £11,714; and Manly District Hospital, £35,584. The Benevolent Society of New South Wales received State aid for two institutions, viz., Royal Hospital for Women £32,223 and the Renwick Hospital for Infants £5,318; an aggregate amount of £7,465

was distributed amongst six hospitals conducted under the auspices of religious organisations. The balance, £31,213, was distributed amongst nine institutions, and four hospitals (including the Thomas Walker Convalescent Hospital) were not subsidised.

State aid represented 49 per cent. of the receipts of country hospitals. The amount included £42,413 for the upkeep of the State institutions, viz., the Waterfall Hospital for Consumptives and the David Berry Hospital. The hospitals to which State aid exceeding £10,000 was paid in 1929 were as follows:—Newcastle £41,982; Broken Hill £22,506, Junee £19,916, Wagga Wagga £12,510, Kurri Kurri £10,606, and Kiama £10,447. The balance £223,774 was allotted to 122 institutions, and two did not receive any aid from the State during the year. The foregoing particulars are exclusive of details regarding three country hospitals for which returns were not supplied.

Subscriptions, donations, bequests, and the proceeds of benefit entertainments, etc., yielded 29.8 per cent. of the hospital revenue, and contributions by patients represented 15.2 per cent.

The growth of hospital receipts and expenditure between 1901 and 1929 is illustrated in the following statement:—

Year.	Receipts.					Expenditure.				
	State Aid.	Subscriptions and Donations.	Contributions by Patients.	Other.	Total.	Buildings and Repairs.	Salaries and Wages, Provisions, Stores, etc.	Other.	Total.	
	£	£	£	£	£	£	£	£	£	£
1901	91,363	50,939	23,698	16,727	182,727	17,354	141,369	17,365	176,118	
1911	159,147	131,244	50,099	22,867	363,357	50,902	263,037	34,877	348,816	
1921	507,268	344,253	148,756	62,368	1,062,645	160,499	818,715	80,067	1,059,281	
1926	751,497	568,272	211,942	95,479	1,627,190	313,450	1,079,391	117,388	1,510,229	
1927	788,740	591,096	233,000	102,183	1,715,019	377,809	1,172,931	120,319	1,671,059	
1928	853,984	466,374	281,667	177,917	1,749,942	454,873	1,226,181	137,847	1,818,901	
1929	903,078	564,179	287,813	136,790	1,891,860	409,623	1,288,578	151,456	1,849,527	

PER HEAD OF POPULATION.										
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
1901	1	4	0	9	0	4	0	3	2	8
1911	1	11	1	7	0	7	0	3	4	4
1921	4	10	3	3	1	5	0	7	10	1
1926	6	5	4	11	1	10	0	10	14	0
1927	6	7	4	11	1	11	0	10	14	3
1928	7	0	3	9	2	2	1	6	14	5
1929	7	4	4	7	2	4	1	1	15	4

The average amount of hospital receipts per head of population rose more than threefold since between 1911 and 1929, the amount in the latter year being 15s. 4d. per head, of which State aid represented 7s. 4d. Contributions by patients were equivalent to 2s. 4d. per head of population, but fees paid while in hospital do not constitute the total amount of their payments, as many of them contribute at other times in the form of subscriptions, donations, etc.

The average annual cost of maintenance per occupied bed in hospitals, exclusive of the cost of buildings and repairs, was £177 10s. in 1929, viz., £183 in the metropolitan hospitals and £171 5s. in the country institutions. The average cost in the year 1928 was £171 5s., viz., metropolitan £178 1s. and country £164 5s. The cost of outdoor treatment and district nursing is excluded from these figures where the information is available; but the amount is not recorded separately in the accounts of many hospitals, including several where large numbers of outdoor patients are treated.

At the end of the year 1929 the invested funds of the hospitals amounted to £717,591 as compared with £603,129 twelve months earlier. Current accounts, however, showed a debit balance which increased from £248,213 to £299,578.

TREATMENT OF COMMUNICABLE DISEASES.

Within the State, the Board of Health is vested with authority to make provision for the treatment and prevention of infectious diseases. The Federal Government is responsible for the administration of the quarantine laws in respect of vessels, persons, and goods arriving from overseas ports.

Cases of such diseases as leprosy, bubonic plague, smallpox, scarlet fever, typhoid fever, diphtheria, infantile paralysis, cerebro-spinal meningitis, and encephalitis lethargica, must be notified to the Board of Health. Puerperal infection was proclaimed as notifiable from 16th August, 1929. Typhus, yellow fever, and cholera were proclaimed as notifiable diseases on 12th August, 1927, in conformity with the terms of the International Sanitary Convention of 1926. Cases of bubonic plague are rare; no case has occurred since 1923. Cases of pulmonary tuberculosis previously notifiable in certain areas, were proclaimed as notifiable throughout the whole State from 1st March, 1929.

Where necessary, provision is made for the isolation of infectious cases. In the metropolis the majority are treated at the Coast Hospital, and further provision is being made by the erection of an infectious diseases hospital in the grounds of the State Hospital at Lidcombe. Country cases are accommodated in special wards of the local hospitals.

The following table shows the notifications of the various diseases in 1921 and later years. Particulars relating to the deaths and death rates are shown in the chapter relating to Vital Statistics:—

Disease.	1921.	1926.	1929.	1930.			
				Metro- politan District.	Hunter River District.	Other Districts.	Total.
Typhoid Fever ...	949	698	438	116	26	238	380
Scarlet Fever ...	1,060	4,755	5,219	2,962	235	1,203	4,400
Diphtheria...	6,854	3,579	4,274	1,907	411	1,733	4,051
Infantile Paralysis ...	184	81	241	15	...	15	30
Cerebro-Spinal Meningitis	30	32	28	26	3	14	43
Encephalitis Lethargica ...	†	...	26	5	3	6	14
Pulmonary Tuberculosis	1,240	1,265	1,215	1,265	98	554	1,917
Leprosy ...	2	1	1	2	...	2†	4
Bubonic Plague ...	2	...	...	...	...	...	...
Puerperal Infection ...	*	*	44	195	10	64	269
Typhus Fever ...	...	...	3	2	...	...	2

* Notifiable since 16th August, 1929.

† Notifiable since 1st April, 1926.
from Queensland.

‡ Includes one

Leprosy.

Persons suffering from leprosy are segregated in the Leper Lazaret, which was opened for the admission of patients in 1883, though statutory provision for the compulsory notification of the disease and detention of lepers was not made until 1890. In 1930 four persons (including one from Queensland) were admitted and four died. There were 20 inmates in the lazaret on 31st December, 1930, viz., 17 males and 3 females. Their birth-places were New South Wales 8, Queensland 2, Ireland 1, Italy 1, Greece 1.

Three were born in China, 2 in the Pacific Islands, and 2 were Australian aboriginals. The cost of management in 1930 was £3,522, or an average of £192 9s. per inmate.

TUBERCULOSIS.

Pulmonary tuberculosis has been notifiable throughout the State since 1st March, 1929. It has been notifiable in the Metropolitan and Newcastle districts since 1915, and in the Blue Mountains tourist district since 1916. During the year 1930 the notifications numbered 1,917, viz., 1,265 in the metropolitan sanitary district, 98 in Hunter River district, 156 in the district of Broken Hill, and 398 elsewhere.

A remarkable reduction in the mortality from tuberculosis has been effected as a result of measures for the protection of the milk and food supply, the supervision of immigration, a stricter regulation of conditions of employment, and improved methods of medical treatment. Nevertheless tuberculosis causes 5 per cent. of the deaths in New South Wales, and while so many new cases occur in each year there is pressing necessity for further organised efforts to control the disease.

A special division of the Department of Public Health has been formed to co-ordinate measures for the cure and prevention of the disease, to regulate the admission of patients to institutions, to arrange for the after-care of those discharged, etc. There is a Board of Control with the Director-General as chairman *ex officio*; and other members to represent the British Medical Association and various institutions and societies concerned with the care of tubercular patients, and two nominees of the Minister of Public Health.

Institutions for the care of tubercular cases have been established by the Governments of the State and the Commonwealth, and others are assisted by State subsidy. As far as practicable the cases are graded for admission to the sanatoria. The Waterfall Sanatorium contains 417 beds for patients in the intermediate stages of the disease, and a branch of the Coast Hospital with 90 beds for advanced patients is located at the Prince of Wales (Repatriation) Hospital. Both these are State Government institutions. The Government of the Commonwealth controls two institutions for returned soldiers with accommodation for 142 patients. The Queen Victoria Homes at Thirlmere and Wentworth Falls, with 108 beds for patients in the early stages, and three sanatoria administered by the Red Cross Society with 139 beds, are subsidised by the State Government. There are 16 beds in the R. T. Hall Sanatorium at Hazelbrook and about 40 beds in private hospitals. Arrangements have been made with the Government of South Australia to provide sanatorium treatment in that State for patients from Broken Hill.

The Waterfall Hospital is the largest of the sanatoria. The number of patients under treatment during 1930 was 881, and 407 were in the hospital at the end of the year. The cost of maintenance was £39,409, equal to £106 6s. per occupied bed.

A village settlement for tubercular cases was opened at Picton Lakes in May, 1929. It was founded and is maintained by public subscription and admission is arranged by the Department of Public Health. There are 19 cottages for married patients and two hostels for single patients. The number of residents at the end of 1930 was 57, including the families of the patients.

With object of checking the spread of tuberculosis, dispensaries have been opened for diagnosis and the examination of patients and the supervision of those who are not under treatment in an institution. The first dispensary in Sydney was opened by the National Association for the

Prevention and Cure of Consumption in 1912. Two dispensaries have been established in connection with metropolitan hospitals and there is one in Newcastle. Medical advice is given to patients, and nurses attached to the dispensaries or the Department of Public Health visit their homes and instruct the inmates in precautionary measures to prevent the spread of the disease.

Venereal Diseases.

The treatment of venereal diseases is regulated under the Venereal Diseases Act, 1918, which came into operation on 1st December, 1920. It prescribes that all persons suffering from such diseases must place themselves under treatment by a qualified medical practitioner, and must remain under treatment until cured. Medical practitioners are required to notify all cases to the commissioner appointed under the Act. Treatment by unqualified persons is prohibited, also the sale of certain drugs used in connection with these diseases, except when prescribed by a qualified medical practitioner.

Clinics have been established at nine metropolitan public hospitals, and free treatment is provided at subsidised hospitals, drugs and instruments being supplied by the Government. Special wards for these cases have been opened at the Coast Hospital and at the Newington and Liverpool State Hospitals, and an isolation block is under construction at the Royal Prince Alfred Hospital.

The notifications during the year 1930 numbered 5,225, of which 4,623 cases were notified in the metropolitan area, and 266 in the Newcastle district. Public hospitals and clinics notified about 50 per cent. of the cases. It is not considered, however, that notification is fully effective.

Prisoners suffering from venereal diseases are detained for treatment in lock hospitals attached to the gaols, in terms of the Prisoners Detention Acts, 1908 and 1918. Such prisoners may be detained even after the definite sentence is served, until certified by the medical officer as free from disease. During the year ended 30th June, 1930, the cases of venereal diseases treated in the gaols numbered 133, and orders for detention in the lock hospitals were obtained in the cases of 82 men and 7 women.

TREATMENT OF MENTAL DISEASES.

The law relating to persons suffering from mental diseases is contained in the Lunacy Act of 1898. Its provisions apply mainly to those who may be certified as insane and incapable of managing their affairs. Such persons may be admitted to an institution, if certified by two qualified medical practitioners, either at the request of relatives or friends, or upon the order of two Justices of the Peace, but relatives have the right of custody of insane persons brought before the Justices if they can give a satisfactory assurance that proper care will be taken of them. Persons found to be insane by proceedings before the Supreme Court in its lunacy jurisdiction may be admitted to mental hospitals upon the order of the Judge. The influx of insane persons to New South Wales is restricted under the Lunacy Act, which renders the owner, charterer, agent, or master of a vessel liable for the maintenance of any such person landed in the State.

The estates of persons proved to be incapable, through mental infirmity, of managing their affairs, are placed under the management and care of the Master in Lunacy.

Special courses of training in the treatment of mental and nervous diseases are provided for medical students at the Sydney University, where a chair of psychiatry has been established.

Mental Hospitals.

The Government has set apart a number of institutions for the reception and treatment of insane persons, and private institutions may be licensed for the purpose. Licenses may be granted also for the reception of a single patient, but unauthorised persons are not permitted to take charge for profit of a person of unsound mind. All institutions for mental cases, including reception houses, etc., for their temporary accommodation, are subject to inspection by the Inspector-General of Mental Hospitals. With his consent, harmless patients may be boarded out or released on leave, or they may be discharged to relatives or friends who undertake to care for them.

There are ten Government mental hospitals, in addition to a hospital for criminal insane, and two private institutions licensed to receive mental patients. Under an arrangement with the Government of South Australia, patients from Broken Hill are accommodated in a hospital in that State, the cost of their maintenance being paid by the Government of New South Wales.

At 30th June, 1931, there were in the mental hospitals and licensed houses in New South Wales 9,139 patients—5,091 males and 4,048 females; in the South Australian hospitals there were 21 men and 12 women from this State; 234 men and 297 women were on leave from the institutions; so that the total number of persons under cognisance as being of unsound mind was 9,703, consisting of 5,346 males and 4,357 females. These figures are exclusive of voluntary patients. The number at intervals since 1901 is shown below:—

At 30th June.	Number of Mental Patients.			Proportion per 1,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1901*	2,684	1,804	4,488	3·72	2·75	3·26
1911*	3,810	2,573	6,383	4·27	3·18	3·75
1921	4,510	3,432	7,942	4·21	3·33	3·78
1926	4,634	3,802	8,436	3·92	3·34	3·64
1927	4,754	3,856	8,610	3·93	3·32	3·63
1928	4,897	4,037	8,934	3·96	3·40	3·68
1929	5,035	4,105	9,140	4·01	3·40	3·71
1930	5,201	4,212	9,413	4·11	3·45	3·79
1931	5,346	4,357	9,703	4·20	3·53	3·87

* At 31st December.

The proportion of the population who were under official cognisance as mental patients showed a tendency to decline between 1921 and 1928, but the ratio in 1931 was higher than in the former year. In order to ascertain the general rate of insanity amongst the population, it would be necessary to take into consideration the patients treated in their homes, and those suffering from mental disorders in a form which does not warrant certification as insane nor compulsory detention in a mental hospital.

The law does not make provision for the treatment of persons in the early stages of mental derangement, when specialised care is most likely to be beneficial. Steps towards meeting the needs of such persons were initiated by the establishment of a psychiatric clinic, where voluntary patients suffering from the milder forms of mental and nervous disorders are received upon their own request. Outdoor treatment is provided also.

During the year 1929-30 the number of resident patients under treatment at the clinic was 593, and there were 126 in the institution at 30th June, 1930. At the other mental hospitals voluntary patients are treated and the total number resident at 30th June, 1930, including those at the psychiatric clinic, was 338, viz., 195 males and 143 females. Psychiatric clinics have been established also within the wards of six general hospitals in the metropolitan district and in three country towns. On the average there were 336 voluntary patients under treatment in Government hospitals during the year 1930-31 and 62 in other hospitals.

Reception houses have been established in Sydney, Newcastle, Kenmore (Goulburn), and Orange, where persons showing symptoms of mental diseases are placed under observation and cases of short duration are treated. The number under observation and care during 1929-30 was 2,056, and 1,237 were transferred to mental hospitals. At the State Penitentiary at Long Bay 65 persons were under observation during the year, and 22 were sent to mental institutions.

The number of admissions and re-admissions to mental hospitals in various years since 1901 are shown below:—

Year ended 30th June.	Admissions.			Re-admissions.		
	Males.	Females.	Total.	Males.	Females.	Total.
1901*	387	309	696	77	75	152
1911*	674	387	1,061	113	73	186
1921	711	622	1,333	115	106	221
1926	709	612	1,321	130	87	217
1927	807	620	1,427	87	56	143
1928	793	667	1,460	89	65	154
1929	769	624	1,393	136	108	244
1930	789	569	1,358	125	111	236
1931	724	600	1,324	124	120	244

* Calendar Year.

Of the admissions and re-admissions in 1929-30, natives of New South Wales numbered 985, England 206, Ireland 66, Scotland 65, other British countries 215, foreign countries 53, and in 4 cases the nationality was unknown.

During 1929-30 the number of patients who died in mental hospitals was 564, or 6.5 per cent. of the average number resident; 534 persons, or 6.1 per cent., were discharged as recovered; 195, or 2.2 per cent., as relieved and 14 were discharged without showing any improvement. During 1930-31 the deaths numbered 525, or 5.57 per cent., and the discharges included 458 persons, or 4.9 per cent., who had recovered, and 264, or 2.8 per cent., who had been relieved.

The records of persons admitted show that, among the exciting causes of insanity, mental anxiety, intemperance in drink, epilepsy, and venereal diseases were the most prominent. Among predisposing causes the most important were old age, congenital defects, and hereditary influence.

The average weekly cost of maintaining mental patients in Government institutions during the year 1930-31 was 25s. 6d. per patient, of which the State paid 21s. 0d., the balance being derived from private contributions.

The following table shows the average weekly cost per patient during the years cited:—

Year ended 30th June.	Annual Cost of Maintenance of Patients.	Cost of Maintenance per Patient per week.		
		To State.	Private Contributions.	Total.
	£	s. d.	s. d.	s. d.
1921	512,797	23 10	3 3	27 1
1926	562,281	22 11	4 0	26 11
1927	599,657	23 11	4 2	28 1
1928	632,622	24 4	4 6	28 10
1929	658,755	24 1	4 11	29 0
1930	671,461	23 10	5 0	28 10
1931	613,665	21 0	4 6	25 6

Variations in the cost of maintenance are due mainly to changes in rates of wages and in the prices of provisions. The cost of voluntary patients is included. During the year ended June, 1931, salaries and fees amounted to £426,081, the cost of provisions, stores, etc., was £152,251; fuel, light, and water, £25,282, and miscellaneous items, £10,051. These amounts are exclusive of the value of the farm products grown and consumed at the institutions, viz., £16,878.

DEAF-MUTISM AND BLINDNESS.

The number of persons who were deaf and dumb, as ascertained at the census of 1921, was 761, equivalent to one person to every 2,762 of the population, and the number of persons afflicted with blindness was 1,057 or one person in every 1,989.

A classification of deaf mutes and blind persons in 1921, according to ages, is shown below:—

Age Group.	Deaf Mutes.			Blind Persons.			Proportion per 1,000 of Population.	
	Males.	Females.	Total.	Males.	Females.	Total.	Deaf Mutes.	Blind.
Years.								
4 and under	89	86	175	39	26	65	·26	·10
15-39	205	158	363	137	73	210	·42	·24
40-64	81	92	173	220	132	352	·37	·76
65 and over...	21	29	50	234	196	430	·55	4·76
T tal..	396	365	761*	630	427	1,057*	·36	·50

* Includes 1 male and 2 female blind deaf mutes.

The care and education of the deaf and dumb and the blind are undertaken at several institutions. The New South Wales Institution for the Deaf and Dumb and the Blind is maintained partly by Government subsidy and partly by public subscriptions. Special educational courses are provided, the fees being remitted in cases of financial inability. The Sydney Industrial Blind Institute undertakes the care of the adult blind, and provides industrial training to enable them to earn a livelihood. Homes for the blind are conducted in connection with this institution, and a free circulating library of embossed books is provided. Institutions for the instruction of deaf mutes are conducted by Roman Catholic religious societies at Waratah for girls, and at Castle Hill for boys.

Under the Commonwealth invalid pension system provision is made for the payment of pensions to permanently blind persons above the age of 16 years.

WELFARE OF CHILDREN.

The Child Welfare Act of 1923 amended and consolidated the principal laws relating to the welfare of children in New South Wales, viz., the State Children Relief Act, 1901, the Children's Protection Act, 1902, the Infant Protection Act, 1904, the Neglected Children and Juvenile Offenders Act, 1905.

The provisions of the Act which relate to neglected or uncontrollable children, juvenile offenders, and children in institutions, apply to boys and girls under 18 years of age, and the other sections to children under 16 years. The Act authorises State relief in regard to neglected and destitute children, and it contains provisions for regulating the adoption of children and their maintenance in foster homes and in institutions, for protecting them from ill-treatment and neglect, for preventing their employment in dangerous occupations, and for regulating their employment in public performances and in street trading. Special courts, called Children's Courts, are maintained to deal with cases relating to children, and to adjudicate in regard to affiliation proceedings.

Orders of a magistrate to compel parents to meet the obligation of maintaining their legitimate children are made in terms of the Deserted Wives and Children's Acts of 1901 and amendments.

The Notification of Births Act of 1915 requires that in proclaimed districts the health authorities must be notified within thirty-six hours of the birth of a child. In this manner cases in which advice or assistance is needed are brought under cognisance. A Federal law, passed in 1912, authorises the payment of an allowance to mothers, to assist in defraying the expenses incidental to childbirth.

The Juvenile Smoking Suppression Act and the Liquor Act prohibit the use of tobacco by juveniles and the supply of intoxicating liquor to them, and the Public Instruction Act requires children between the ages of 7 and 14 years to attend school regularly. The employment of children in factories and industrial apprenticeship are subject to laws which are discussed in the chapters relating to Factories and to Employment.

In terms of the Widows' Pensions Act, 1925-1929, the State pays allowances to assist widows to maintain their children during years of dependency.

Maternity Allowances.

The Maternity Allowances Act of the Commonwealth, which came into operation on 10th October, 1912, provided for the payment to mothers of a sum of £5 in respect of each birth occurring in Australia. The Act was amended by the Financial Emergency Acts, 1931, reducing the amount of the allowances to £4, and restricting them to cases where satisfactory evidence is produced that the income of the claimant and her husband (or in the case of a posthumous or ex-nuptial child, the income of the claimant) does not exceed £260 per annum. The amendment came into force on 20th July, 1931.

Payments are made in respect of still-born children if viable, but one allowance only is payable in the case of plural births. The allowances may be paid only to women who are inhabitants of, or who intend to settle in the Commonwealth, and they are not payable to Asiatics or to aboriginal natives of Australia or of the Pacific Islands.

The following statement shows the number of claims passed for payment in New South Wales in the years stated, in comparison with the number of confinements:—

Year.	Confinements. (excluding Still- births).	Maternity Allowances.	
		Claims passed for payment.	Amount.
			£
1921	54,047	54,390	271,950
1926	52,573	53,420	267,100
1927	53,268	53,790	268,950
1928	54,257	55,250	276,250
1929	52,129	53,130	265,650
1930	51,555	52,730	263,650

In each of the fifteen years 1916-30 the number of claims passed for payment exceeded the number of confinements. This is due mainly to the fact that still-births are not included in the number of confinements, though maternity allowances are paid in respect of the births of viable children.

The maternity allowances paid in New South Wales up to the end of the year 1930 amounted, in the aggregate, to £4,817,290. The claims approved in 1931 numbered 43,650.

Baby Health Centres and Day Nurseries.

With the object of reducing the wastage of child life due to preventable causes the Government has established baby health centres in various parts of the city and suburbs, and in country towns.

A staff of nurses and an honorary medical officer are attached to each centre. The nurses instruct the mothers in hygiene at the centres and in their homes, and make arrangements for medical or dental treatment of mothers and children when necessary.

In December, 1930, there were 80 centres, viz., 39 in the metropolitan area, 16 in the district of Newcastle, and 25 in other country districts. During the year 1930 the attendances at the centres numbered 408,100, and the nurses made 100,100 visits to cases within the area served by the centres. The corresponding figures for the previous year were 351,000 attendances and 105,900 visits.

The Royal Society for the Welfare of Mothers and Children, incorporated in 1919, was established with the object of co-ordinating measures for the welfare of mothers and children. The society maintains two welfare centres in the city and conducts two training schools, where nurses may receive post-graduate training in infant hygiene and mothercraft. Associations of medical practitioners and of nurses, charitable organisations, and institutions for children are affiliated with the Society.

Six day nurseries have been established in the metropolis by the Sydney Day Nursery Association. Mothers who work outside their homes may leave their children at the nurseries during the daytime for the sum of 9d. per day. Food, clothing, and medical advice are provided, also kindergarten tuition. During 1930-31 a sum of money was granted from the Unemployment Relief Fund to enable the association to afford relief to young children in necessitous families.

In the outlying country districts nurses engaged by the Bush Nursing Association give assistance to mothers and advise them as to the feeding and treatment of children.

Adoption of Children.

The Child Welfare Act of 1923, as amended in 1924, makes legal provision for the permanent adoption of children upon order of the Supreme Court in its equitable jurisdiction. Application to the Court may be made by adopting parents or by the Minister of Public Instruction on their behalf. If over 12 years of age, the child's consent to adoption is necessary, unless the Court dispenses with it owing to special circumstances.

An order of adoption terminates all rights and liabilities between the child and his natural parents, except the right to inherit property by reason of kinship. An adopted child takes the surname of his adopting parent in substitution for his own surname, and orders of adoption are registered by the Registrar-General. Application for orders of adoption may be heard in open court, or in public or in private chambers.

The number of children who had been adopted in accordance with the provisions of the Act up to 31st December, 1930, was 3,180.

Deserted Children.

In cases of desertion of wife or of legitimate children, the husband or father may be ordered, in terms of the Deserted Wives and Children Acts, to pay periodical contributions for their support. In cases relating to ex-nuptial children the father may be ordered, under the Child Welfare Act, to pay the expenses incidental to birth and periodical contributions for maintenance. In certain cases mothers may be required to contribute towards the support of their children.

For disobedience of or non-compliance with orders under these Acts offenders may be fined, or they may be committed to prison, and from the value of their work while in prison the cost of their upkeep may be deducted and the balance applied to the satisfaction of the orders. Under an amendment of the law in August, 1931, the period of imprisonment has been limited to one day for every 4s. due and an offender may not be detained for a longer period than twelve months.

Legislation has been enacted to provide for reciprocity in respect of orders for maintenance between New South Wales and other parts of the British Empire.

The following statement shows the number of cases in respect of wife and child desertion dealt with in the Courts of Petty Sessions and the Children's Courts during the year 1930:—

Cases.	Applications for Orders.			Non-compliance with Orders		
	Order made.	Order refused.	Case with-drawn.	Order obeyed subse-quently.	Defend-ant im-prisoned.	Case with-drawn or dis-mitted.
For maintenance—Wife ...	1,599	229	1,260	2,558	568	2,226
Child ...	743	53	281	1,522	242	1,998
For expenses incidental to birth of illegitimate child ...	570	56	89	33	14	57
Total ...	2,912	338	1,630	4,113	824	4,281

In five cases in which applications for orders were made and in one case of non-compliance with orders the mothers were the respondents.

Children under State Supervision.

The function of supervising the children under the care of the State is exercised by the Child Welfare Department under the direction of the Minister for Education.

The Government has established shelters for the reception and temporary detention of children, industrial schools, and homes for cases requiring segregation or special treatment, and the Children's Courts may order near relatives to pay the cost of maintaining children therein. Children in institutions may be apprenticed or placed out in suitable employment or may be discharged to the custody of parents or other suitable persons.

The gross amount expended by the Government during the year ended 31st December, 1930, on account of the services of the Child Welfare Department, was £537,834. Of this amount, £95,640 represented payments to guardians of children boarded out apart from their parents; and allowances to mothers towards the support of their own children amounted to £266,326. Contributions by parents and relatives and repayments of maintenance allowances amounted to £14,930.

The following statement shows the annual expenditure of the Department during the last five years:—

Year.	Payments for Children.		Institutions, Homes, Hostels, etc.	Salaries.	Miscellaneous.	Total Expenditure.	Contributions by Parents and other Revenue.	Net Expenditure.
	Boarded-out.	In their own homes.						
	£	£	£	£	£	£	£	£
1926 ...	104,273	310,474	55,600	64,298	41,781	576,426	17,919	558,507
1927 ...	105,341	259,765	45,318	71,246	44,987	526,657	18,351	508,306
1928 ...	108,672	259,884	48,623	79,281	47,166	543,626	23,720	519,906
1929 ...	103,570	259,510	42,893	93,073	48,529	553,575	22,055	531,520
1930 ...	95,640	266,326	49,358	89,234	37,276	537,834	14,930	522,904

The total expenditure increased from £94,064 in the year ended April, 1911, to £390,652 in 1920-21 and to £587,235 in 1925. The increase was due partly to an increase in the number of children assisted, but in a greater degree to increases in the rates of payment, owing to higher cost of living. Thus, in 1911, the average rate of payment for children boarded out apart from their parents was about 5s. 3d. per week, and for children with their mothers 3s. The weekly rate for children apart from their mothers is now 15s. if under 1 year of age and 10s. at ages 1 to 14 years, and the rates for the majority of the children living with their mothers is 10s. The expenditure of the Child Welfare Department on this form of relief decreased by reason of the introduction of widows' pensions in March, 1926.

The number of children under the supervision of the State, classified in accordance with the statutory provisions under which they were controlled, is shown in the following statement. The number in December, 1930, was 25,440:—

Classification.	1911.	1921.	1926.	1928.	1929.	1930.
State wards { Boarded out, etc. In shelters and industrial schools	4,677	5,439	{ 5,676 708	5,673	5,693	5,516
Children of widows, etc. ...	4,453	11,462	10,014	10,125	10,083	11,117
In licensed institutions ...	263	689	737	826	947	889
In foster homes... ..	559	290	505	503	491	427
Employed in theatres... ..	216	280	894	816	722	844
On probation from Children's Courts	1,148	1,381	3,548	4,012	5,671*	5,553*
Total	11,316	19,541	22,082	22,853	24,699	25,440

* Includes children on probation from State institutions.

These figures do not include the children who are licensed to engage in street trading under conditions which are described later.

State Wards.

The boarding-out system has been adopted in regard to State wards, and treatment in institutions is restricted to special cases. The children are boarded out until they are 14 years of age to approved persons, the maximum number of children under the care of one guardian being three, except in cases of families comprising a greater number, brothers and sisters being placed usually in the same home. The children are supervised by salaried inspectors, whose efforts are supplemented by honorary officers. Women inspectors visit infants placed out apart from their mothers, and all such infants in the metropolitan area must be submitted to medical examination every fortnight during the first twelve months of life.

The State wards may be apprenticed with suitable employers or they may be restored to the custody of parents or other suitable persons. The children may be supervised for two years after their period of boarding out or apprenticeship has terminated.

For apprentices, the terms of indenture prescribe a wage payment and pocket-money on a specified scale. The wages are banked to the credit of the apprentice and one-third of the accumulated amount is paid to them on completion of apprenticeship, the balance remaining at interest till age 21 is attained. The majority of the girls are apprenticed in domestic service, and the boys to farmers, orchardists, and artisans in country districts.

The children boarded out as State wards in December, 1930, consisted of 2,990 boys and 2,526 girls, and they were distributed as follows:—Supported by the Government, 2,421 boys, 2,020 girls; adopted or boarded without subsidy, 293 boys, 331 girls; and apprenticed, 276 boys, 175 girls.

These figures do not include the children in the State industrial schools nor those in the metropolitan shelters.

Relief of Children of Deserted Wives, etc.

The Child Welfare Act provides for contributions towards the support in their own homes of the children of widows in necessitous circumstances or of wives deprived of their husbands' support through desertion, illness, infirmity, or imprisonment. Relief in this form may be granted also in respect of ex-nuptial children. Contributions were paid to 4,389 mothers for the support of 10,083 children in 1929, and to 5,069 mothers for 11,117 children in 1930.

Since March, 1926, when the payment of widows' pensions was commenced, relief has not been payable under the Child Welfare Act in respect of children whose mothers are qualified for widows' pensions, but the Child Welfare Department assists the children of widows who are not eligible for such pensions, such as those qualified to receive invalid pensions which are provided by the Commonwealth Government.

Children in Foster Homes.

The law regarding the reception of children in foster homes, as amended by the Child Welfare Act, 1923, prescribes that such places must be licensed if one or more children under 7 years are received. No person, without a written order of the Court, may receive a child under 7 years of age to be maintained apart from its mother in consideration of the payment of money. The payments must be by periodical instalments, and the instalments may not be paid for more than four weeks in advance, nor exceed the sum of 30s. per week.

The number of foster homes registered in 1930 was 477, and the number of children 855. Thirty-two children died during the year, 253 were discharged to their parents, and 143 were removed from State supervision for other reasons, so that 427 remained in the foster homes at the end of the year.

Children in Charitable Institutions.

There are a number of children in institutions conducted by religious bodies and other organisations where they have been placed by their guardians in preference to being boarded out under the State system. Some of the institutions receive children from the Children's Courts. Those in which children under the age of 7 years are received must be licensed under the Child Welfare Act. In a few cases the parents contribute towards the support of the children, but usually they are maintained by the organisations which conduct the establishments.

At the end of the year 1930 there were 4,076 children in these charitable institutions, and there were 1,297 in the State institutions, such as homes for delicate children, industrial schools, and shelters. Particulars of the children in the various kinds of institutions are shown below:—

Institutions.	Metropolitan.		Country.		Total.		
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Total.
Lying-in Homes	24	21	18	12	42	33	75
Benevolent Asylums	2	3	...	5	2	8	10
Orphan Asylums	412	525	736	828	1,148	1,353	2,501
Neglected Children's Homes—State ...	116	382	778	21	894	403	1,297
Others	246	582	20	...	266	582	848
Institutes for Deaf, Dumb, and Blind	96	86	53	46	149	132	281
Infants' Homes	91	88	66	59	157	147	304
Other Charitable Institutions	14	43	...	...	14	43	57
Total	1,001	1,730	1,671	971	2,672	2,701	5,373

Delinquent Children.

Cases of juvenile offenders under the age of 18 years are dealt with in the Children's Courts, by magistrates with special qualifications for the treatment of delinquent children.

Leniency is an outstanding feature in the treatment of the young offenders, and a large number are released after admonition, or on probation, committal to an institution being a final resort. The children brought before the courts are classified into distinct groups, according to the special treatment they require, consideration being given to the character of the child and the circumstances surrounding the committal of the offence, the home environment, the character of the parents, and the nature of their control.

Children committed to institutions may be detained in custody until the expiration of the period specified by the Court, or until reaching the age of 18 years. They may be indentured as apprentices with suitable employers or restored to the custody of parents or guardians.

A truant school is conducted at Guildford for the detention of boys under 14 years of age who are persistent truants. The average period of detention is between three and four months. The gross enrolment during 1930 was 190, and the average daily attendance 64.

The other State institutions for the reformation and training of delinquent children include the Farm Homes for Boys at Mittagong, Gosford, Narara, and Yanco, and the Girls' Industrial Schools at Parramatta and La Perouse. Under certain conditions children may be committed to approved institutions established by the religious organisations.

The Mittagong Farm Home is primarily for the reception of boys under 14 years of age. There were 404 admissions and 381 discharges during the year 1930, the number in the home at the end of the year being 297. The Gosford and Narara institutions are for older boys, who need strict discipline or who show tendencies liable to be developed into criminal habits, and for those who have failed to respond to probation or to treatment in the Mittagong Farm Home.

At Gosford 438 boys were admitted during 1930, and 374 were discharged. The number at the end of the year was 298. The Yanco Home was established in 1928 when an experiment farm in the Murrumbidgee Irrigation Area was transferred to the Child Welfare Department for the purpose of providing training in the various branches of agriculture and rural pursuits for boys up to 18 years of age. Seventy-one boys were admitted during 1930 and 57 were discharged, and the number at 31st December, 1930, was 158.

The Industrial Schools for Girls at Parramatta and La Perouse receive uncontrollable girls mostly between the ages of 13 and 18 years. During the year 1930 the number of girls admitted at Parramatta was 227, and 203 were discharged. The number remaining at 31st December, 1930, was 186. At the school at La Perouse 48 girls were admitted and 47 discharged, and 49 remained in the institution at the end of 1930.

Mentally-deficient Children.

Experience obtained by the medical inspection of school children indicates that about 1 per cent. require special tuition on account of mental deficiency and efforts are being made to establish a comprehensive system for their treatment. Classes for such children have been established at eight schools in the metropolitan district. The classes are limited to about 15 pupils, so that each may receive individual attention, and in some cases the children have made sufficient progress for transfer to the ordinary schools.

A residential school for subnormal children was opened in 1927 at Glenfield, where four cottages and a central administrative building were erected on a plan which will allow the construction of four additional cottages if required. In each cottage accommodation is provided for 32 children. The site occupies 110 acres in a healthy locality, 4 miles from Liverpool, and the buildings are connected with the metropolitan water supply and electricity systems.

Employment of Children.

In other chapters of this volume particulars are shown regarding the employment of children in factories and as apprentices. There are two classes of employment in which children may not be employed unless licensed under the Child Welfare Act, viz., in public theatrical performances and in street trading.

Theatre licenses may be issued in respect of children over 7 years, subject to such restrictions and conditions as the Minister may think fit. The licenses may be rescinded at any time upon sufficient cause being shown.

Street trading is defined as hawking, singing or performing for profit, or any like occupation conducted in a public place. Boys under 12 years and girls are not allowed to engage in street trading, and the boys under 16 years must be licensed, and are required to wear a metal arm-badge whilst trading.

Precautions are taken by supervisors to ensure the regular school attendance of licensees under 14 years of age. Boys between the ages of 12 and 14 may trade between the hours of 7 a.m. and 7 p.m.; and boys over 14 years of age, between 6 a.m. and 10 p.m.

Particulars relating to the licenses issued during the last five years are shown below:—

Year.	Theatre Licenses issued.	Street Trading Licenses Granted to Boys.		
		Under 14 years of age.	14 to 16 years of age.	Total.
1926	894	1,477	678	2,155
1927	809	1,562	605	2,167
1928	816	1,703	761	2,464
1929	722	1,684	759	2,443
1930	844	1,308	803	2,111

With few exceptions the street trading licenses are issued to newspaper vendors. The licenses are issued half-yearly, therefore the number issued each year is approximately double the number of boys licensed. The number of licenses current at the end of 1930 was 868, viz., 478 held by boys under 14 and 390 by boys over 14 years of age.

Medical Inspection of School Children.

A system of medical inspection of school children was organised in New South Wales in 1913. The inspections are conducted by a staff attached to the Department of Education, consisting of 13 medical officers, 9 dentists, 10 nurses, and 8 dental assistants.

An annual visit of inspection is made to nearly every school in the metropolitan area for the examination of the children in the first-class and those whose thirteenth birthday occurs in the year. Medical supervision is maintained in regard to special cases, and an annual test is made of the vision of all the children. Outside the metropolitan area a triennial visit was paid to each school, so that every child was examined twice during the period of compulsory school attendance, *i.e.*, between the ages of 7 and 14 years. Under existing arrangements, however, work in country districts is limited for reasons of economy to medical inspection and ocular survey by one oculist, and dental treatment by three travelling dental clinics.

In the metropolitan district children may be treated as out-door patients at hospitals, or at the school dental clinics, seven in number.

During 1930 the number of children examined was 55,604 and 22,704 were found to have defects. The most numerous defects were in respect of teeth, 16,087 cases, nose and throat 5,275 cases, vision 2,576 cases, and hearing 820 cases. In addition to these children who were submitted for a full medical examination, the health of 28,753 children, examined in former years, was reviewed during 1930, and 11,790 were found to have defects.

The work of the medical officers of the Department of Education includes the investigation of epidemics of infectious diseases affecting school children; the inspection of school buildings; courses of lectures at the Teachers' Colleges; lectures to senior girls in metropolitan high schools on the care of babies, personal cleanliness, home hygiene, sick nursing, etc., and lectures to parents. Special investigations are carried out into problems affecting the welfare of children, such as tuberculosis, goitre, crippling, and mental deficiency.

The expenditure on medical inspection in 1930, exclusive of administration, was £30,598.

CHARITABLE INSTITUTIONS AND SOCIETIES.

In addition to hospitals for the treatment of sickness or disease, there exist both in the metropolis and in the country other institutions, such as homes for the aged and for children, also societies for granting casual aid to indigent persons, and for the help of discharged prisoners.

The State maintains five asylums, others are maintained partly by State aid and partly by private contributions, and a few are wholly dependent on private aid.

Four of the State asylums are for men and one is for women. These institutions were established as asylums for aged and destitute persons, but since the introduction of the old-age pension system the character of the work of three of the institutions has changed considerably, and they are used to a large extent for the treatment of chronic ailments. They contain special wards for persons suffering from cancer, tuberculosis, and venereal diseases, and a hospital for the treatment of infectious diseases is being erected in the grounds of the institution at Lidcombe.

The average number resident in the State asylums during the year 1930 was 3,570 as compared with 3,635 during the previous year. The average cost per inmate was £39 18s. 10d. In the hospitals attached to the three institutions, 5,631 cases of illness were treated during 1930—males, 4,547, and females, 1,084—and at the end of the year 1,273 cases remained under treatment.

The total number of inmates in the charitable institutions during the year 1930 was 31,297 persons, including 14,643 children. The discharges numbered 19,794, and the deaths 1,071. The number remaining at the end of the year was 10,432, viz., 3,487 men, 1,572 women, and 5,373 children. A classification of the institutions in which the children were resident is shown on page 381. The receipts of the charitable institutions amounted to £971,277, including the cost of State institutions and State aid to other establishments £672,586, and the expenditure amounted to £1,006,556.

A number of societies are active in the matter of charitable relief, *e.g.*, nursing, ambulance, and shipwreck relief; and in many suburbs and country towns benevolent societies have been formed for the relief of local distress.

For the purpose of organising and controlling the ambulance and transport services a board has been incorporated under an Act passed in 1919 and amended in 1924. The board delimits certain districts for administrative purposes, and in each district a committee is elected annually by the contributors to its funds.

The District Nursing Association and the Bush Nursing Association engage nurses to visit the sick, gratuitously if needed, the former in the metropolitan and the latter in the country districts. Public charitable

collections are made periodically for the relief of distress or with the object of increasing the revenue of hospitals and charitable agencies. In the Metropolitan district during 1930-31 the Hospital Saturday Fund collected voluntary subscriptions and donations amounting to £26,190, and the United Charities Fund, £7,085.

The following is a comparative statement of the receipts and expenditure of the charitable institutions and societies:—

Particulars.	1901.	1911.	1921.	1929.	1930.
Receipts—	£	£	£	£	£
State Aid	153,752	192,941	663,044	948,139	958,269
Subscriptions, Fees, etc. ...	34,906	78,786	229,547	398,950	317,672
Other	44,999	67,519	68,363	128,642	166,223
Total	233,657	339,246	960,954	1,475,738	1,442,164
Expenditure—					
Buildings and Repairs	40,247	21,063	41,771	86,876	56,817
Maintenance, Salaries, Wages ...	174,679	293,460	871,475	1,297,678	1,291,398
Other	39,008	11,142	39,371	103,094	167,178
Total	253,934	325,665	952,617	1,487,648	1,515,393

Financial aid from the State in 1930 represented 66 per cent. of the total receipts. It included moneys provided by the State in respect of Governmental charitable institutions, baby health centres, the Aborigines Protection Board, and the boarding out of children.

PROTECTION OF THE ABORIGINES.

The protection of the aboriginal natives of New South Wales is the function of a Board consisting of the Inspector-General of Police and other members, up to ten in number, appointed by the Governor.

On a number of reserves set apart for aborigines in various localities, dwellings have been erected, and assistance in the form of food and clothing is supplied when necessary.

Aboriginal children are required to attend school until the age of 14 years, and schools have been established for their exclusive use. The Board may assume control of the children and apprentice them, or place them in a training home. There is a training home for girls at Cootamundra, and a home for boys at Kinchela, on the Macleay River.

The Aborigines Protection Board collects certain particulars of aborigines in the State, as far as it is practicable in each year. The number recorded as at 30th June, 1931, included 1,038 full bloods and 8,775 half-castes, as well as a number of quadroons and octoroons. The number living in supervised camps was 3,267, of whom 416 were full bloods.

The expenditure by the Aborigines Protection Board during the year ended 30th June, 1931, amounted to £39,613; including £27,771 for general maintenance, £3,242 for the purchase of stores, £7,743 for educational purposes, and £857 for medical attention and other services. An amount of £2,468 was received as revenue from sales of products raised on the reserves. The net expenditure during the year was £37,145.

PENSIONS.

In New South Wales pensions are provided for the aged, for the permanently invalided, for persons incapacitated during war service, for the dependents of deceased soldiers and sailors, and since March, 1926, for widows with dependent children. Provision is made also for superannuation in most sections of the Government services. An Act to provide a scheme of superannuation for certain employees of local governing bodies was passed in March, 1927, the cost to be borne partly by the councils and partly by the employees. The Act was proclaimed on 1st October, 1927. Several of the banking companies and other firms have made arrangements for the superannuation of employees.

Old Age and Invalid Pensions.

Old-age pensions are payable to women 60 years of age and over, and to men 65 years of age and over, with a reduction to 60 years in the case of men permanently incapacitated, the prescribed period of residence in Australia being twenty years continuously. Absences amounting in the aggregate to one-tenth of the total period of residence do not involve disqualification.

Naturalised persons are eligible for pensions, but aliens, Asiatics (except those born in Australia and Indians born in British India), and aboriginal natives of Australia, Africa, the islands of the Pacific, and of New Zealand, are disqualified. A pension is not payable to any person if the net capital value of his property, exclusive of the value of his home, exceeds £400.

Invalid pensions are payable to persons over the age of 16 years who have resided continuously for at least five years, and have become incapacitated or blind, in Australia, also to persons permanently incapacitated or blind by reason of congenital defect if they were brought to Australia before the age of 3 years or have resided in Australia continuously for twenty years. Invalid pensions are not payable to persons whose income or property exceeds the limits prescribed in the case of old-age pensions, nor to those adequately maintained by relatives, *i.e.*, father, mother, husband, wife, either severally or collectively.

The maximum rate of pension, as varied from time to time, is shown below. The amount of pension is subject to reduction so that the pensioner's income, together with pension, will not exceed the limit stated in the table. It is reduced also by £1 for every complete £10 of the pensioner's property in excess of £50:—

Date.	Maximum Rate of Pension Per annum.		Limit of Income (including pension) Per annum.	
	£	s.	£	s.
1901, August...	26	0	52	0
1916, October	32	10	58	10
1920, January	39	0	65	0
1923, September	45	10	78	0
1925, October	52	0	84	10
1931, July	45	10	78	0

If a pensioner is an inmate of a public benevolent asylum, or remains in a public hospital for over twenty-eight days, he receives an allowance instead of a full pension. The rate was fixed at 3s. per week in 1923, increased to 4s. in October, 1925, and to 5s. 6d. in October, 1928. It was

prescribed in July, 1931, that the rate may not exceed 5s. per week. If the pensioner had applied for a pension before entering the institution the Federal Government also pays to the institution an allowance for his maintenance, but such allowance is not made in respect of a pensioner who was an inmate when he applied for a pension. The rate of these allowances was reduced from 14s. 6d. to 12s. 6d. per week in July, 1931.

The following statement shows, in respect of old-age and invalid pensions, the applications received in New South Wales, the number of pensions current, and the average rate and total liability in recent years in comparison with similar information for 1911-12, the first year of Commonwealth control:—

Year ended 30th June.	New Claims.	Pensions current in New South Wales at 30th June.			Weekly Rate of Pension, as at 30th June.		Estimated Annual Liability, as at 30th June.	Estimated Annual Liability per head of Population, as at 30th June.
		Males.	Females.	Total.	Max.	Average.		

Old-age Pensions.

					s. d.	s. d.	£	s. d.
1912	4,763	13,639	16,029	29,668	10 0	9 7	734,526	8 7
1921	5,727	16,033	23,004	39,027	15 0	14 1	1,428,258	13 8
1926	9,386	20,969	28,419	49,388	20 0	19 2	2,460,718	21 3
1927	8,140	21,990	29,540	51,530	20 0	19 1	2,563,028	21 7
1928	7,696	22,899	30,376	53,275	20 0	19 1	2,645,604	21 10
1929	7,702	23,401	31,183	54,584	20 0	19 1	2,710,734	22 0
1930	10,249	25,651	32,787	58,438	20 0	19 2	2,906,176	23 4
1931	12,814	28,003	37,029	65,032	20 0	19 1	3,225,872	25 9

Invalid Pensions.

					s. d.	s. d.	£	s. d.
1912	1,784	2,549	2,278	4,827	10 0	9 9	121,836	1 5
1921	3,278	7,016	8,371	15,387	15 0	14 9	588,583	5 8
1926	4,453	8,896	11,297	20,193	20 0	19 7	1,033,552	8 11
1927	4,434	9,576	12,069	21,645	20 0	19 7	1,105,624	9 4
1928	4,366	9,980	12,763	22,743	20 0	19 7	1,160,146	9 7
1929	4,652	10,486	13,480	23,966	20 0	19 7	1,220,908	9 11
1930	5,220	11,361	14,379	25,740	20 0	19 7	1,308,892	10 6
1931	6,383	12,148	15,943	28,096	20 0	19 6	1,425,996	11 4

At 30th June, 1931, the number of pensioners in public benevolent asylums in New South Wales was 1,804, and the annual liability for their pensions at the rate of 5s. 6d. per week was £25,797.

The old-age and the invalid pensioners in New South Wales as at 30th June, 1931, represented respectively 25.9 and 11.2 per 1,000 of population, as compared with 26.6 per 1,000 and 10.6 per 1,000 in the Commonwealth. The number and proportion of pensioners have increased appreciably with each increase in the maximum rate and in the value of property which a pensioner may hold without disqualification.

The total expenditure by the Commonwealth on invalid and old-age pensions during the year ended 30th June, 1931, was £11,710,953, of which an amount of £11,549,828 was paid as pensions, including payments to pensioners in benevolent asylums and hospitals, and £161,125 to public benevolent asylums and hospitals for the maintenance of pensioners. In addition, the cost of administration amounted to £93,077.

The amount of pensions, etc., paid in New South Wales during 1930-31 was £4,456,650, including £41,059 to asylums and hospitals.

Widows' Pensions.

The Widows' Pensions Act, 1925, as amended in 1929, provides for the payment of pensions to widows with dependent children. A widow is not qualified to receive a pension under the Act unless she was domiciled in New South Wales at the date of her husband's death, is residing in the State at the date of her application for a pension, and has been so residing continuously for a period of three years, and (except in cases noted below) has wholly or mainly dependent upon her for support a child, stepchild, or child legally adopted before her widowhood, who is under the age of 14 years. If a child is an invalid or possesses special scholastic ability the age limit for the purposes of this provision of the Act is 16 years. A widow without dependent children may be granted a pension if she is at least 50 years of age and destitute, or if on the death of her husband she is left unprovided for—the pension in the latter case being limited to the period of six months after the death of her husband. Continuous residence is not deemed to have been interrupted by occasional absences not exceeding one-tenth of the total period of residence, nor by absences during which the widow's children or her home was in New South Wales.

A pension may not be paid to any widow if she is receiving any other pension or allowance exceeding the amount of pension which, if otherwise qualified, she would receive under this Act; nor if she is an alien, or an Asiatic born out of Australia, or an aboriginal native of Africa, the islands of the Pacific, or New Zealand.

The maximum rate of pension is £1 per week in respect of the widow, and an additional amount of 10s. per week in respect of each dependent child under 14 years of age. The amount payable in each case is ascertained by deducting from the maximum annual amount £1 for each £1 by which the net income of the widow exceeds £26 per annum. For this purpose a widow's income is deemed to include any pension or allowance under any other Act; the earnings of the widow or her children under 14 years of age from personal effort; 5 per cent. of any real or personal property of the widow or her children which produces less than 5 per cent. per annum, except the house in which they reside and the furniture and personal effects therein; and any payment for the children's maintenance or education from any estate, etc.

The widow's income is deemed to include also 50 per cent. of the earnings of children over 14 years of age residing with her and 25 per cent. of the earnings of unmarried children not residing with her. In special circumstances, however, the whole or part of such earnings may be disregarded. Her income is not deemed to include sick allowance or funeral benefit from any society, nor money received under an assurance policy on the destruction or damage of property; and, if the widow is paying rent for her home, the amount of the rent up to a maximum of £78 per annum is deducted from her income.

Pensions are not payable for any period while the pensioner resides out of New South Wales, except during occasional absence during which her family or home is in the State. Pensions are terminated on the marriage of a pensioner or on the date she becomes qualified to receive an old-age or invalid pension under federal legislation. On the death of a widow the guardian of her children is entitled, with the Minister's approval, to receive the pension payable in respect of them.

The pensions became payable on 10th March, 1926. The number and cost in each year are shown below:—

Year ended 30th June.	Pensions current at end of year.	Pensions paid during year.	Cost of administration...
	No.	£	£
1926*	4,404	126,555	2,421
1927	5,449	553,707	7,489
1928	6,038	608,808	8,257
1929	6,328	637,551	7,827
1930	6,023†	611,947	†
1931	6,661	620,258	†

* March to June. † Not available. ‡ Amended since last issue.

The Widows' Pensions Act has been administered by the Child Welfare Department since July, 1929, and particulars as to cost of administration are not available.

War Pensions.

War pensions are granted by the Commonwealth Government upon the death or incapacitation, as the result of warlike operations, of members of the naval or military forces, and are administered by the Department of Repatriation. The pensions, with certain exceptions, were reduced in July and August, 1931, in accordance with the Financial Emergency Act, 1931.

The number of pensioners under the War Pensions Act as at 30th June, 1931, was as follows:—

Pensioners.	New South Wales.		Commonwealth.	
	Number of Pensioners.	Average Fortnightly Rate.	Number of Pensioners.	Average Fortnightly Rate.
Incapacitated Soldiers	25,355	£ s. d. 2 0 9	75,316	£ s. d. 1 17 8
Dependents of Deceased Soldiers	9,971	} 0 15 5	35,617	} 0 15 1
Dependents of Incapacitated Soldiers	54,792		172,389	
Total	90,118	1 2 7	283,322	1 1 1

At 30th June, 1931, there were 90,118 war pensions current in New South Wales, and the annual liability was estimated to be £2,642,146. The actual expenditure on account of pensions in New South Wales during the year ended 30th June, 1931, was £2,736,872, the total expenditure by the Commonwealth being £7,987,038. The cost of administration was £179,325.

Government Service Pensions.

The existing pension funds for employees of the State Government of New South Wales are the Public Service Superannuation Fund, the Police Superannuation and Reward Fund, and the Government Railways Superannuation Fund. An Act which provides for the superannuation of employees of the Commonwealth Government came into operation on 22nd November, 1922. These funds are maintained partly by deductions from officers' salaries and partly by grants from the public revenue.

Special provision is made by the State Government for pensions to judges, the amount paid from Consolidated Revenue during the year ended 30th June, 1931, being £10,199.

The first Public Service Superannuation Fund in New South Wales was established by the Civil Service Act, 1884, but in 1895 the admission of new contributors was discontinued and the existing contributors were given the option of withdrawing from the fund. The officers who elected to discontinue their contributions became entitled under prescribed conditions to receive refunds and gratuities on retirement. Officers who have continued to contribute are entitled to an annual pension equal to one-sixtieth of the average annual salary for the last three years' service, multiplied by the years of service, not exceeding forty, the pensions being payable on retirement through incapacity or at age 60, or on abolition of office. The amounts payable from the fund in excess of contributions are paid out of Consolidated Revenue. Contributors under this scheme were authorised to exchange their rights for new rights under the Superannuation Act of 1916.

On 30th June, 1930, there were 633 officers in receipt of pensions amounting to £159,336; and eleven pensions amounting, in the aggregate, to £1,016, were being paid in respect of deceased officers who had commuted their pensions rights in terms of the Superannuation Act of 1916. In addition, 157 officers, who had been transferred to the Commonwealth Service, were receiving pensions amounting to £39,185, a portion, £11,576, being payable by the State and the balance by the Commonwealth Government.

The existing Public Service Superannuation Fund was constituted by the provisions of the Superannuation Acts, 1916 and 1918, the provisions of which have been described in previous issues of this Year Book.

Certain sections of the Superannuation Act, which conferred pension rights without contributions on employees who had reached the age of 60 years, came into force in 1916, and the other provisions on 1st July, 1919.

At 30th June, 1930, the number of employees contributing to the fund was 21,640, viz., 14,306 men and 7,334 women. The pensions in force in respect of contributors numbered 2,577, amounting to £205,552 annually, and 1,500 pensions were payable in respect of persons who had not contributed to the fund, the annual amount being £103,783. During the year ended 30th June, 1930, the income of the fund amounted to £971,668, including contributions due by employees £316,830 and £217,698 due by employers. In 1930-31 the income, £1,044,005, included employees' contributions £324,135 and employers' contributions £238,836.

The funds of the Board at 30th June, 1931, amounted to £9,088,481, including £8,853,308 invested in securities and £23,362 due for employers' contributions. An agreement was made between the Superannuation Board and the State Treasury for the payment of the Crown contributions in respect of employees who were over the age of 30 at the commencement of the Act by equated payments of £233,253 per annum for a period of ~~thirty~~ four years from 1st July, 1925. Subsequently this arrangement was abandoned and in terms of amending legislation the Crown contributions from Consolidated Revenue as from 1st July, 1929, are to be paid as the pensions become due. Some of the corporate bodies, *e.g.*, Metropolitan and Hunter District Water and Sewerage Boards, continue to contribute on the basis provided by the original Act.

The total amount of pensions payable under the Civil Service and the Superannuation Acts as at 30th June, 1931, was £533,287, including £27,462 payable by the Commonwealth.

A pension fund for the police was established in 1899, amending legislation being passed in 1906 and 1925. Annual contributions by members of the service are at the rate of 4 per cent. of salary. Other sources of revenue

are penalties imposed on members of the police force, penalties and damages awarded to the police as prosecutors, and the proceeds of the sale of unclaimed goods in possession of the police. The amount of pension payable to members who entered the police service prior to 1906 is graduated in accordance with length of service. The retiring age is 60 years, except in cases of incapacitation, but under prescribed conditions the services of any member of the force may be retained until he reaches the age of 65 years. During the year ended 30th June, 1930, the receipts of the Police Superannuation and Reward Fund amounted to £257,316, including deductions from salaries, £50,615, and special appropriation from Consolidated Revenue, £175,525. The disbursements, £257,649, included pensions, £242,410, and gratuities, £14,928. In 1930-31 deductions from salaries amounted to £51,351, appropriation from revenue to £190,800, and total receipts to £262,077; disbursements £261,678 included pensions £249,877 and gratuities £11,381.

The Railway Service Superannuation Fund was established in October, 1910. The contributions from employees are at the rate of $1\frac{1}{2}$ per cent. of wages or salary, and the railway and tramway funds provide all that is necessary beyond such contributions. The amount of pension payable is one-sixtieth of the average annual salary during term of service, multiplied by the number of years of service, the maximum pension being two-thirds of the average salary. At 30th June, 1931, there were 47,229 contributors. The number of pensions in force was 4,000, amounting in the aggregate to £341,221 per annum. Since the inception of the fund, 6,554 pensions have been granted, and 2,311 pensioners have died; 221 officers have been re-employed, and 22 pensions have been written off the books. During the year 1930-31 the receipts of the fund amounted to £369,415, including deductions from salaries £177,144, and an amount of £169,889 from the Government Railways Fund and £16,200 from the Transport Trust. The disbursements, representing pensions, gratuities, refunds, etc., amounted to £369,089. The total subsidy from the public revenues up to 30th June, 1931, was £785,239, viz., £402,650 from Consolidated Revenue £366,389 from the Government Railways Fund and £16,200 from the Transport Trust.

In the Superannuation Fund for the Commonwealth Public Service as at 30th June, 1930, there were 31,446 contributors, of whom approximately one-third were in the State of New South Wales.

FAMILY ALLOWANCES.

The introduction of family allowances in New South Wales in terms of the Family Endowment Act, 1927, was an outcome of the system of wage regulation which is described in the chapter relating to wages. Endowment is not restricted to the children of wage and salary earners, and it is payable in respect of all families with more than one dependent child where the income is below the limit prescribed by the Family Endowment Act and its amendments.

The maximum rate of endowment is 5s. per week in respect of each child for whom endowment is payable. The age limit is 14 years, but payments may be continued to 16 years if the child is incapacitated. Children in charitable institutions are included within the scope of the system. Illegitimate children are excluded generally, but the Commissioner of Family Endowment has discretionary power to pay endowment in respect of such children under special circumstances. Other exemptions are children of fathers who are aliens, Asiatics, or aboriginal natives of Africa, the Pacific Islands, or New Zealand, unless born in Australia; children for

whom pension is payable under the Widows' Pensions Act or any other State or Federal Act except the War Pensions Act; children for whom family allowance is paid in the Commonwealth Public Service.

Where practicable, the endowment is paid to the mothers, and for them there is a residence qualification of two years in New South Wales immediately preceding the date of claim. There is a similar qualification in respect of the children except those under 2 years of age who were born in the State.

The maximum rate of endowment is 5s. per week per child, and the amount is reduced where necessary so that it will not raise the family income beyond the prescribed limit. Up to December, 1929, the limit was the amount of the current living wage, based on the requirements of a man and his wife without children, and £13. for each dependent child, and allowances were granted for a period of a year on the basis of the family income of the twelve months preceding the application. On the date mentioned the Industrial Commission was required to base its determinations of the living wage on the requirements of a family consisting of a man, wife and one child and the Family Endowment Act was amended to exclude from the allowance payable to each family one of the children who would have been eligible but for the amendment, exception being made in regard to children in charitable institutions.

The amending Act provides also that in the case of wage-earners, except those following occupations of a seasonal character, endowment may be granted for a period of one, two, three or four quarters on the basis of the average family income for a similar period before the date of a claim. In practice, however, the frequent review of allowances proved to be expensive, and in October, 1930, it was decided that as a general rule the claims be granted for the period of one year.

The family income is defined as the combined income of the claimant, his spouse, and children under 14 years, including weekly payments as workers' compensation, and 5 per cent. per annum of real or personal property (except their residence, and the furniture and personal effects therein), which produces less than 5 per cent. per annum. In assessing the income the following amounts are excluded, viz., sick pay and funeral benefits from any society; money received under fire insurance policy; lump sum payments as workers' compensation or superannuation or gratuity; earnings of children under 14 years; earnings of mother from casual employment; war pension for a member of the Forces or his wife or widow or his children; earnings from overtime up to £26; and where income is derived otherwise than from wages, the amount expended in the production of that income.

The number of claims for endowment received during the year ended 30th June, 1928, was 44,703, and the number of original claims was 13,315 in 1928-29, and 13,198 in 1929-30. Notwithstanding the elimination of one child per family the number of original claims increased to 17,734 in 1930-31. The number of claims and renewals granted in the respective years was 39,132, 38,940, 40,324, and 66,320. The number in the latest year (1930-31) included some claims and renewals for periods of three months. The number of families receiving endowment at 30th June, 1931, was 38,948 and the average fortnightly liability was £46,019.

The moneys for endowment are payable from the Family Endowment Fund, to which employers are required to pay a tax on amounts paid to employees in the form of wages, salaries, bonuses, commission, or remuneration for piece-work; and for each employee for whom board and lodging are provided £1 per week is added to the wages for the purpose of assessing the tax. The tax is not levied on wages paid to domestic servants employed otherwise than in the employer's trade or business, or to members

of a family employed by a parent, nor in cases where the employer's annual wages bill does not exceed £150, nor where the employer is a public hospital or public benevolent or charitable institution.

In respect of employees working under federal award or agreement the tax was reduced by 10 per cent. until 1st January, 1930, when such wages became exempt from tax. Other wages exempted at that date were those paid under awards, etc., which provided for allowances for children and the wages of Crown employees except those employed in connection with industrial undertakings and statutory bodies. An amendment of the Act in 1931 restored all these wages to the area of taxation as from 1st July, 1931, and provided that full tax must be paid on the amount of wages under federal awards and agreements.

The Family Endowment Act came into operation on 23rd July, 1927, and the tax was collected at the rate of 3 per cent. on the wages paid between that date and 31st October following. Then the tax was suspended because the assessments exceeded the amount required to meet the claims for endowment which had been lodged and to defray costs of administration. The tax was re-imposed on 1st April, 1929, the rate being 2 per cent. It was reduced to 1 per cent. on 1st April, 1930, and increased to 2 per cent. on 1st July, 1931.

Particulars regarding the family allowances paid and the tax collected in each year are show below.

Year ended 30th June..	Families receiving endowment at end of year.	Expenditure.			Tax collected.
		Endowment payments.	Expenses including interest on advances.	Total expenditure..	
	No.	£	£	£	£
1928	39,132	814,518	63,047	877,565	1,012,758
1929	42,000*	1,553,986	99,353	1,653,339	52,598
1930	37,000*	1,261,202	175,632	1,436,834	1,886,715
1931	38,948	1,196,484	139,475	1,335,959	1,018,429

* Approximate.

Approximately 8,000 families receiving endowment for one child were excluded from endowment in December, 1929. The expenses charged to the Family Endowment Fund during 1929-30 included £65,013 in respect of advances from the Treasury during a period of two years, a large deficiency having accumulated while the tax was suspended, viz., on wages paid between 31st October, 1927, and 1st April, 1929. The interest on advances in 1930-31 amounted to £23,429.

Officers of the Public Service of the Commonwealth, of whom a large number are employed in New South Wales, have received child endowment since November, 1920. The payments are at the rate of 5s. per week for each dependent child under the age of 14 years, provided that it does not bring the remuneration of the officer above £500 per annum. In effect the cost is borne by the employees in the service, because in assessing the basic wage upon which he determines their salaries and wages, the Public Service Arbitrator deducts from the rate, which otherwise would be awarded, a sum to cover the cost of endowment.

Employees of banks in New South Wales also receive child endowment in terms of an award for bank officers made by the Industrial Commission of New South Wales in June, 1927. The banks are required to

pay allowances to officers covered by the award, at the rate of £35 per annum for each child under the age of 14 years, or, if at school, under the age of 16 years, provided that the amount of these allowances, together with salary, apart from other allowances, does not exceed £750 per annum.

THRIFT.

Evidence that thrift is practised extensively in New South Wales is found in the strong position of friendly societies—both in membership and finances; in the large number of savings bank accounts and of life assurances; and in the growth of Starr-Bowkett building societies and co-operative trading societies. For particulars of the savings banks, and other financial institutions, reference should be made to the chapter of this volume relating to private finance.

FRIENDLY SOCIETIES.

Friendly Societies for many years have exercised a strong influence for good among the industrial classes by inculcating habits of thrift, and by preventing and relieving distress.

The benefits assured are fairly uniform in all societies, and consist usually of medical attendance and medicine for a member and his family, with sick pay for the member, and funeral allowances for the member and his wife. The usual sickness benefit is 21s. per week during the first six months of illness, 15s. during the next six months, and 5s. per week during the remainder of illness, this last provision being rendered possible by the system of State subvention, of which details are given later.

The funeral benefits range usually from £10 to £40 at death of the member, according to the period of membership, and a contingent benefit of £10 or £15 is payable on death of his wife. In several societies members may assure for sums up to £100, and in two of them it is possible to assure for £200, the maximum allowed by law. A separate benefit for widows of members—usually £10—may be assured in most of the societies for a stated contribution.

The societies may be divided into two classes, viz., Friendly Societies proper, and Miscellaneous Societies, whose objects bring them within the scope of friendly societies legislation, but whose benefits differ somewhat from those of ordinary friendly societies.

At 30th June, 1930, there were 53 societies, including 20 miscellaneous; 16 possessed branches, and 37, including one with a juvenile branch, were classed as Single Societies.

The following summary shows the branches, membership, and funds as at 30th June, 1930:—

Classification.	Branches.	Members.	Funds.
Friendly Societies Proper—	No.	No.	£
Affiliated	2,510	249,139	3,869,152
Single	18	2,947	55,442
	2,528	252,086	3,924,594
Miscellaneous Societies	20	...	76,350
Total	2,548	252,086	4,000,944

The number of members has grown rapidly since 1899, when societies were first subjected to supervision by the Registrar. In that year there were 78,245 members, equal to 5.9 per cent. of the population. Thereafter a continuous development proceeded until the outbreak of war, when the

number declined owing to enlistments, and, subsequently, through deaths on active service. There has been an increase in each year since the termination of the war. The membership at intervals since 1899 is shown in the following table:—

At 30th June.	Aggregate Membership.		At 30th June.	Aggregate Membership.	
	Members.	Percentage of Population.		Members.	Percentage of Population.
1899*	78,245	5·9	1927	238,527	10·0
1901*	89,684	6·5	1928	242,199	10·0
1911*	164,910	9·7	1929	247,730	10·0
1921	199,688	9·5	1930	252,086	10·1
1926	234,699	10·1			

* At 31st December.

The number of members entitled to benefits at 30th June, 1930, was 226,133, and 25,953 were ineligible on account of arrears of contributions. The benefits of medical attendance and medicine accrue also to the member's family, but such persons are not included in the membership.

The membership at 30th June, 1930, included 205,063 men, 22,443 women, and 24,580 juveniles. As compared with the membership at 30th June, 1929, there were increases of 1,305 men, 1,500 women, and 1,551 juveniles; the total increase being 4,356.

Information regarding receipts and expenditure of Friendly Societies, and the accumulated assets, may be found upon reference to the chapter of this Year Book entitled Private Finance.

Miscellaneous Friendly Societies.

In addition to the Friendly Societies proper there were at 30th June, 1930, twenty miscellaneous societies registered under the Friendly Societies Act. These organisations were medical institutions or dispensaries for the supply of medicine to all members whose names have been placed on their lists of contributing branches. In some cases the societies arrange for medical attendance.

The receipts of the dispensaries during the twelve months ended 30th June, 1930, were £64,233, and the expenditure was £59,436, so that there was an excess of receipts amounting to £4,797. Many of these bodies have received liberal grants from the Government, and with this assistance were able to purchase land and to erect buildings. In some cases funds were raised by the issue of interest-bearing debentures to component societies. In addition to paying interest, most of the dispensaries have made substantial reductions in the principal. The funds at 30th June, 1930, amounted to £76,350.

State Subvention of Friendly Societies.

The Subvention to Friendly Societies Act, 1908, now consolidated with the Friendly Societies Act, assured to the societies, which might elect to be bound by its provisions, certain monetary benefits payable from the Consolidated Revenue of the State for the purpose of enabling them to pay sickness benefits for extended periods, and to relieve aged members of the necessity of paying contributions.

The following is a summary of the claims in respect of each of the five years ended 30th June, 1930:—

Year ended 30th June.	Applicant Societies.	Sickness Pay.				Contributions.				Total Amount of Claims.
		Continuous Sickness.		Sickness of Aged Members.		Medical.		Funeral.		
		Claimant Members.	Amount.	Claimant Members.	Amount.	Claimants.	Amount.	Claimants.	Amount.	
1926	26	1,565	8,368	3 576	23,589	11,604	20,654	12,283	6,469	59,080
1927	25	1,603	8,526	3,847	25,508	12,359	21,959	13,099	6,730	62,723
1928	25	1,732	9,155	4,027	26,709	13,321	24,106	13,866	7,336	67,306
1929	26	1,933	10,167	4,207	28,675	14,019	25,085	14,720	7,836	71,763
1930	26	2,130	11,164	4,665	31,042	14,901	26,920	15,765	8,307	77,433

The total amount paid to the societies in respect of subvention claims to 30th June, 1930, was £843,435. The cost of subvention increased steadily in each year until it reached the sum of £77,433 in respect of the year 1929-30. Then the Government decided, in view of adverse financial conditions, to limit the subvention to a fixed sum—£50,000—per annum, and the law was amended to provide for its distribution amongst the societies on the basis of aged membership.

COMMUNITY ADVANCEMENT AND SETTLEMENT SOCIETIES.

The Co-operation Acts, 1923-1929, provide, *inter alia*, for the formation of community advancement societies and community settlement societies. Community advancement societies may be formed to provide any community service or benefit, *e.g.*, to transport and supply water, gas, and electricity, to establish factories and workshops, to undertake farming operations and the purchase of machinery for its members, to erect dwellings, to maintain buildings, etc., for education, recreation, or other community purpose, to promote charitable undertakings, and to do anything calculated to improve the conditions of urban or rural life in relation to the objects specified.

Community settlement societies may be formed for the purpose of acquiring land in order to settle or retain people thereon, and of providing any community service, and with these objects they may do anything calculated to promote the economic interests of their members.

Up to the end of August, 1931, twenty-one community advancement societies had been registered under the Act. Two have been dissolved and three are in liquidation. Of those in operation, ten were formed for the object of erecting and maintaining public halls and six for establishing recreation or social clubs. Two community settlement societies have been registered, and one is in liquidation.

HOUSING.

A classification of the occupied dwellings in New South Wales, as disclosed by the Census of 1921, according to the nature of the dwelling, the number of rooms and materials used appears in the 1928-29 issue of this Year Book.

Construction of Dwellings.

The Local Government Act confers extensive powers on municipal and shire councils for supervising and regulating the construction of buildings, and for promoting schemes of town-planning on modern lines. To assist the councils a Town Planning Advisory Board was appointed by proclamation of the Governor in October, 1918.

A Board of Architects has been established, in terms of the Architects Act, 1921, for the purpose of regulating the practice of architecture. Persons using the name "architect" are required to be registered, registration being granted to persons over 21 years of age who possess the requisite qualifications. The Act does not apply to naval architects. In January, 1931, there were 649 registered architects.

Brick buildings predominate in the city and suburbs, and local sandstone, and, in recent years, concrete are used to a great extent in the construction of the larger buildings. For suburban dwellings the cottage plan is favoured. The maximum height of buildings in the metropolitan district is limited by law to 150 feet, except in the case of those erected for the purposes of public worship. Outside the city proper, permission must be obtained from the Chief Secretary for the erection of buildings over 100 feet high. The skyline must be approved by him and adequate provision must be made for protection against fire.

In the city of Sydney extensive building operations have been undertaken during recent years by private enterprise, and the City Council has been active in resuming and remodelling insanitary and congested areas.

During 1929 the Metropolitan Water, Sewerage, and Drainage Board assessed 151 new buildings erected at a cost of £4,390,657 in the city, and additions, which cost £554,415, to buildings already assessed. In 1930 the number of new buildings assessed was 231, and the cost was £2,592,473; and the cost of additions to existing buildings was £272,731. In 1931 the cost of new buildings and additions was only £542,551.

The following statement shows the number of new buildings assessed by the Metropolitan Water, Sewerage, and Drainage Board in the metropolitan area—including Auburn, Bankstown, Granville, Lidcombe, and Parramatta—in each year since 1920. The cost of the new buildings assessed and of additions to existing buildings is shown also.

Year.	City of Sydney.		Suburbs.*		Metropolitan Area.*	
	Number of new buildings.	Cost of new buildings and of additions to old buildings.	Number of new buildings.	Cost of new buildings and of additions to old buildings.	Number of new buildings.	Cost of new buildings and of additions to old buildings.
		£		£		£
1920	97	873,364	8,958	7,857,042	9,055	8,730,400
1921	67	1,399,467	7,658	7,684,117	7,725	9,083,561
1922	153	1,593,684	7,852	7,663,659	8,005	9,257,343
1923	277	1,634,081	9,080	7,826,744	9,357	9,460,825
1924	402	3,501,809	10,454	9,835,324	10,856	13,337,133
1925	263	2,593,452	9,408	8,180,965	9,671	10,774,417
1926	168	2,621,780	9,596	9,677,187	9,764	12,298,967
1927	214	2,795,277	9,400	10,598,945	9,704	13,394,222
1928	324	3,630,037	10,216	11,496,270	10,540	15,126,307
1929	151	4,945,072	8,490	10,393,236	8,641	15,338,308
1930	231	2,865,204	4,691	5,616,313	4,922	8,481,517
1931	126	542,551	1,203	1,068,129	1,329	1,610,680

* Including Auburn, Bankstown, Granville, Lidcombe, and Parramatta.

The figures in the foregoing table show that there has been remarkable activity in the erection of buildings in the suburbs as well as in the city. The cost of buildings assessed in the metropolitan area rose from £9,500,000 in 1923 to £13,300,000 in 1924, then after a temporary contraction increased further until it exceeded £15,000,000 in 1928 and 1929. From this high level there was a decline to £8,500,000 in 1930, and to £1,600,000 in 1931.

Assessments by the Water, Sewerage, and Drainage Board are made when a building or a section of it is practically completed. Another aspect of the building operations is obtainable from records of the Local Government authorities concerning permits which must be obtained from the councils before construction is commenced. Particulars relating to the permits issued for new buildings and for additions, and alterations in the metropolitan area (except the city of Sydney, for which they are not available) are shown below; also the number and estimated cost in relation to new buildings in country municipalities.

Year.	Metropolitan Area* (except City of Sydney).				Country Municipalities.*	
	Permits for new buildings.		Permits for additions and alterations.		Permits for new buildings.	
	Number	Estimated Cost.	Number.	Estimated Cost.	Number.	Estimated Cost.
		£		£		£
1920	9,355	8,422,682	3,560	708,837	3,028	2,253,240
1921	6,113	5,356,475	4,323	739,436	2,493	1,586,809
1922	9,317	7,689,727	5,233	779,223	3,757	2,161,649
1923	11,931	9,752,670	5,109	832,352	4,020	3,028,494
1924	10,857	8,374,021	6,132	931,839	5,024	3,161,594
1925	11,919	8,950,844	5,863	840,620	6,092	3,495,815
1926	11,859	9,339,118	6,708	1,091,051	6,463	3,633,641
1927	10,582	10,905,988	10,270	1,510,452	4,772	3,579,569
1928	10,177	10,781,502	10,513	1,691,121	4,329	3,378,297
1929	8,134	9,070,006	10,512	1,728,050	4,375	3,775,862
1930	2,129	2,356,053	6,912	699,290	1,945	1,495,793
1931	474	454,611	4,106	347,658	910†	460,000†

* Auburn, Bankstown, Granville, Lidcombe, and Parramatta included in Metropolitan Area.

† Preliminary—subject to revision.

These figures show that the decline in building projects in 1930 was greater than is indicated by the particulars of assessments shown in the table on page 397. The estimated cost of new buildings for which permits were issued by suburban councils in 1930 showed a decrease of 74 per cent., as compared with 1929, and a further decrease of 81 per cent. in 1931.

The particulars regarding permits for new suburban buildings in 1926 and earlier years probably include a number for the erection of garages as annexes to existing premises, which have since been classified as additions.

The extent of building operations in various municipalities outside the metropolitan district is indicated by the following statement of the number and value of buildings for which permission to erect was granted during

the last three years. Only those municipalities are specified where the estimated cost exceeded £45,000 in any of these years, and the other municipalities are grouped:—

Country Municipalities.	Estimated Population 31st Dec., 1930.	1928.		1929.		1930.	
		No.	Value.	No.	Value.	No.	Value.
			£		£		£
Dundas	5,600	69	72,731	96	89,938	39	34,343
Fairfield	7,840	89	48,000	69	37,410	49	19,828
Holroyd	14,850	267	154,666	245	147,578	85	48,063
Lismore	10,370	66	55,708	98	98,712	60	113,031
Newcastle and suburbs ...	104,170	765	654,332	573	481,999	229	176,304
Scone	1,990	21	90,592	21	14,965	14	6,392
Wollongong	10,130	215	159,358	279	234,556	72	72,908
Armidale	7,090	69	66,345	95	181,020	28	23,650
Bathurst	9,690	55	44,755	46	57,131	18	14,148
Cowra	4,490	26	20,864	63	53,975	23	27,537
Mudgee	3,090	52	49,887	28	19,560	10	5,357
Orange	8,590	92	82,843	109	111,930	28	27,149
Goulburn	12,560	120	100,871	106	122,334	23	16,245
Tamworth	7,690	103	86,385	142	110,275	63	52,863
Dubbo	6,180	144	113,104	78	59,002	25	20,420
Forbes	5,120	50	39,256	66	53,356	11	8,610
Parkes	5,660	68	60,072	101	102,510	15	11,720
Albury	9,320	111	129,713	96	149,224	38	30,799
Wagga	8,920	87	126,285	99	92,785	26	22,024
Moree	3,990	40	31,762	61	172,450	20	13,742
Coonamble	2,380	23	10,183	35	64,063	14	15,339
Other Municipalities ...	289,240	1,797	1,181,150	1,869	1,320,489	1,055	735,321
Total*	538,960	4,329	3,378,862	4,375	3,775,862	1,945	1,495,793

* Exclusive of Auburn, Bankstown, Granville, Lidcombe and Parramatta.

ASSISTANCE TO HOME BUILDERS.

Active measures for assisting the people to acquire homes have been taken in New South Wales by both State and Federal Governments. Assistance is given by erecting dwellings to be sold on the rent purchase system or by advances to defray the cost of erection or purchase, repayments being extended over a period of years.

In 1912 when there was a shortage of small dwelling-houses in Sydney, the Government undertook the construction of a model suburb, which was named Daceyville. The Housing Act was passed to make provision for the appointment of a Housing Board, and for the purchase and subdivision of land, and the erection of residences. In 1919 the Housing Board was authorised also to assist persons owning land to erect dwellings thereon, and to make advances for the purchase of dwellings already erected.

In 1924 arrangements were made to dissolve the Board, and its powers were vested in the Minister for Local Government.

During the period of its administration the Housing Board erected 818 dwellings and made advances in respect of 516 properties. Upon the dissolution of the Board 966 accounts, representing advances made by the Board, were transferred to the Commissioners of the Savings Bank for liquidation. The number of loans outstanding was 862 and the amount £515,842 at 30th June, 1930, and there were 849 loans amounting to £497,888 at 30th June, 1931.

In addition to the areas acquired in terms of the Housing Act, there is an area in the city, known as the Observatory Hill Resumed Area, which was resumed by the Government in 1900 with a view to reconstruction. It consists of about 30 acres in the oldest settled portion of Sydney, adjoining the wharfs, and contains a number of business premises and residences, including tenements built for waterside workers. Extensive improvements have been made in regard to buildings, streets, etc. The capital expenditure to 30th June, 1931, amounted to £935,146.

The Municipal Council of the City of Sydney controls four blocks of workmen's dwellings. The Strickland Buildings were opened in April, 1914. They consist of eight shops and 71 self-contained flats of two, four, or six rooms. The rents range from 11s. 7d. to 26s. per week. The Dowling-street dwellings, opened on 29th June, 1925, consist of 30 flats of four or five rooms, for which the rentals are 20s. 2d. to 26s. per week. The Pyrmont dwellings were opened on 2nd November, 1925. They contain 41 flats of four or five rooms, and the weekly rentals range from 18s. 9d. to 24s. The Alexandria dwellings, opened on 17th October, 1927, consist of 22 dwellings and a shop. The rentals range from 19s. 5d. to 25s. per week. The total cost, including the land, was—Strickland £49,814; Dowling-street, £23,000; and Pyrmont, £33,500; and the cost of the erection of the Alexandria dwellings was £26,156.

ADVANCES FOR HOMES—SAVINGS BANK FUNDS.

The use of the funds of the Government Savings Bank of New South Wales for the purpose of making advances to home-builders was authorised by the Government Savings Bank Amendment Act of 1913.

In 1927 the Federal Parliament passed legislation by which the Commissioners of the Commonwealth Savings Bank of Australia were authorised to advance moneys to federal, territorial, State, or municipal authorities to be used under certain conditions for the purpose of housing schemes. This legislation was proclaimed on 9th June, 1928, and in November following an Act was passed by the Parliament of New South Wales to enable the Commissioners of the State Savings Bank to obtain funds thus provided in terms of the Commonwealth Housing Act. At the same time the Bank was authorised to use its own funds for the erection of dwellings, and its existing scheme of advances for homes was amended.

Thus there were three housing schemes under the administration of the Government Savings Bank of New South Wales, viz., (1) Advances for homes under the Act of 1913; (2) the erection of dwellings by the Commissioners in terms of the Act of 1928; (3) advances from funds obtained from the Commonwealth Savings Bank. An explanation of these schemes appears in the 1928-29 issue of this Year Book.

From 1st July, 1914, when the system of advances for homes was commenced, up to 30th June, 1931, the amount of £18,365,169 had been advanced to 32,696 borrowers, and the amount outstanding at that date was £12,661,842, owing by 24,097 persons.

The rate of interest charged for advances was raised from 5½ to 6 per cent. on 1st July, 1917, to 6½ per cent. from 1st July, 1920, and to 7 per cent. from 1st July, 1921. It was reduced to 6½ per cent. on 1st July, 1923, and to 6 per cent. on 1st July, 1926. For current loans at higher interest, the rate was reduced to 6½ per cent. from 1st July, 1925, and to 6¼ per cent. from 1st July, 1928.

The current rates of interest were reduced further, as from 1st October, 1931, in terms of the Interest Reduction Act passed by the State Parliament. The Act prescribed a general reduction of 4s. 6d. in every pound of interest, with a proviso that the rate of interest should not be reduced below 5½ per cent. in the case of the advances from funds made available by the Commonwealth Savings Bank, or below 5 per cent. on the other advances for homes.

The advances during the years stated were as follow:—

Year ended 30th June.	Advances made.		Year ended 30th June.	Advances made.	
	No.	Amount.		No.	Amount.
		£			£
1915	575	221,900	1928	3,019	1,794,435
1921	2,489	1,282,360	1929	2,628	1,690,803
1925	2,673	1,531,775	1930	2,889	2,177,759
1926	2,724	1,619,650	1931	336	296,745
1927	2,578	1,519,610			

The advances in 1929-30 included 779 loans for £649,763 from funds made available to the Commissioners by the Commonwealth Savings Bank, and 137 loans in 1930-31 for the aggregate amount of £133,846.

War Service Homes.

The Commonwealth Government assists Australian sailors and soldiers and their female dependents to acquire homes, the operations being conducted under the Commonwealth War Service Homes Act, 1918-29.

A summary of the activities of the Commission charged with the administration of the Act in New South Wales up to 30th June, 1930, shows that the Commission had decided to grant 13,522 applications for homes. The number of homes provided at that date was 11,877, viz., 6,402 by the construction of new houses, 4,223 by the purchase of existing dwellings, and 1,252 by the discharge of mortgages. There were 109 houses under construction at 30th June, 1930, and arrangements were in progress for the erection of 25 houses.

The average cost of construction was £847, excluding the cost of the land, for which the average was £81. The sums paid as instalments of principal and interest to 30th June, 1930, amounted to £4,255,301, and arrears of instalments amounted to £64,408.

PARKS, RECREATION RESERVES, AND COMMONS.

Under the Public Parks Act the Governor may appoint trustees of any lands proclaimed for the purposes of public recreation, convenience, health, or enjoyment. The trustees are empowered to frame by-laws for the protection of shrubs, trees, etc., upon the land vested in them, and to regulate the use and enjoyment of such land by the public.

The public parks and recreation reserves which are not committed to special trustees are placed by the Local Government Act, 1919, under the control of municipal and shire councils. All the towns of importance possess extensive parks and recreation reserves.

The city of Sydney contains within its boundaries 614 acres of parks, squares, and public gardens. The most important are Moore Park, where about 354 acres are available for public recreation, including the Sydney Cricket Ground and the Royal Agricultural Society's Ground; the Botanic

Gardens and Garden Palace Grounds, 65 acres, with the adjoining Domain of 86 acres, ideally situated on the shores of the Harbour; and Hyde Park, 37 acres, in the centre of the city. In addition, the Centennial Park, 474 acres in extent, is situated on the outskirts of the city. It was reserved formerly for the water supply, but now it is used for recreation, the ground having been cleared, planted, and laid out with walks and drives.

It has been ascertained that there are over 9,800 acres of public parks and reserves in suburban municipalities. This figure representing nearly 7 per cent. of their aggregate area is exclusive of some parks and reserves which the municipalities have acquired by gift or by purchase from private owners.

The Zoological Gardens at Taronga Park, on the northern side of the Harbour, were opened in 1916. The area is nearly 57 acres. In their preparation the natural formation has been retained as far as practicable, with the object of displaying the animals in natural surroundings. An aquarium has been built within the gardens.

The National Park, situated about 16 miles south of Sydney, was dedicated in December, 1879. The total area, with the additions made in 1880 and 1883, is 33,800 acres. The park surrounds the picturesque bay of Port Hacking, and extends in a southerly direction towards the mountainous district of Illawarra. It contains fine virgin forests with attractive scenery.

Another large tract of land, the Kuring-gai Chase, was dedicated in December, 1894, for public use. The area of the Chase is 35,300 acres, and contains portions of the parishes of Broken Bay, Cowan, Gordon, and South Colah. This park lies about 15 miles north of Sydney, and is accessible by railway at various points, or by water, *via* the Hawkesbury River. Several creeks, notably Cowan Creek, intersect it.

In 1905 an area of 248 acres was proclaimed as a recreation ground at Kurnell, on the southern headland of Botany Bay, a spot famous as the landing-place of Captain Cook. Parramatta Park (252 acres) is of historic interest.

Surrounding many country towns there exist considerable areas of land reserved as commons, on which stock owned by the townsfolk may be depastured. The use of these lands is regulated by local authorities. Nominal fees are usually charged to defray the cost of supervision and maintenance. Many of these commons are reserved permanently, but a large number are only temporary.

The area reserved for parks and recreation reserves, excluding alienated lands acquired by local councils or donated by private persons, was 256,890 acres at 30th June, 1930, and the area of permanent commons was about 39,000 acres, and 367,994 acres were reserved temporarily as commons.

PUBLIC ENTERTAINMENTS.

Theatres and Public Halls, etc.

Buildings in which public meetings (excluding meetings for religious worship) or public entertainments are held, must be licensed under the Theatres and Public Halls Act, 1908. A license may be refused if proper provision is not made for public safety, health, and convenience, or if the site or building is unsuitable for the purpose of public meeting or entertainment. Plans of buildings intended to be used for theatres and public halls must be approved by the Chief Secretary before erection is begun. Licenses are granted for a period of one year, and premises are subjected to inspection before renewal. A license or renewal of a license may be withheld until such alterations or improvements as *may* be deemed necessary are effected.

As at 31st December, 1930, there were 2,440 buildings to which the provisions of the Act applied, and they contained seating accommodation for approximately 1,127,400 persons. The total amount of fees received for licenses during 1930 was £4,510.

Cinematograph films are subject to censorship prior to exhibition in New South Wales, those imported from oversea countries being reviewed by the Commonwealth customs authorities, and those made in Australia by a State board.

Horse-racing.

Horse racing, which includes pony racing and trotting races, is a popular form of sport in New South Wales, and with it is associated a large amount of betting. Racecourses must be licensed.

If a racecourse is used for more than one class of racing—horse racing, pony racing, or trotting—a separate license must be obtained for each class. In 1930 the licensed racecourses numbered 350, and the licenses issued in respect thereof numbered 461. The maximum number of days on which it was permissible to hold race meetings in the metropolitan district during 1930 was 196, and in the district of Newcastle 90 days. In November, 1931, a law was passed for the regulation of greyhound racing on racecourses specially licensed therefor. In the metropolitan district not more than two racecourses may be licensed, and elsewhere not more than one in any town. Meetings may not be held on more than fifty-two days in a year.

Betting or wagering is prohibited in connection with any sports except horse, pony, trotting and greyhound races on licensed racecourses, and coursing on grounds approved by the Chief Secretary, and betting or wagering is illegal after sunset on licensed racecourses or coursing grounds except at greyhound races. Racing clubs may be required by the Colonial Treasurer to instal totalisators on their racecourses and to use them at every race meeting.

To facilitate the collection of stamp duty in respect of betting, bookmakers are required to use stamped tickets and to keep a record of credit bets. During the year ended 30th June, 1931, the number of betting tickets issued to bookmakers was 10,340,000, and approximately 440,000 credit bets were recorded. The investments on totalisators during the same period amounted to £1,670,694.

As from 20th December, 1930, a tax has been imposed on winning bets. The rate was 1s. for each 10s. of the bets, including the amounts wagered by the backer, and the tax collected to 30th June, 1931, amounted to £227,650. In November, 1931, the sum wagered by the backer was excluded from the tax.

Particulars relating to taxes in connection with racing are shown in the chapter relating to Public Finance.

State Lotteries.

State lotteries are conducted in New South Wales, in terms of the State Lotteries Act, 1930, which was brought into operation by proclamation on 22nd June, 1931. The administration of the Act is entrusted to a director, and the lotteries are conducted on the cash-prize system. From the proceeds of the sale of tickets in each lottery a sum is apportioned for prizes and the balance is payable to consolidated revenue. The first lottery was drawn on 20th August, 1931.

Taxation of Public Entertainments.

A tax on public entertainments has been imposed by the Commonwealth Government since 1st January, 1917, the rate of tax being based upon the amount paid for admission.

From 1st December, 1919, to 1st October, 1922, the tax was charged on the payments for admission at the rate of $\frac{1}{4}$ d. for each 6d. or fraction thereof; but it was not charged on payments not exceeding 5d. for the admission of children under 16 years of age to places of continuous entertainment, *i.e.*, those open for more than four hours on three or more days in the week, nor for admission to entertainments intended only for children if the charge was under 6d. As from 2nd October, 1922, payments lower than 1s. were exempted from the tax, and since 15th October, 1925, tax has not been payable where the price of admission is less than 2s. 6d.

Where payment for admission is made in the form of a lump sum as a subscription to a club or association, or for a season ticket, the tax is collected on the amount of the lump sum. Certain entertainments are exempt from the tax, *e.g.*, if the proceeds are devoted wholly to philanthropic, religious, charitable, or educational purposes.

Particulars of taxable entertainments held in New South Wales and the Federal Capital Territory during the years 1928-29 and 1929-30, as recorded for the purposes of the Commonwealth Entertainments Tax, are shown below:—

Classification.	1928-29.			1929-30.		
	Entertainments.	Admissions.	Tax.	Entertainments.	Admissions.	Tax.
Racing	1,523	1,788,829	£ 48,499	1,130	1,660,068	£ 46,263
Theatres	6,693	2,460,148	58,686	4,658	1,090,756	24,761
Picture Shows	6,124	1,776,272	27,104	11,531	2,744,924	42,556
Dancing and Skating	3,321	475,988	9,107	3,663	419,868	8,104
Concerts	430	65,285	1,142	438	72,796	1,403
Miscellaneous	1,896	863,507	14,439	1,974	559,448	9,305
Total	19,987	7,430,029	158,977	23,394	6,547,860	132,392

There was a marked increase in taxable admissions to picture-shows in 1929-30, as a result of the introduction of sound-equipment, and there was a decrease in respect of nearly all other classes of entertainments, especially theatres. The entertainments tax collected in the Commonwealth in 1929-30 amounted to £316,121, and there was a decline to £186,661 in 1930-31.

The State Government imposed a tax on entertainments as from 1st January, 1930. Admissions are taxable if payments exceed 1s. 6d., at the following rates:—Over 1s. 6d. and under 2s., tax $\frac{1}{4}$ d.; 2s. and over, tax 1d., and $\frac{1}{4}$ d. for each additional 6d.

The amount of tax collected during the six months January to June, 1930, was £54,748, and in the following year £78,436. These sums do not include taxes on admissions to racecourses which the State has taxed since 1st October, 1920, at rates shown on a later page, the amount collected being £129,320 in 1929-30 and £86,579 in 1930-31.

REGULATION OF LIQUOR TRADE.

The sale of intoxicating liquor is subject to regulation by the State Government in terms of the Liquor Act of 1912 and subsequent amendments. The sale of intoxicating liquor except by persons holding a license is prohibited. Several kinds of licenses are granted, viz., publican's, packet, Australian wine, club, booth or stand, and railway refreshment room, all of which authorise the sale of liquor in small quantities; and spirit merchant's and brewer's for the sale in large quantities.

The authority given by each of these licenses and the conditions attached thereto are described in the 1928-29 issue of this Year Book.

The Licenses Reduction Board, appointed under the Act of 1919, may reduce the number of publicans' licenses in any electorate where the existing licenses exceed the "statutory number," prescribed by the Act, which is proportionate to the number of electors. For the purposes of the liquor licensing laws, the electorates are those which existed before they were rearranged in 1927 on the basis of single-member districts.

When deprived of their hotel licenses the holders, owners, lessees, etc., of the premises are entitled to compensation as assessed by the Board, payable from a fund obtained by levies on the licensees. In the case of wine licenses, only the licensees are entitled to compensation.

A licensee deprived of his license by the Board is paid as compensation for each year of the unexpired term of his tenancy (up to three years), the average annual net profit during the preceding period of three years. Owners, lessees, etc., of hotel premises receive compensation based on the amount by which the net return from the premises over a period of three years is diminished by being deprived of a license. Appeals against the determinations of the Board in respect of the compensation awarded may be made to the Land and Valuation Court.

On 1st January, 1920, the number of publicans' licenses in existence was 2,539, of which 2,085 were in fourteen electorates with more than the statutory number, and the maximum reduction which the Act authorised the Board to make was 483. During 1923 the number of electors so increased in two of the electorates, viz., Byron and Oxley, that the number of licenses was no longer in excess of the statutory number. A decrease in population placed the Balmain electorate within the jurisdiction of the Licenses Reduction Board in 1925, and for a similar reason the Oxley electorate was restored to its jurisdiction in 1926.

During the period from 1st January, 1920, to 31st December, 1931, the Board deprived 291 hotels of licenses and accepted the surrender of 119 licenses. Seventy-five of the hotels were situated in the Sydney electoral district, 24 in the district of Newcastle, and 311 in other country districts. The compensation awarded in respect of 400 publicans' licenses amounted to £687,615, distributed as follows:—Licensees, £244,360; owners, £431,302; lessees, £11,553; and sub-lessees, £400. Compensation has not yet been determined in the case of ten hotels in the country. The compensation fees collected by the Board up to 31st December, 1926, when contributions ceased, amounted to approximately £1,500,000.

In addition to the hotel licenses terminated or ordered to close by the action of the Licenses Reduction Board, 69 licenses were terminated during the period by reason of expiration, cancellation, surrender to the Licensing Court, etc. One of these licenses was restored and 59 new licenses were granted. The number of hotel licenses in existence at 31st December, 1931,

was 2,120; of which 538 were in the Metropolitan Licensing district, 61 in the Parramatta district, 117 in Newcastle, 58 in Maitland, and 51 in Broken Hill district.

The Licenses Reduction Board may reduce the number of Australian wine licenses in any electorate by one-fourth of the number in force on 1st January, 1923, and may make a greater reduction where considered necessary in the public interest.

On 1st January, 1923, there were 441 Australian wine licenses, of which 220 were in the metropolitan electoral districts. Between that date and 31st December, 1931, the Board deprived 65 licensees of wine licenses, and accepted the surrender of nine licenses. Compensation in respect of 73 licenses amounted to £63,610. Compensation was not claimed in respect of one license.

Twelve wine licenses terminated by reason of expiration, cancellation, etc. One of these licenses was restored and three new licenses have been granted since 1st January, 1923. The number in existence at 31st December, 1931, was 359.

The number of licenses for the sale of intoxicating liquor issued during various years since 1901 is shown below:—

Licenses.	1901.	1911.	1921.	1929.	1930.
Publicans'	3,151	2,775	2,488	2,142	2,147
Additional Bar ... ..	...	118	153	210	257
Permits to Supply Liquor with Meals—(6 p.m. to 9 p.m.) ...	...	...	...	164	148
Club ... ..	...	76	78	80	80
Railway Refreshment—					
General Liquor	22	24	29	35	37
Wine	*	*	*	19	19
Booth or Stand	1,787	1,829	2,337	3,057	2,618
Packet	20	24	13	8	6
Australian Wine, Cider, Perry...	675	532	450	363	362
Spirit Merchants'	225	198	244	255	262
Brewers'	53	39	17	9	7

* Not available.

The annual fees payable for new licenses in respect of hotels, packets, and Australian wine are assessed by the Licensing Court, the maximum fees being £500, £20, and £50 respectively. Clubs pay £5 per annum for the first 40 members, and £1 for each additional forty. Spirit merchants pay £30 in the metropolitan district and £20 elsewhere. For renewals of publicans' licenses the annual fees are assessed by the Licenses Reduction Board at the rate of 5 per cent. of the amount spent by the licensees in the purchase of liquor during the preceding calendar year. For renewals of packet, wine, club, and spirit merchants licenses the rate is 2 per cent., except that spirit merchants do not pay on the liquor sold by them to persons licensed to sell liquor, and they pay a minimum fee of £30 in the metropolitan district and £20 elsewhere. The owner of the premises is liable for two-fifths of the license fee, but if his share exceeds one-third of the rent he may obtain a refund of part or the whole of the excess as determined by the Board.

The fees for licenses in respect of railway refreshment rooms are assessed at the same rate as those for publicans' licenses, but the Railway Commissioners do not pay the fees assessed for those refreshment rooms for which Australian wine licenses only are issued.

The fees assessed for the various classes of licenses, for which fees are based on the purchases by the licensees during the preceding year, amounted to £194,748 in 1927, to £472,782 in 1928, to £479,120 in 1929, and to £486,978 in 1930. Publicans' fees assessed in 1931 amounted to £338,245.

Licensees.	License fees assessed.				
	1926.	1927.	1928.	1929.	1930.
	£	£	£	£	£
Publicans'	163,173	172,313	448,414	454,752	462,858
Club	3,457	3,604	3,836	4,041	4,418
Railway Refreshment	1,250	1,371	2,554	2,159	2,172
Packet	50	54	41	44	38
Australian Wine	6,950	7,178	7,264	6,971	6,460
Spirit Merchants'	9,684	10,228	10,673	11,153	11,032
Brewers	325	300	275	309	250
Booth or Stand	4,960	4,896	6,412	7,070	6,148

In addition to the annual license fees, compensation fees were payable by holders of publicans' and Australian wine licenses during 1926. The increase in the assessments in 1928 was due to an increase in the rate for renewals of publicans' licenses, viz., from 2 per cent. to 5 per cent. of the amount expended in purchasing supplies.

Brewers pay £50 per annum in the metropolitan district and £25 in other districts. For booth and stand licenses, which are temporary permits granted to licensed publicans for the sale of liquor at places of public amusement, fees have been charged at the rate of £2 for each period up to seven days. This fee was altered in June, 1923, to £2 per day.

The Liquor Act of 1922 prescribes that all licenses, except booth and stand, must be renewed on 1st July of each year. Previously they were current for the term of one year from the date on which they were granted.

Consumption of Intoxicants.

The following estimate of the consumption of intoxicating liquors in New South Wales during the year ended June, 1930, was published in the 1929-30 issue of this Year Book:—Spirits, 1,005,000 proof gallons; beer 26,108,000 gallons; and wine, 1,785,000 gallons. Information obtained since the estimate was published indicates the probability that the consumption of spirits was over stated. There is evidence that the consumption of spirits declined in a marked degree in 1930-31, but satisfactory data are not available for an estimate of the quantity of spirits or of wine consumed in this year.

The figures relating to spirits represent the proof alcoholic contents and the actual quantities would be at least 25 per cent. greater. Proof spirit means spirit of a strength equal to that of pure ethyl alcohol compounded with distilled water so that the resultant mixture at a temperature of 60 deg. Fahrenheit has a specific gravity of 0.91976 as compared with that of distilled water at the same temperature. It is prescribed by regulation under the Pure Food Act that the standards of strength for whisky, brandy, gin and rum may not be less than 35 degrees under proof, and spirits of the best quality are retailed usually at about 30.5 degrees under proof. Prior to 24th December, 1930, the minimum strength of whisky and brandy was 25 degrees under proof, and in the retail trade it was sold usually at about 23.5 degrees under proof.

The natural strength of Australian wines is from 26 per cent. to 28 per cent. of proof spirit. The strength of wines offered for sale is 35 per cent. of proof spirit in the case of fortified wines, *e.g.*, port, claret, sherry; and from 20 to 24 per cent. in the case of dry wines, such as hock, chablis.

The consumption of spirits, Australian and imported, in various years since 1901 is estimated to have been as follows:—

Year.	Aggregate Consumption of Spirits.			Per Head of Population.		
	Australian.	Foreign.	Total.	Australian.	Foreign.	Total.
	proof gallons.	proof gallons.	proof gallons.	proof gallons.	proof gallons.	proof gallons.
1901	12,400	1,233,300	1,245,700	·01	·89	·90
1911	194,300	1,337,800	1,532,100	·12	·80	·92
1920-21	451,100	456,500	907,600	·22	·21	·43
1925-26	489,800	670,100	1,159,900	·21	·23	·50
1926-27	493,500	639,100	1,132,600	·21	·27	·48
1927-28	487,400	666,000	1,153,400	·20	·28	·48
1928-29	468,500	607,900	1,076,400	·19	·25	·44
1929-30	449,000	556,000	1,005,000	·18	·22	·40

The consumption of spirits per head in 1920-21 was 53 per cent. lower than in 1911. The decline has been in the quantity of foreign spirits, as more Australian spirits are consumed now than formerly. The figures for the year 1929-30 indicate only a slight variation in consumption, but it is probable that they are overstated by the inclusion of appreciable quantities which were withdrawn from bond in anticipation of increased duties and distributed to retailers but not actually consumed before the end of the year.

The consumption of beer as estimated for 1901 and subsequent years is shown below:—

Year.	Quantity of Beer consumed.			Per Head of Population.		
	Australian.	Imported.	Total.	Australian.	Imported.	Total.
	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.
1901	13,118,300	1,757,900	14,876,200	9·60	1·28	10·88
1911	18,332,900	1,200,100	19,533,000	11·01	·72	11·73
1920-21	25,163,500	129,800	25,293,300	12·04	·06	12·10
1925-26	25,946,000	144,000	26,090,000	11·29	·06	11·35
1926-27	27,698,000	143,000	27,841,000	11·79	·06	11·85
1927-28	28,167,000	158,000	28,325,000	11·73	·07	11·80
1928-29	29,475,000	156,000	29,631,000	12·04	·06	12·10
1929-30	25,975,000	133,000	26,108,000	10·48	·05	10·53
1930-31	20,375,000	35,000	20,410,000	8·15	·01	8·16

The consumption of beer per head declined by 13 per cent. in 1929-30, and by 23 per cent. in the following year. Nearly all the beer consumed is brewed in Australia.

The wine entering into consumption in New South Wales is chiefly the produce of Australian vineyards, less than 2 per cent. being imported.

Year.	Consumption of Wine.					
	Aggregate.			Per Inhabitant.		
	Australian.	Foreign.	Total.	Australian.	Foreign.	Total.
	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.
1901	700,000	94,000	794,000	·51	·07	·58
1911	908,700	57,900	966,600	·55	·03	·58
1920-21	1,480,100	21,500	1,501,600	·71	·01	·72
1925-26	1,466,000	31,000	1,497,000	·64	·01	·65
1926-27	1,641,000	48,000	1,689,000	·70	·02	·72
1927-28	1,721,000	31,000	1,752,000	·72	·01	·73
1928-29	1,753,000	31,000	1,784,000	·72	·01	·73
1929-30	1,752,000	33,000	1,785,000	·71	·01	·72

The consumption of wine per head of population in recent years was about 25 per cent. greater than in 1911.

Expenditure on Intoxicants.

The amount of money expended by the public on intoxicating liquors in New South Wales in the year ended 30th June, 1930, is estimated to have been £14,500,000, or £5 17s. per head. The estimate, however, should be used with caution, because it relates to a period when many unusual factors were affecting the trade. The expenditure, as estimated for various years since 1901, is shown below:—

Year.	Expenditure on Intoxicants.		Year.	Expenditure on Intoxicants.	
	Total.	Per Head of Population.		Total.	Per Head of Population.
	£	£ s. d.		£	£ s. d.
1901	5,000,000	3 13 2	1926-27	13,220,000	5 12 7
1911	5,962,000	3 11 7	1927-28	13,607,000	5 13 4
1920-21	11,034,000	5 5 7	1928-29	13,849,000	5 13 2
1925-26	12,633,000	5 9 11	1929-30	14,500,000	5 17 0

The increase in the expenditure between 1911 and 1920-21 was due mainly to higher prices, though there was also an increase in consumption of beer and of wine. There was a decline between 1920-21 and 1923-24 owing to diminished consumption of beer and wine, and the average expenditure per head did not regain the former level until 1925-26, when there was a general increase in the quantity consumed, and a rise in the price of imported whisky in consequence of an addition of 5s. per gallon to the rate of customs duty. The subsequent increase until 1929-30 was due to the larger quantities of beer and wine consumed rather than to higher prices.

Drunkenness.

Persons apprehended by the police for drunkenness in public places may be charged in the Courts of Petty Sessions. Since September, 1916, it has been the practice in the metropolitan police district to release such persons before trial if they deposit as bail an amount equal to the usual penalty imposed. If they do not appear for trial the deposits are forfeited, and further action is not taken.

During the year 1930 the number of persons charged with drunkenness was 26,146, of whom 2,356 were females. In the cases of 453 males and 38 females the charges were withdrawn or dismissed, 15,811 males and 1,414 females were convicted after trial by the Courts, and 7,526 males and 904 females, who did not appear for trial, forfeited their bail. The following statement shows the number of convictions for drunkenness, including the cases in which bail was forfeited, during each of the six years, 1926 to 1931:—

Year.	Convictions.		Bail Forfeited.		Total Cases.			Cases per 1,000 of mean population.
	Males.	Females.	Males.	Females.	Males.	Females.	Total.	
1926	18,736	1,202	10,238	1,185	28,974	2,387	31,361	13.51
1927	19,013	1,035	11,461	1,140	30,474	2,175	32,649	13.75
1928	19,769	1,172	12,975	1,239	32,744	2,411	35,155	14.49
1929	19,769	1,330	10,920	1,117	30,689	2,447	33,136	13.44
1930	15,811	1,414	7,526	904	23,337	2,318	25,655	10.30
1931	13,285	1,472	5,068	734	18,353	2,206	20,559	8.19

Relatively to the population, the number of convictions for drunkenness in 1928 was the highest since 1923. There was a decline of 7 per cent. in the following year, of 23 per cent. in 1930, and 20 per cent. in 1931.

The Treatment of Inebriates.

The Inebriates Act was designed to provide treatment for two classes of inebriates—those who have been convicted of an offence, and those who have not come in this way under the cognisance of the law.

For the care and treatment of the latter class, the Act authorises the establishment of State institutions under the control of the Inspector-General of Insane. Judges, police magistrates, and the Master-in-Lunacy may order that an inebriate be bound over to abstain, or that he be placed in a State or licensed institution, or under the care of an attendant controlled by the Master-in-Lunacy, or of a guardian, for a period not exceeding twelve months. Provision is made also to enable an inebriate to enter voluntarily into recognisances to abstain.

An inebriate convicted of an offence of which drunkenness is a factor, or, in certain cases, a contributing cause, may be required to enter into recognisances for a period of not less than twelve months, during which he must report periodically to the police; or he may be placed in a State institution under the direction of the Comptroller-General of Prisons.

The institutions where special provision was made for the treatment of the inebriates up to the year 1929 were under the control of the prison authorities, viz., the State Penitentiary for men and the State Reformatory for women who had been convicted previously for offences other than drunkenness and the Shaftesbury Inebriate Institution for those of the

non-criminal class. In 1929 Shaftesbury was closed and some of the State mental hospitals were gazetted under the Inebriates Act for the detention of inebriates who are now under the supervision of the Inspector-General of Mental Hospitals. The number under his control at 30th June, 1930, was 20, viz., 14 men and 6 women.

The majority of persons admitted to the institutions for inebriates have been chronic offenders over 40 years of age. During the period dating from the first reception in August, 1907, to 30th June, 1930, the total number of original receptions amounted to 1,720—784 men and 936 women. Licenses for release numbered 2,287, viz., 954 men and 1,333 women; 297 issued to men and 533 to women were cancelled, and the licensees recommitted to institutions.

CONSUMPTION OF TOBACCO.

An Act passed in 1884 in connection with the imposition of an excise tax, of which most of the provisions have been superseded by federal legislation, prescribes that persons who sell tobacco in New South Wales must obtain a license, for which an annual fee of 5s. is charged. The number of licenses issued in 1930 was 21,793. The sale of tobacco to juveniles under the age of 16 years is prohibited.

The quantity of tobacco consumed in New South Wales, as estimated at intervals since 1901, is shown in the following statement:—

Year.	Total Consumption (000 omitted).				Per Head of Population.			
	Tobacco.	Cigars.	Cigarettes.	Total.	Tobacco.	Cigars.	Cigarettes.	Total.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1901	2,977	215	368	3,560	2·18	·15	·27	2·60
1911	3,827	271	1,076	5,174	2·30	·16	·65	3·11
1920-21	4,370	273	1,958	6,601	2·09	·13	·94	3·16
1925-26	5,263	224	2,011	7,498	2·29	·10	·87	3·26
1926-27	5,387	223	2,188	7,798	2·29	·10	·93	3·32
1927-28	5,397	215	2,335	7,947	2·25	·09	·97	3·31
1928-29	5,631	185	2,446	8,262	2·30	·08	1·00	3·38
1929-30	5,622	204	2,364	8,190	2·27	·08	·95	3·30
1930-31	5,215	124	1,833	7,172	2·09	·05	·73	2·87

The quantity of tobacco (including cigars and cigarettes) consumed in 1930-31 was 7,172,000 lb. and the average 2·9 lb. per head. The annual consumption per head, which had been increasing slowly, declined by 15 per cent. during the last two years. It is estimated that the expenditure on tobacco in 1930-31 amounted to £6,000,000, or £2 8s. per head of population, as compared with £2,858,000, or £1 11s. 6d. per head in 1913.

As regards the description of tobacco used, the proportion of cigarettes advanced during the period under review from 10 to 30 per cent. between 1901 and 1921, and the proportion of ordinary tobacco declined from 84 to 66 per cent. With the recent decline in consumption the proportion of ordinary tobacco rose again to 72 per cent., and the proportion of cigarettes declined to 26 per cent.

Of the total tobacco consumed in 1930-31, nearly 98 per cent. was manufactured in Australia, principally from imported leaf, viz., ordinary tobacco 99 per cent. made in Australia, cigarettes 95 per cent., and cigars 91 per cent. The proportions made in Australia in 1911 were 85 per cent., 94 per cent., and 46 per cent. respectively.

LICENSES FOR VARIOUS OCCUPATIONS.

Partly as a means of raising revenue and partly as a means of ensuring a certain amount of supervision over persons who follow callings which bring them into contact with the general public, or which are carried on under special conditions, licenses must be obtained by auctioneers, pawnbrokers, hawkers, pedlars, collectors, second-hand dealers, fishermen, and persons who sell tobacco, conduct billiard and bagatelle tables, or engage in Sunday trading. The Pistol License Act, 1927, prescribes the licensing of pistols; licenses may not be issued to persons under 18 years of age.

Auctioneers' licenses are divided into two classes, viz., general and district, the annual fee for a general license being £15, and for each district license £2. General licenses are available for all parts of the State. District licenses only cover the police district for which they are issued, and they are not issued for the Metropolitan district. Auctioneers' licenses may not be granted to licensed pawnbrokers. Sales by auction are illegal after sunset or before sunrise, except in the municipality of Albury, where, under the Auctioneers' Licensing (Amendment) Act, 1915, permits may be granted to allow wool to be put up to sale or sold after sunset. Where provision has been made for reciprocity with New South Wales auctioneers resident and licensed in other Australian States may obtain general licenses in New South Wales.

For pawnbrokers' licenses an annual fee of £10 is payable. The hours for receiving pledges are limited, with certain exceptions, to those between 8 a.m. and 6 p.m., but a restriction is not placed on the rate of interest charged.

The following table shows the principal licenses issued in the five years 1926-1930:—

Occupation.	1926.	1927.	1928.	1929.	1930.
Auctioneers—General	335	339	403	360	346
District	1,678	1,775	1,623	1,753	1,504
Billiard	800	727	717	723	675
Tobacco	20,023	20,508	21,159	20,871	21,793
Pawnbrokers	99	100	100	100	94
Hawkers and Pedlars	2,675	2,885	3,132	3,295	4,170
Collectors	1,094	1,585	1,824	2,118	2,602
Second-hand Dealers	1,573	1,099	1,146	1,058	1,155
Sunday Trading	9,609	9,797	10,410	11,014	11,773
Fishermen	2,930	2,832	3,390	3,198	3,816
Fishing Boats	1,663	1,594	1,825	1,655	1,941
Oyster Vendors	341	327	373	362	411
Gun or Pistol Licenses (ordinary)	40,924	15,082	9,187	11,409	13,148
" " (special)	25,677	6,501	102	121	192
Gun or Pistol Dealers	532	281	109	95	89

A law was enacted in 1927 with the object of preventing the improper use of such drugs as opium, morphine, and cocaine. Registered medical practitioners, pharmacists, dentists, etc., are authorised generally to use the drugs in the conduct of their profession or business, but other persons must obtain a license to manufacture, distribute, or have possession of them. Particulars of these licenses are shown on page 364.

STATUS OF WOMEN.

In New South Wales women have the right to exercise the franchise and sex does not disqualify any person from acting as member of the Legislative Assembly, as member of a council of any shire or municipality, as judge,

magistrate, barrister, solicitor, or conveyancer, or as member of the Legislative Council. Women have contested Parliamentary elections, and one was elected as member of the Legislative Assembly in 1925. Two women were appointed members of the Legislative Council in November, 1931. Many women have been appointed justices of the peace, and some have been admitted to the practice of the legal profession. They are eligible for all degrees at the University of Sydney, but are not ordained as ministers of religion. Women may not act on juries.

The employment of women in factories and shops is regulated specially by the Factories and Shops Act, 1912, and its amendments, which limit the continuous employment of women to five hours, restrict the time they may be employed in excess of forty-eight hours per week and between 6 p.m. and 6 a.m., also the weight they may be allowed or required to lift, and prohibit the employment of girls under 18 years of age in certain dangerous occupations. The minimum wage for any employee in a factory or shop is fixed at 4s. per week. Many trade unions have women members. A separate living wage for women employees is determined after special inquiry by an industrial tribunal, but a definite principle of equality or difference between the pay of women and men is not observed in the industrial awards and agreements. In accordance with the Industrial Arbitration Act, the list of matters which may be determined by the industrial tribunals includes claims that the same wage be paid to men and women performing the same work, or producing the same return of profit or value to their employer.

A legal age of marriage has not been defined, but the average age at which women marry is about 25 years. The consent of a parent or guardian is necessary to validate the marriage of minors. The wife of a British subject is deemed to be a British subject throughout Australia. Under the Married Women's Property Act, 1901, a married woman is capable of holding, acquiring, or disposing of any real or personal property as her separate property in the same manner as if she were a *femme sole*. Her property is not liable for her husband's debts, and her earnings in any occupation apart from her husband's are her own. A wife, however, has no legal share of her husband's income, nor in any property acquired by their joint efforts after marriage, but the husband is liable for all necessary expenses of his wife and children.

RELIGIONS.

In New South Wales there is no established church, and freedom of worship is accorded to all religious denominations.

The numbers of adherents of the principal religions, as disclosed by the census records, are shown in the 1928-29 issue of this Year Book.

EDUCATION.

IN New South Wales there is a State system of national education which embraces primary, secondary, and technical education, and there are numerous private educational institutions, of which the majority are conducted under the auspices of the religious denominations. The University of Sydney is maintained partly by State endowment and partly by moneys derived from private sources.

The Public Instruction Act of 1880, as amended by the Free Education Act, 1906, the Bursary Endowment Act, 1912, and the Public Instruction (Amendment) Acts of 1916 and 1917, is the statutory basis of the State system. This system aims at making education secular, free and compulsory, each of these principles being enjoined by statute. The Act of 1880 provides that "the teaching shall be strictly non-sectarian, but the words 'secular instruction' shall be held to include general religious teaching as distinguished from dogmatical or polemical theology." General religious instruction is given by teachers, and special religious instruction for limited periods, with the consent of parents, by ministers of religion. The Free Education Act, 1906, provides that education in State primary schools must be free. Secondary schools also have been free since the beginning of 1911, except during a period of eighteen months from 1st January, 1923. The Act of 1880 prescribed that children between the ages of 6 and 14 must attend school, and the amending Act of 1916 raised the compulsory age at beginning to 7 years and made provision for more stringent enforcement of attendance.

The State system is subject to central guidance and control, being administered by a responsible Minister of the Crown, through a permanent Director of Education. Practically the whole of the State expenditure on education is provided by appropriation from the Consolidated Revenue Fund, but part of the expenditure on buildings, additions, and renewals, has been defrayed from loan and other funds.

The private schools are not endowed by the State, but, with few exceptions, they are subject to State inspection. If children of statutory school age are enrolled at a private school it must be certified as efficient in terms of the Public Instruction (Amendment) Act of 1916, and private schools supplying education for State bursars must be registered under the Bursary Endowment Act of 1912. The fact that the school examinations, which mark the various stages of primary and secondary education, are based on the curricula of the State system tends towards uniformity in the teaching of the subjects covered by the examinations.

The school medical service organised by the State for the benefit of children attending both State and private schools, and the school for backward children at Glenfield have been described in the preceding chapter of this volume.

The complete scheme of education provides a direct avenue from Kindergarten to University. In the State schools kindergarten classes are conducted under the Montessori method. Many private schools make provision for kindergarten, and an organisation known as the Kindergarten Union

of New South Wales conducts a school for training in Froebelian methods, and maintains free kindergarten schools and playgrounds in the more congested parts of the metropolitan area.

The course in the primary schools supplies education of a general character in such subjects as English, mathematics, nature knowledge, civics and morals, art and manual work. Beyond the primary stage, the courses assume a vocational bias. The pupil may continue his general education and at the same time enter upon a course of training to fit him for the occupation he intends to follow after leaving school. In the selection of the super-primary course an important consideration is the probable length of the school life of the individual pupil. At high schools the full course leading to professional occupations or to tertiary education at the University and elsewhere extends over a period of five years. Shorter courses are provided for those who will probably leave school at an earlier stage. A vocational guidance bureau has been organised for the purpose of assisting boys and girls leaving State schools to obtain employment in occupations for which they are best fitted.

Preparatory education for commercial pursuits is provided at commercial schools and at high schools where economics, shorthand, business principles and practice are included in the curriculum. At the University there is a degree course in economics and a diploma course in commerce. A lectureship in Japanese language has been established by means of a special grant to the University from the public revenue of the Commonwealth to assist in the teaching of languages serviceable to the development of commercial relations between Australia and other countries.

Industrial training, commenced in the form of manual training in the primary course, may be continued at continuation schools, and at the trades schools and technical colleges. Training in domestic subjects is a feature of the schools for girls, advanced courses being provided at the schools under the technical system. At the University there is a school of domestic science.

Special attention is directed towards education in subjects pertaining to rural industries, and an organiser has been appointed to develop the system in State schools. At district rural schools boys may acquire basic knowledge of agricultural science, rural economics, etc., and there are two high schools—at Glenfield and Yanco—where the studies are arranged for boys who intend to become farmers. The school at Glenfield is known as the Hurlstone Agricultural High School. Its grounds cover 100 acres and those at Yanco 629 acres. The course includes general education as well as scientific training with laboratory practice and field work, and it leads to higher courses at the Hawkesbury Agricultural College.

Advanced training in agriculture, dairying, etc., is provided for farmers and students at the Hawkesbury Agricultural College and at experiment farms in various districts. Particulars of these institutions are published in the chapter relating to agriculture.

The final stages of education for rural pursuits are reached at the University, where there is a degree course in agriculture, and in veterinary science.

CENSUS RECORDS.

Particulars of the numbers of persons receiving education and of those who had acquired the rudiments of education (reading and writing) as recorded as at the censuses of 1901, 1911, and 1921 are shown in the Year Book for 1922 at pages 148-150.

An indication that illiteracy is unusual in New South Wales may be deduced from the fact that there are few mark signatures in the marriage registers. The number in 1930 represented less than twelve per 10,000 persons married.

SCHOOLS AND TEACHING STAFFS.

The following table shows the total number of public and private schools in operation at the end of 1901, 1911, 1921 and the past five years, and the aggregate teaching staff in each group. The figures in this table, and in the subsequent tables relating to public and private schools, include secondary schools, but are exclusive of evening continuation schools, technical colleges and trade schools, free kindergarten and other schools maintained by charitable organisations, shorthand and business colleges, etc.

Year.	Schools.			Teaching Staffs.						
	Public. *	Private.	Total.	In Public Schools.*			In Private Schools.			Grand Total.
				Men.	Women.	Total.	Men.	Women.	Total.	
1901	2,741	890	3,631	2,829	2,318	5,147	337	2,303	2,640	7,787
1911	3,107	757	3,864	3,165	3,034	6,199	366	2,262	2,628	8,827
1921	3,170	677	3,847	3,554	5,118	8,672	465	2,463	2,928	11,600
1926	3,125	704	3,829	4,256	5,801	10,057	517	2,647	3,164	13,221
1927	3,087	713	3,800	4,311	5,978	10,289	546	2,735	3,281	13,570
1928	3,103	721	3,824	4,466	6,203	10,669	586	2,742	3,328	13,997
1929	3,104	726	3,830	4,624	6,368	10,992	639	2,780	3,419	14,411
1930	3,173	730	3,903	4,794	6,515	11,309	641	2,753	3,394	14,703

* Including subsidised schools.

The number of teachers in public schools, as shown above, is exclusive of students in training, who numbered 1,408 in 1929 and 1,445 in 1930. In the case of private schools, visiting or part-time teachers, viz., 317 men and 925 women in 1930 are excluded, as some of them attended more than one school and were included in more than one return.

In the State schools the men employed as teachers outnumbered the women until 1912, but the proportion of men in 1930 was only 42 per cent. of the total. In the private schools the proportion of men teachers has been small always, and in 1930 it was less than 19 per cent. of the full-time teaching staffs of private schools.

SCHOOL PUPILS.

A comparative review of the enrolment of children at public and private schools is restricted to the last quarter in each year, as the figures in regard to private schools in the earlier years are available for that period only. The following statement shows the enrolment during the December quarter at all schools and colleges in the State, primary and secondary, other than

evening continuation, charitable, and free kindergarten schools and technical, trade, and business schools and colleges* :—

Year.	Public Schools.†			Private Schools.			Total Enrolment.	Proportion of Scholars Enrolled.	
	Boys.	Girls.	Total.	Boys.	Girls.	Total.		Public Schools.	Private Schools.
1901	110,971	99,617	210,588	27,163	33,674	60,837	271,425	per cent.	per cent
1911	116,317	105,493	221,810	26,962	34,588	61,550	283,360	77·6	22·4
1921	163,699	151,529	315,228	35,903	42,557	78,460	393,688	78·3	21·7
1926	178,939	164,248	343,187	37,739	46,045	83,784	426,971	80·1	19·9
1927	184,017	168,293	352,310	39,213	46,871	86,084	438,394	80·4	19·6
1928	189,476	173,049	362,525	40,136	47,494	87,630	450,155	80·5	19·5
1929	193,872	177,458	371,330	42,024	48,564	90,588	461,918	80·4	19·6
1930	198,793	181,852	380,645	42,680	48,551	91,231	471,876	80·7	19·3

Since 1901 the enrolment in public schools has increased by 80 per cent., while in the private schools it has risen by less than 50 per cent., so that the proportion of children in public schools has advanced from 77·6 per cent. to 80·7 per cent. In the public schools there are more boys than girls, the proportion being boys 52 per cent. and girls 48 per cent. In the private schools girls are in the majority, representing 53 per cent. of the enrolment.

Considering only children for whom education is compulsory, viz., between 7 and 14 years, the following table shows the numbers and proportions taught in public and private schools, based on the enrolment in December quarter, omitting private institutional schools and free kindergartens :—

Year.	Public Schools.	Private Schools.	Total.	Proportion per cent.	
				Public Schools.	Private Schools.
1926	267,407	56,934	324,341	82·4	17·6
1927	271,162	58,006	329,168	82·4	17·6
1928	277,601	58,052	336,253	82·6	17·4
1929	282,517	60,441	342,958	82·4	17·6
1930	285,856	60,241	346,097	82·6	17·4

Nearly 23 per cent. of the pupils under 7 years of age in December quarter, 1930, and 27 per cent. of those over 14 years were enrolled at private schools, the proportion in both groups being much greater than the proportion at statutory ages, viz., 17·4 per cent.

CHILDREN RECEIVING EDUCATION.

It is probable that a considerable number of children between the ages of 7 and 14 years, when education is compulsory, are not enrolled in schools for the whole of those years, although they may attend school for most of the statutory period. The children not enrolled in schools include those receiving instruction at home (numbering 13,181 at the Census of 1921) those exempt from further attendance for special reasons on attaining the age of 13 years, and those who are inaccessible to schools or who are mentally or physically deficient. The institution of a system of teaching isolated pupils by correspondence, the provision of facilities for conveyance, and of subsidies for private teachers of small rural schools, tend to reduce the number of children not reached by the education system.

* The numbers of pupils so excluded were as follows in 1930 :—Evening continuation, about 5,800 ; schools for deaf mutes, etc., 298 ; private charitable, 1,625 ; free kindergarten, 1,034 ; technical colleges and trade schools, 15,819 ; business colleges and shorthand schools, about 7,700.

† Including Subsidised Schools.

It has been estimated that the average weekly enrolment at State and private schools represents more than 90 per cent. of the children "requiring education," *i.e.* the children of statutory school age and those of other ages enrolled.

The following comparison indicates the degree of regularity of attendance among children enrolled at State and private schools:—

Year.	Public Schools.			Private Schools.		
	Average Weekly Enrolment.	Average Daily Attendance.	Ratio of Attendance to Enrolment.	Average Weekly Enrolment.	Average Daily Attendance.	Ratio of Attendance to Enrolment.
			per cent.			per cent.
1911	203,335	160,776	79.0	*	52,122	*
1921	292,264	248,605	85.1	74,206	64,172	86.4
1926	319,835	272,287	85.1	79,363	69,205	87.2
1927	328,967	283,615	86.2	80,800	71,821	89.0
1928	339,413	290,914	85.7	83,153	73,109	87.9
1929	346,644	298,743	86.1	84,827	76,178	89.8
1930	357,319	314,052	87.9	86,280	78,780	91.3

* Not available.

The proportion of attendance to enrolment signifies that on the average children attend less than four and a half days in a school week of five days. The ratio of attendance has increased slightly since 1921.

The attendance of children at school is affected adversely by infectious and contagious diseases, and—particularly in country districts where transport facilities are lacking—by inclement weather. The attendance of boys is slightly more regular than that of girls.

Age Distribution of Pupils.

The following table shows the age distribution of pupils enrolled at schools during the last five years. The figures represent the gross enrolment during December quarter at primary and secondary schools omitting those enumerated at the foot of page 417:—

Year.	Public Schools.				Private Schools.			
	Under 7 years.	7 years and under 14.	14 years and over.	Total.	Under 7 years.	7 years and under 14.	14 years and over.	Total.
1926	46,707	267,407	29,073	343,187	14,079	56,934	12,771	83,784
1927	49,993	271,162	31,155	352,310	14,980	58,006	13,098	86,084
1928	50,977	277,601	33,947	362,525	14,850	58,652	14,128	87,630
1929	52,943	282,517	35,870	371,330	15,483	60,441	14,664	90,588
1930	53,276	285,856	41,513	380,645	15,619	60,241	15,371	91,231

In 1930 there were enrolled 68,895 children below the statutory school age, *viz.*, 34,566 boys and 34,329 girls; and 56,884 were over 14 years of age—30,871 boys and 26,013 girls.

More details as to the ages of children attending public primary schools may be obtained from a table published annually in the report of the Minister for Education, which shows the ages of children in the various school classes.

RELIGIONS.

Particulars of the religion of each child attending a State school are obtained upon enrolment, but such information is not available regarding pupils of private schools. Any analysis of the religions of school pupils is restricted, therefore, to a comparison of the number of children of each denomination enrolled at public schools, and the number of children (irrespective of religion) attending schools conducted under the auspices of the various religious denominations.

Such a comparative review of the aggregate enrolment in primary and secondary schools (omitting those enumerated at the foot of page 417) during the December quarter of various years is given below. The figures, being on the same plane of comparison for each year, illustrate the progress of each main type of denominational school during the period:—

Year.	Public Schools— Denomination of Children Enrolled.					Private Schools— Denomination of Schools.			
	Church of England.	Roman Catholic.	Presby- terian.	Methodist.	Other.	Church of England.	Roman Catholic.	Undenom- inational.	Other.
1901	109,876	31,054	23,511	24,971	21,176	3,966	41,486	13,546	1,839
1911	118,794	31,044	26,347	30,595	15,030	3,297	46,097	10,141	2,015
1921	176,998	35,532	37,497	44,210	20,991	5,265	63,060	8,131	2,004
1926	194,313	36,251	42,712	47,273	22,638	5,776	67,573	7,889	2,546
1927	199,884	37,215	44,129	48,011	23,071	6,094	69,488	7,829	2,673
1928	205,268	38,601	45,894	49,022	23,740	6,248	70,922	7,696	2,764
1929	210,286	39,614	47,232	49,447	24,751	6,097	73,846	7,521	3,124
1930	214,912	41,199	48,107	50,573	25,854	6,008	75,326	6,744	3,153

Proportion Per Cent. of Total Number of Pupils Enrolled.

1901	40.5	11.4	8.7	9.2	7.8	1.5	15.3	5.0	0.6
1911	41.9	10.9	9.3	10.8	5.3	1.2	16.3	3.6	0.7
1921	45.0	9.0	9.5	11.2	5.3	1.4	16.0	2.1	0.5
1926	45.5	8.5	10.0	11.1	5.3	1.4	15.8	1.8	0.6
1927	45.6	8.5	10.1	10.9	5.3	1.4	15.8	1.8	0.6
1928	45.6	8.6	10.2	10.9	5.3	1.4	15.7	1.7	0.6
1929	45.5	8.6	10.2	10.7	5.4	1.3	16.0	1.6	0.7
1930	45.5	8.7	10.2	10.7	5.5	1.3	16.0	1.4	0.7

The pupils attending Roman Catholic schools constitute approximately 83 per cent. of the pupils attending private schools and 16 per cent. of the total pupils at all schools. The proportion of children of each denomination, except Roman Catholic, attending public schools has tended to increase or has remained constant. Although the proportion per cent. of Roman Catholic children enrolled in State schools declined from 10.9 to 9.0 per cent. between 1911 and 1921, the proportion of children enrolled in Roman Catholic schools also declined from 16.3 to 16.0 per cent. of the total. This decline was coincident with a decrease in the proportion of persons of the Roman Catholic faith in the population. The increase in the proportion of children belonging to the Church of England was coincident with an increase in the proportion of persons of that faith.

The enrolment at undenominational private schools has diminished considerably since 1901.

Religious Instruction in State Schools.

The Public Instruction Act, 1880, provides that religious instruction may be given in State schools by visiting ministers and teachers of religious bodies for a maximum period of one hour in each school day, and the following table indicates the number of lessons in special religious instruction given in primary schools during the past five years by representatives of the various denominations:—

Denomination.	Number of Lessons.				
	1926.	1927.	1928.	1929.	1930.
Church of England	46,476	46,123	51,758	55,733	53,560
Roman Catholic	2,778	3,619	3,482	3,740	4,300
Presbyterian	16,789	15,215	13,297	19,312	19,887
Methodist	21,567	20,788	24,133	25,991	26,131
Other Denominations	11,791	11,552	13,511	14,354	14,229
Total	99,401	97,297	111,181	119,130	118,107

SCHOOL SAVINGS BANKS.

A system of school savings banks in connection with State schools was commenced in the year 1887 with the object of inculcating principles of thrift amongst the children. Deposits are received by the teachers, and an account for each depositor is opened at the local branch or agency of the Commonwealth Savings Bank. Interest is paid on each complete pound at the rate of 3 per cent. per annum.

At 30th June, 1931, there were 1,999 school banks with 142,746 depositors and the amount at the credit of their accounts was £184,377.

STATE SCHOOLS.

The following table affords a comparison between the numbers of the various types of State schools in operation at the end of 1881, the first full year in which the Department of Education was under ministerial control, and the numbers open at later periods:—

Type of School.	Schools at end of year.					
	1881.	1891.	1901.	1911.	1921.	1930.
Primary Schools—						
Public	1,007	1,686	1,874	1,915	2,020	2,010
Provisional	227	320	398	475	477	606
Half-time	83*	280	414	271	90	48
House-to-house and Travel- ling ... ..	...	83	17	6	3	1
Correspondence ... ..	...	...	...	...	4	1
Subsidised ... ..	...	...	...	414	546	468
Evening	33	13	34	16	...	...
Industrial and Reformatory	2	3	4	2	3	3
Total—Primary	1,352	2,385	2,741	3,099	3,143	3,137
Secondary Schools—						
High ... ..	...	5	4	8	27	36
Intermediate High ... ..	...	...	...	...	25	52
District ... ..	...	...	...	...	13	11
Continuation Schools—						
Commercial ... ..	...	...	...	...	15	16
Junior Technical ... ..	...	...	...	...	26	32
Domestic ... ..	...	...	...	...	46	53
Evening ... ..	...	...	...	18	46	44
Rural Schools ... ..	...	...	...	...	...	13
Composite†	53	78	113	145	57	1,043
Total—Secondary and Con- tinuation Schools	53	83	117	171	255	1,300

* Including Third-time Schools.

† Superior Public Schools.

The number of individual schools at the end of 1930 was 3,217, which is less than the foregoing figures indicate, owing to the fact that with the exception of high schools the majority of secondary schools are conducted in conjunction with primary schools.

It is the policy of the State educational authorities to supply as far as practicable the demand for post primary education. As a result there has been a rapid increase in the number of country schools where composite courses are provided to enable pupils to progress beyond the primary stage. The figures in the table are exclusive of a number of small country schools where, by means of lesson sheets and with the assistance of the teacher, pupils may secure a year's course of super-primary instruction.

State Primary Schools.

Primary work in its various stages is undertaken in State schools classified broadly into three groups,—(a) Primary and superior schools in more or less populous centres; (b) schools in isolated and sparsely settled districts, viz., provisional, half-time, and subsidised schools; and (c) a correspondence school instructing children so isolated as to be unable to attend school.

A public school may be established in any locality where the attendance of twenty children is assured. In most schools boys and girls are taught together, but schools with an average attendance of 300 pupils are divided into two departments, and those with an attendance exceeding 600 into three departments, viz., boys, girls, and infants.

The infants' course extends over a period of two years. The primary course for older children is completed generally between the ages of 13 and 14 years.

Small schools are not established where it is convenient to arrange for the daily conveyance to a central school of the pupils from the surrounding neighbourhood. In such cases local committees consisting of parents, the teacher of the central school, and other persons of repute, are required to assume responsibility for arranging and supervising the carriage of the children, and the cost of conveyance is defrayed by the Department according to fixed rates. Attendance at central schools is encouraged also by means of subsidies which may be paid under certain conditions as an aid towards boarding children with relations or friends in a township for the purpose of attending school. The amounts expended for conveyance and boarding allowances during the years 1929 and 1930 were £51,195 and £62,869 respectively.

Provisional schools are maintained where there is an attendance of at least ten pupils, and where doubt exists as to the permanence of the settlement. At the end of 1930 there were 606 such schools in operation with an effective enrolment of 11,204 pupils.

Half-time schools are established where a number of children sufficient to maintain a minimum attendance of ten pupils can be collected in two groups, not more than 10 miles apart. One teacher divides his time between the two groups, so arranging that home-work and preparatory study shall occupy the time of each pupil in his absence from either school. The number of half-time schools at the end of 1930 was 48, and the number of pupils enrolled was 505. The course of instruction in provisional and half-time schools follows the course of full-time schools.

There is one travelling school which visits localities where families are so isolated that two cannot combine readily for the education of the children. The teacher is provided with a vehicle to carry school requisites, and a tent for use as a schoolroom, in which to teach for a week at a time at each centre in his circuit. Formerly there were a number of travelling schools, but in recent years teaching by correspondence has been developed as a more satisfactory method of educating children in isolated localities. The pupils who are being taught by correspondence are organised as one school. The course of instruction is mainly the ordinary primary course, and when it is completed pupils may undertake a two years' course of superprimary instruction in such subjects as English, economic geography, arithmetic, practical mensuration and farm bookkeeping. A pupil is not admitted to instruction by correspondence before he reaches the age of 7 years and the young children are taught by kindergarten teachers. About 4,250 children were receiving primary education by correspondence in 1930.

Another type of school for the benefit of families in remote districts is the subsidised school, which may be formed where there is a single family with at least four children of school age or where two or more families combine to engage a teacher. The teacher, if approved by the Department of Education, is paid an annual subsidy at a rate based on the average attendance, viz., in the eastern portion of the State £5 per pupil up to a maximum of £70, and in the western division £6 per pupil up to £80. The course is as far as practicable the same as in primary schools, and the subsidised schools are subject to inspection by the State school inspectors. A subsidised school may be established by a single family with at least four children of school age. The number of subsidised schools in 1930 was 468 and there were 3,595 pupils on the roll.

Secondary Education in State Schools.

The number of pupils receiving secondary education at State schools at intervals since the year 1916 is shown in the following statement. The secondary schools consist of high, intermediate high, district, day continuation and rural schools. Particulars relating to evening continuation schools are not included, but are shown later:—

Year.	Secondary Schools.			Super-Primary Courses at Primary Schools.		
	Schools.	Gross. Enrolment.	Average Daily Attendance.	Schools.	Effective Enrolment.	Average Attendance.
1916	...	133	13,961	9,732	*	*
1921	...	152	26,728	18,680	57	1,530
1926	...	202	45,137	32,505	682	4,178
1927	...	210	47,521	35,274	740	4,219
1928	...	210	54,518	39,964	826	4,275
1929	...	217	56,194	42,218	1,176	5,690
1930	...	213	59,290	46,315	1,043	5,001

* Not available.

The average daily attendance of pupils attending secondary schools has increased nearly fivefold since 1916.

Admission to State High Schools is gained by competitive examination, and only qualified pupils are allowed to enter. The courses of instruction cover five years, leading to the Leaving Certificate Examination,

at which candidates may matriculate. The courses of instruction at Intermediate High and District Schools cover the first three years of that course, leading to the Intermediate Certificate Examination. The courses are for the most part educational only, but the Intermediate and Leaving Certificates are generally accepted as proof of sufficient educational qualification for admission to the Public Service, the teaching profession, banks, and kindred bodies.

At the end of 1930 there were eleven High Schools in the metropolitan area (including a Technical High School), and twenty-five in the country districts providing a full course of instruction. There were fifty-two Intermediate High Schools, thirty-one being in the country, and twenty-one in the metropolis.

The following particulars relate to High Schools and Intermediate High Schools maintained by the State. In addition to the holders of bursaries as shown in the table there were 250 holders of scholarships in 1911. In recent years scholarships have not been awarded, all pupils being supplied with text-books free of cost.

Year	High Schools.	Inter-mediate High Schools.	Teachers.			Pupils.			Bur-saries.
						Enrolment.		Average Attendance.	
			M.	F.	Total.	Total.	Average Weekly.		
1901	4	...	16	11	27	676	526	489	†
1911	8	...	59	38	97	2,293	1,864	1,786	201
1921	27	25	349	299	648	14,247	12,199	11,253	1,005
1926	30	38	434	365	799	18,460	16,867	15,576	805
1927	30	39	487	398	885	19,852	17,918	17,089	815
1928	31	47	553	475	1,028	23,570	21,596	20,074	850
1929	34	49	594	525	1,119	25,370	23,778	22,026	881
1930	36	52	641	593	1,234	28,519	26,550	24,825	853

† Not available.

The rapid expansion in secondary schools affords evidence of a widespread desire for education among the people.

Training in commercial subjects is provided in Commercial Continuation Schools and a preparatory course leading to the trade courses under the technical system is given in Junior Technical Continuation Schools. At these schools boys may continue for a period of three years elementary courses commenced in primary schools in commercial subjects and in manual training respectively. In the Junior Technical Schools the subjects are essentially of a practical nature, viz., practical drawing and workshop practice, English, practical mathematics, history and civics, industries and elementary science. The courses in English, mathematics, and history are on the same standard as in High Schools.

The Continuation Schools for girls are known as Domestic Continuation Schools. The syllabus provides for a course commencing at the end of the primary school stage and extending over three years. The course during the first two years is of a domestic and general educational character, embracing English, arithmetic, history, civics, and morals, art and home decoration, botany and practical gardening, needlework, cookery, laundry, home management, hygiene, care of infants and care of the sick. The third year course is of a commercial character and provides for further studies in English and arithmetic to which is added elementary training in business principles, shorthand and typewriting. This course has gained the recognition of commercial houses.

Candidates successful in the annual domestic science examination may enter upon the home economics course at the Technical College.

Since 1920 there has been a rapid growth in the attendance at superior schools of the domestic type. In that year forty-seven such schools were in operation with a gross enrolment of 4,920 super-primary pupils and an average attendance of 2,829. In 1930 the corresponding numbers were fifty-three schools, gross enrolment 13,930, and average daily attendance 9,779.

Rural Schools are conducted in conjunction with the primary schools in country centres. At each of these schools super-primary courses are provided extending over a period of three years in general subjects and in elementary agriculture, agricultural nature study, applied farm mechanics, rural economics and horticulture.

The following table provides a comparison of the number of continuation schools and the gross enrolment during each of the last five years:—

Year .	Day Continuation Schools.						Rural Schools.	
	Commercial.		Junior Technical.		Domestic Type.		No.	Gross Enrolment.
	No.	Gross Enrolment.	No.	Gross Enrolment.	No.	Gross Enrolment.		
1926	18	2,341	30	8,481	57	12,506	15	1,346
1927	20	2,565	31	8,460	60	12,938	15	1,535
1928	17	2,719	31	10,040	56	14,195	15	1,767
1929	17	2,693	30	9,956	57	13,543	15	1,762
1930	16	2,788	32	10,309	53	13,930	13	1,745

The average attendance during 1930 was as follows:—Commercial 2,007, junior technical 7,571, domestic 9,779, rural, 1,325.

Composite courses are provided at primary schools in country districts where secondary schools are not readily accessible. The courses lead to the intermediate certificate, the commercial superior public school certificate and the Public Service entrance examinations.

Superprimary instruction by means of leaflets is arranged for children attending small country schools who have passed the primary final examination and are prepared to continue their education for at least one year. The subjects of instruction are English, history, arithmetic, elementary science, business principles, and for girls, hygiene and home management. A series of eleven papers comprises a course, and each paper contains sufficient work for one month. This system differs from instruction by correspondence in that the pupils' work is arranged and corrected by the teacher in charge of the school.

Evening Continuation Schools.

Evening Continuation Schools for the benefit of pupils who leave school to engage in occupations at the termination of the primary course are organised on the same lines as the Day Continuation Schools. The courses, which extend over a period of two years, are similar, though they are modified for pupils who work during the day, and attend the classes for

only a few hours per week. An Evening Continuation School may be established in any centre where the number of students who will guarantee to attend for two years is sufficient. A fee of 6d. per week is charged, but it is refunded at the end of each year to the students whose conduct and attendance have been satisfactory. The average age of the pupils attending the Evening Continuation Schools is 18 years.

The following is the record of the Evening Continuation Schools in the years 1929 and 1930:—

Classification.	1929.			1930.		
	Number of Schools.	Average Weekly Enrolment.	Average Attendance.	Number of Schools.	Average Weekly Enrolment.	Average Attendance.
Junior Technical (Boys)...	18.	2,113	1,694	17	2,171	1,910
Commercial (Boys) ...	21.	2,345	1,802	18	2,415	1,776
Domestic (Girls) ...	10.	969	683	9	1,255	953
Total ...	49	5,427	4,179	44	5,841	4,639

Vocational Guidance Bureau.

A vocational guidance bureau has been established as part of the State educational system for the purpose of affording advice to boys and girls in regard to their choice of a vocation, and of assisting them as far as practicable in obtaining the employment for which they are suited. Those who wish to obtain the assistance of the bureau are submitted to a series of psychological and physical tests which, with school records of educational attainments, serve to indicate mental ability, intelligence, aptitude, and capacity for various kinds of work, etc.

Many firms engage employees through the bureau and the development of its activities depends in a large degree upon the co-operation of employers.

PRIVATE SCHOOLS.

The position of private schools in the education system of the State has been discussed at the beginning of this chapter.

By virtue of the Public Instruction (Amendment) Act of 1916, children between the ages of 7 and 14 years must be provided with efficient education, and a school is not recognised as efficient unless it is certified by the Minister of Education, who takes into account the standard of instruction, the qualifications of the teachers, the suitability of the school premises, and the general conduct of the school. This provision applies to both primary and secondary schools where children of statutory ages are educated. The conditions upon which benefits under the Bursary Endowment Act are extended to private secondary schools involve a similar inspection and certification, and nearly all of them have been registered by the Department of Education. The standards of instruction required of private schools under both Acts are the same as those of public schools of similar grade and situation.

The total number of private schools certified by the Minister for Education in 1929, was 804. Of these, 641 were certified under the Public Instruction (Amendment) Act of 1916, including 55 which were certified for the instruction of children up to a specified age only; 100 secondary schools were registered under the Bursary Endowment as efficient to provide the full secondary course; and 63 were recognised officially as qualified for the education of pupils to the Intermediate Certificate stage of the secondary course.

The Roman Catholic schools comprise the largest group of private schools in New South Wales. They are organised on a diocesan basis to provide religious and secular education. A Director of Catholic Education with special qualifications for the work exercises general supervision, and there are religious and secular inspectors in each diocese. In addition to general primary and super-primary education, commercial and domestic courses are provided at the parochial schools, and a number of the schools have been specially equipped for commercial, junior technical, or domestic training. English and commercial classes are conducted also by correspondence. At some of the schools rural training is provided and an agricultural college was opened at Woodlawn, Lismore, in 1931, to give practical education in scientific agriculture, as well as the academic course of a secondary school.

The pupils at the Roman Catholic schools attend the public examinations, described on page 428, also examinations conducted by the diocesan inspectors at the end of the primary and in the intermediate stages. On the results of these examinations scholarships and bursaries are awarded. There are two Roman Catholic colleges for resident students at the University of Sydney. Information relating to the training of teachers for Roman Catholic schools is shown on page 438.

The following table shows particulars of the schools of each denomination in 1929 and 1930 excluding charitable schools described on page 428:—

Classification.	1929.				1930.			
	Schools.	Teachers.	Enrolment December Quarter.	Average Daily At- tendance.	Schools.	Teachers.	Enrolment December Quarter.	Average Daily At- tendance.
Undenominational ...	134	467	7,585	6,680	133	417	6,813	6,003
Roman Catholic ...	511	2,387	73,846	61,109	513	2,416	75,326	64,383
Church of England ...	57	377	6,097	5,537	61	380	6,008	5,550
Presbyterian ...	9	100	1,599	1,475	8	97	1,592	1,533
Methodist ...	5	66	1,074	1,048	4	61	1,032	912
Lutheran ...	3	3	76	69	3	3	111	95
Seventh Day Adventist	7	19	311	260	7	14	292	239
Theosophical ...	...	...	...	...	1	6	57	65
Total ...	726	3,419	90,588	76,178	730	3,394	91,231	78,780

The number of teachers, as shown in the table, does not include those who visit schools to give tuition in special subjects only. It is not possible to ascertain the number of individuals represented by these figures, because the number of teachers who give instruction in more than one school is not recorded.

Fees are usually charged at private schools, but they vary considerably in amount. In many denominational schools the payment of fees is to some extent voluntary, and a number of scholarships and bursaries have been provided by private subscriptions for the assistance of deserving students.

Some of the private schools are residential. In 1930 there were 82,983 day scholars and 8,243 boarders.

The following statement shows the number of secondary pupils enrolled during the December quarter in each of the last five years:—

Year.	Schools.	Secondary Pupils Enrolled.		
		Boys.	Girls.	Total.
1926	264	5,809	6,979	12,788
1927	295	6,451	7,523	13,974
1928	307	6,896	7,721	14,617
1929	314	7,388	8,364	15,752
1930	324	7,627	8,004	15,631

The number of secondary pupils in private schools has shown a considerable increase. The pupils so enumerated are defined as those who follow a course of instruction similar to that laid down in the syllabus for secondary schools by the Department of Education. There are, however, in private schools a considerable number of pupils over 14 years of age not recorded as secondary pupils in the returns supplied. Some of these attend business colleges for commercial education while others follow super-primary courses.

Private Charitable Schools.

In addition to the private schools to which the foregoing tables relate, there are schools connected with charitable institutions or organisations, which are certified under the Public Instruction (Amendment) Act of 1916 for the education of children of statutory school age. There were 14 such schools in 1930. Thirteen were under the auspices of the Roman Catholic Church and one under the Church of England. The gross enrolment at these institutional schools during 1930 was 1,817.

The Kindergarten Union maintains in the city and suburbs fifteen free kindergarten schools and playgrounds for children under statutory school age. In 1930 there were enrolled 1,573 scholars, and the average daily attendance was 781. The organisation receives a State subsidy of £1,000 per annum.

The education of deaf and dumb and blind children is undertaken at two schools in connection with the Institution for the Deaf and Dumb and the Blind, which is endowed by the State. At the end of 1930 there were 182 children in the institution. Deaf mutes are trained also at two Roman Catholic institutions, one at Waratah for girls, with 48 inmates at the end of 1930, and the other, established at Castle Hill, where 48 boys were enrolled.

The total number of private charitable schools in 1930 was 33, and there were 178 teachers. The gross enrolment during the year was 3,676, and the average daily attendance 2,414. In December quarter there were 2,887 scholars on the roll, of whom 1,321 were under 7 years of age, 1,383 between 7 and 14 years, and 183 over 14 years.

Enrolment in Private Schools.

A comparative statement of the enrolment in private schools (including the schools at private charitable institutions) is shown below. The enrolment at Kindergarten schools and playgrounds is not included.

Year.	Scholars on Roll during December Quarter.								Total.*
	Un-denominational.	Roman Catholic.	Church of England.	Presbyterian.	Methodist.	Seventh Day Adventist.	Lutheran.	Salvation Army.	
1911 ...	11,097	46,656	3,397	370	311	213	34	...	62,078
1921 ...	8,496†	63,486	5,417	788	605	301	51	163	79,307
1926 ...	8,046	68,856	5,919	1,168	982	308	88	63	85,430
1927 ...	7,992	70,945	6,223	1,217	1,004	356	96	58	87,891
1928 ...	7,865	72,349	6,409	1,333	1,024	324	83	62	89,449
1929 ...	7,760	75,311	6,220	1,599	1,074	311	76	50	92,401
1930 ...	7,052†	76,824	6,131	1,592	1,032	292	111	...	93,034

* Includes schools at private charitable institutions.

† Includes scholars at Theosophical school.

Between 1911 and 1930 the enrolment in private schools increased by 30,956 or 50 per cent. In undenominational schools there was a marked decline, but all groups of denominational schools have expanded. The enrolment in Roman Catholic schools, which constitute the great majority of the private establishments, has increased by 65 per cent. since 1911.

SCHOOL EXAMINATIONS.

To test the proficiency of students who have completed the primary course and those who are attending higher courses, a system of public examinations has been organised by the Department of Education with the concurrence of the University authorities, who accept as evidence of satisfactory educational qualification appropriate certificates issued by the Department. The University also holds an annual matriculation examination, on the results of which a number of University scholarships and prizes are awarded.

The regulations of the Department of Education provide for the issue of certificates which mark definite stages in the progress of school pupils. An examination known as the Primary Final is held at the end of the primary course. On the results admission to secondary schools and super-primary courses is determined, and bursaries under the Bursary Endowment Act are awarded.

The Superior Public School Certificate is issued to successful candidates at a written examination terminating the continuation course of instruction of either two or three years, the certificate for the three years course being the equivalent of the Intermediate Certificate.

The Intermediate Certificate marks the satisfactory completion of the first three years of the secondary course. The Leaving Certificate is obtainable on graduation from the full five-years' secondary course, and is accepted as indicative of adequate preparation for the University, if it shows a pass in matriculation subjects.

The Board of Examiners in connection with the Intermediate and Leaving Certificates consists of four delegates appointed by the University, and four officials of the Department of Education, viz.: The Director of Education, the Chief Inspector, the Principal of the Teachers' College, the Inspector of Secondary Schools.

Certificates of proficiency are awarded to pupils of Evening Continuation Schools whose attendance and work have been satisfactory throughout the course.

The number of candidates and of passes at examinations for entrance to the high school, for which the primary final examination has been substituted, and for intermediate and leaving certificates during 1929 and 1930 are shown below:—

Examinations.	1929.			1930.		
	Candidates.	Passes.		Candidates.	Passes.	
		Number.	Per cent.		Number.	Per cent.
High School Entrance and Bursary ...	16,718	8,567	51·2	20,617	14,710	71·3
Intermediate Certificate ...	9,291	6,850	73·7	13,142	9,262	70·5
Leaving Certificate (5th year) ...	2,512	1,709	68·0	3,167	2,216	70·0

TECHNICAL EDUCATION.

Technical education is under the direct control of the Department of Education, and is administered by a Superintendent, with financial and general procedure independent of other branches of the education system. The courses of instruction are co-ordinated, however, with those of the ordinary schools.

The Central Technical College is in Sydney, and there is a college at East Sydney, Darlinghurst. Colleges have been established also at Newcastle and Broken Hill and there are seventeen trade schools, viz., seven in the suburbs, nine in country towns and one at Canberra. In addition, elementary instruction is provided in special subjects at sixty-four country centres where there is a demand for it and correspondence courses are provided in a number of subjects.

Specialised instruction in the practice of a wide range of callings is provided for the apprentice, improver, and journeyman, while higher courses, embracing the technology of the various trades and technical professions, may be followed by more advanced students.

The lower trade courses cover a period of three years in the Trade Schools, but sometimes they are extended to five years. Comprehensive courses covering five years and higher courses of two years' duration are given in the Technical Colleges. The subjects are grouped to form trade classes, instruction being given in all branches of mechanical and electrical engineering, building, sanitation, applied art, domestic science, commercial subjects, agriculture, sheep and wool classing and in manufacturing trades.

Some of the higher courses of evening instruction are co-ordinated with first-year courses at the University, and the satisfactory completion of any course of instruction is marked by the award of certificates, viz., the Certificate of Trade Competency in trade courses and the College Diploma in the higher courses. These certificates are recognised by employers.

The fees payable for instruction are very low, being usually at the rate of 4s. per term of thirteen weeks for juniors, and 8s. for seniors.

Intending students are required to furnish evidence that they possess sufficient preparatory knowledge to take profitable advantage of the training, and a student is not admitted to a course unless actually engaged in the specific trade to which the course relates. Special provision is made for the admission of journeymen, without preliminary test, to any part of the courses relating to their trades. Young students are admitted if they furnish a guarantee to become apprenticed before reaching the limit of the age of apprenticeship.

A noteworthy feature of the system is the existence of advisory committees in connection with each course of instruction. These committees are composed of representatives of employers and employees, who visit the classes regularly and discuss with the Superintendent and heads of departments matters relating to the maintenance of standards of efficiency in equipment and teaching, and by this means the courses are made to meet practical needs.

The following table shows the number of classes and teachers and the enrolments at the Technical College and Trade Schools during the last five years, together with the amount of fees received and of money expended.

Year.	Number of Classes.	Lecturers and Teachers.	Total Enrolments.*	Individual Students.	Fees Received.	Net Expenditure.†
					£	£
1926	688	527	28,764	12,089	18,938	163,777
1927	743	552	30,399	13,238	20,771	170,269
1928	751	604	32,960	15,326	23,359	176,004
1929	755	628	33,280	15,253	26,111	193,791
1930	766	632	34,776	15,819	25,415	180,294

* Students being counted in each class.

† After deducting fees received.

The net expenditure shown above is exclusive of interest on capital value of land, buildings, and equipment. The average net cost per student in 1930 was £11 7s. 11d.

The ages and sexes of the individual students attending technical classes in 1929 and 1930 were as follows:—

Age last Birthday.	1929.			1930.		
	Males.	Females.	Total.	Males.	Females.	Total.
14	253	540	793	207	526	733
15	682	638	1,320	622	690	1,312
16	1,555	612	2,167	1,486	690	2,176
17	1,852	515	2,367	1,879	551	2,430
18	1,605	338	1,943	1,731	423	2,154
19	1,245	299	1,544	1,312	316	1,628
20	798	219	1,017	939	260	1,199
21 and over	2,792	1,310	4,102	2,981	1,203	4,187
Total ...	10,782	4,471	15,253	11,157	4,662	15,819

In 1930 diploma courses were followed by 741 males and 6 females, trade courses by 6,564 males and 9 females, women's handicrafts and art classes by 379 males and 4,223 females, and miscellaneous courses by 3,473 males and 424 females.

Technical Education Examinations.

The following are particulars of examinations conducted under the technical education system during the last five years:—

Particulars.	1926.	1927.	1928.	1929.	1930.
Number Examined	22,722	24,116	27,602	29,193	28,670
Number of Passes	19,160	20,822	23,093	23,738	24,096
Percentage of Passes	84.7	86.3	83.6	81.3	84.0

These figures afford evidence of a very encouraging growth in this important branch of education, and a larger increase would have occurred if accommodation had been available for all applicants. The accommodation in the metropolitan centres has not been sufficient for all the apprentices who desired to gain admission to the classes, particularly those relating to the building industry.

Railway and Tramway Institute.

Classes for the technical, commercial and general education of railway employees are conducted by the Railway and Tramway Institute, which is under the control of a director and advisory council.

The headquarters of the institute are in Sydney, and there are a number of branches in various parts of the State. The total membership is 26,467, or more than half the railway employees. The number of students in 1930 was 5,437, and the courses ranged from elementary railway principles to the University matriculation standard. Correspondence courses are provided.

A scholarship of the value of £150 per annum, tenable for four years, in engineering at Sydney University is awarded annually to the most proficient student in the Engineering Matriculation Class.

UNIVERSITY OF SYDNEY.

The University of Sydney was incorporated by Act of Parliament on 1st October, 1850, and it was granted a Royal Charter on 27th February, 1858, when its graduates were accorded the same status in the British Empire as that of graduates of the Universities of the United Kingdom. Since 1884 women have been eligible for all University privileges.

Within the University there are ten faculties, viz., Arts, Law, Medicine, Science, Engineering, Dentistry, Veterinary Science, Agriculture, Architecture, and Economics, besides a School of Domestic Science. Degrees are awarded in each of these faculties in addition to diplomas in Commerce, Education, Public Health, Tropical Medicine, Tropical Hygiene, Psychiatry, Anthropology, Public Administration, and Journalism. There is also a course of study for pharmacy students proceeding to the final examination of the Pharmacy Board of New South Wales. The University is precluded by statute from providing instruction or granting degrees in Theology and Divinity.

In 1854 an Act was passed to provide for the establishment within the University grounds of residential colleges in connection with the religious denominations. These colleges and the year in which each college was incorporated by Act of Parliament are as follows:—The Church of England (St. Paul's) 1854, Roman Catholic (St. John's) 1857, and (Sancta Sophia for women) 1929, Presbyterian (St. Andrew's), 1867, Methodist (Wesley) 1910. There is also the Women's College (1889), which is conducted on an undenominational basis. A teachers' college, which is non-residential and is not affiliated with the University, is maintained by the State for the training of teachers, and is situated in the University grounds.

Many benefactions have been bestowed on the University by private persons. These endowments include the Challis Fund, of which the original amount, £276,856, has been increased by investment to £386,946, the G. H. Bosch Fund over £250,000, the P. N. Russell Funds, £100,000; and the Fisher Estate, £30,000. In addition, the University receives a large annual revenue from the trustees of the McCaughey bequest, the amount so received in 1930 being £21,560. Excluding the principal of the McCaughey bequest, the credit balances of the private foundations amounted to £1,205,923 on the 31st December, 1930.

In 1930 the Rockefeller Foundation of New York authorised a grant of £100,000 towards the cost of building a clinical laboratory for the medical school.

University Finances.

The University is supported chiefly by Government aid, the fees paid by students, and income derived from the private foundations.

The following statement shows the amounts derived from the principal sources of revenue, and the total expenditure during each of the last five years. Under the items are included sums received for capital expenditure on buildings, etc., and amounts from benefactors to establish new benefactions:—

Year.	Receipts.					Disbursements.	Private Endowment Funds Credit Balance at end of Year.
	Government Aid.	Fees.	Private Foundations.	Other Sources.	Total.		
	£.	£	£	£.	£	£	£
1926	102,168	43,371	92,003	5,008	242,550	213,808	735,362
1927	75,132	45,297	84,624	3,260	208,313	189,814	744,201
1928	87,170	44,335	347,399	32,330	511,234	201,871	1,026,129
1929	81,170	46,575	117,650	16,256	261,651	206,796	1,153,356
1930	73,161	51,791	134,258	8,177	267,387	210,833	1,205,923

* Includes Retiring Allowances Fund, but excludes the capital of McCaughey bequest.

The amount of Government aid as stated includes special appropriations paid from the Consolidated Revenue Fund to the Senate of the University to be expended in the erection of buildings for or in connection with the University under the University (Building) Act, 1919. The total amount of the appropriation was £300,000 payable in six annual instalments of £50,000 each, the last in the financial year ended 30th June, 1926.

The increase in receipts from private foundations in 1928 was a result of a special public appeal for donations towards the funds of the University. The moneys received therefrom were donated mainly for the development of education in medicine.

Salaries comprise the principal item of disbursements in each year. The total expenditure inclusive of capital expenditure in the last five years was distributed as follows:—

Classification.	Amount.				
	1926.	1927.	1928.	1929.	1930.
	£	£	£	£	£
Salaries	135,293	142,477	152,222	153,690	155,750
Maintenance, Apparatus, etc.	42,587	34,599	35,440	34,813	32,102
Buildings and Grounds	17,657	4,739	7,138	11,344	15,803
Scholarships and Bursaries	6,587	6,890	6,859	5,917	6,686
Other	11,684	1,109	212	1,032	492
Total	213,808	189,814	201,871	206,796	210,833

Lectures, Staff, and Students.

Before admission to courses of study leading to degrees, students must afford proof of educational qualifications by matriculation. Non-matriculated students are admitted to lectures and to laboratory practice, but are not eligible for degrees. On the satisfactory completion of any course, however, they may be awarded a certificate. Lectures are delivered during the daytime in all subjects necessary for degrees and diplomas, and evening lectures are provided in the faculties of arts and economics, in certain science subjects, and in Japanese. Students are required to attend at least ninety per cent. of the lectures in each course of study leading to a degree.

Lectures are delivered during three terms of ten weeks in each year. The period of study and total cost of graduation in each faculty are as follow:—Arts, 3 years, £81; Economics, 4 years, £102; Law, 4 years, £103; Medicine, 6 years, £259; Dentistry, 4 years, £223; Agriculture, 4 years, £125; Veterinary Science, 4 years, £120; Science, 3 years, £105; Engineering, 4 years—Civil, £170; Mechanical and Electrical, £177; Mining and Metallurgy, £184; Technology, £177; and Architecture, 5 years, £195.

Public exhibitions or exemptions from the payment of fees are granted annually on the results of the leaving certificate examination to 200 students entering the University, and fees are remitted in the case of teachers or students in training for the teaching profession attending University lectures. A number of scholarships are awarded from private foundations, and bursaries may be awarded by the Senate. In 1930 fees were remitted in respect of 1,299 students, including exhibitioners, State and University bursars and students in training as teachers. A general service fee of £1 1s. per term is imposed upon all students in attendance at lectures, including students exempt from payment of ordinary fees.

The number of degrees conferred by the University from the foundation to the end of 1930 was 11,606, made up as follows:—

Degree.	Number Conferred.		Degree.	Number Conferred.		Degree.	Number Conferred.	
	During 1930.	To end of 1930.		During 1930.	To end of 1930.		During 1930	To end of 1930.
M.A.	9	631	B.D.S.	16	215	D.Sc./Eng. ....	...	1
B.A.	161	3,797	L.D.S. ....	...	30	M.E.	2	16
LL.D.	2	34	D.Sc.	1	37	B.E.	17	676
LL.B.	49	707	M.Sc.	4	21	M.Ec. ....	...	5
M.D.	1	87	B.Sc.	51	828	B.Ec.	29	248
M.B.	58	2,239	B.Sc.Agr.	4	68	B. Arch.	9	65
Ch. M.	1	1,658	D.Sc.Agr.	1	1			
			D.V.Sc., ....	...	1			
B.S.	53	190	B.V.Sc.,	3	48			
D.D.S. ....	...	2	B.Sc. Dom. ....	...	1	Total ...	471	11,606

In 1930 the teaching staff of the University included 51 professors and 168 lecturers and demonstrators. Professors and most of the lecturers are paid fixed salaries, and the remainder receive fees. Provision is made for a pension scheme for professors appointed since 1898, the benefit to accrue after twenty years' service, and after attaining the age of 50 years.

The University has not the power to confer honorary degrees, but may admit *ad eundem gradum* graduates of approved Universities, viz., Oxford, Cambridge, London, Durham, Victoria, St. Andrew's, Edinburgh, Glasgow,

Aberdeen, Dublin, Queen's of Ireland, Royal of Ireland, Melbourne, New Zealand, Adelaide, and of such other Universities as the Senate may determine.

The following statement shows the number of students attending the various courses in 1921, and in each of the five years 1926 to 1930:—

Course.	1921.	1926.	1927.	1928.	1929.	1930.		
						Men.	Women.	Total.
Degree and Special Courses—								
Arts	856	794	828	839	873	467	489	956
Law	328	288	290	255	260	271	8	279
Medicine	985	403	393	362	385	386	44	430
Science	220	217	206	242	237	189	91	280
Engineering	224	124	139	128	131	153	...	153
Dentistry	82	59	72	71	65	56	5	61
Veterinary Science	16	10	18	25	33	37	1	38
Agriculture	28	25	23	29	35	41	4	45
Architecture	55	41	54	55	50	32	16	48
Economics	138	118	128	127	153	159	35	194
Japanese	12	8	6	4	7	1	1	2
Diploma Courses—								
Commerce*	148	95	79	109	98	139	7	146
Public Administration ... ..	...	...	...	...	15	16	...	16
Journalism ... ..	...	11	12	9	10	3	3	6
Anthropology ... ..	...	...	...	7	25	5	1	6
Pharmacy Students	204	243	178	123	130	117	16	133
Massage Students	21	11	15	21	27	...	48	48
Social Study and Training ... ..	...	...	...	...	12	...	11	11
Less Students enrolled twice	3,317 42	2,447 25	2,441 31	2,406 24	2,546 26	2,072 ...	780 ...	2,852 28
Total, Individual Students	3,275	2,422	2,410	2,382	2,520	2,048	776	2,824

* Economics and Commerce in earlier years.

There were 35 post-graduate students and research scholars in 1930, viz., 16 in the faculty of arts, 10 in medicine, 7 in science, 1 in engineering, and 1 in agriculture.

The decline of 893 students between 1921 and 1928 may be attributed partly to the completion of courses delayed by the war and partly to an increase in fees in 1921. The decline was general in all courses except science, being greatest in respect of medical students. In 1930 there was an increase as compared with 1929 in all degree courses except dentistry and architecture. The number of students admitted to matriculation in 1930 was 642, as compared with 575 in 1921.

University Clinics.

Three metropolitan hospitals, viz., Royal Prince Alfred, Sydney, and St. Vincent's, provide clinical schools for students in medicine.

Such students must pass through the hospital curriculum of study and practice in order to obtain the certificate of hospital practice necessary to qualify for admission to the final degree examination in medicine and surgery.

Other hospitals where studies may be undertaken in connection with the faculty of medicine are:—The Royal Hospital for Women, Royal Alexandra Hospital for Children, the Callan Park and Newcastle Mental Hospitals, the Broughton Hall Psychiatric Clinic, the Women's Hospital, the Renwick Hospital for Infants, and the South Sydney Hospital for Women.

In connection with the Department of Dental Studies, the United Dental Hospital of Sydney provides facilities for the instruction of students. The University lecturers in surgical and mechanical dentistry are, *ex officio*, honorary dental surgeons of the hospital.

Student Adviser and Appointments Board.

In 1922 the Senate appointed a student adviser to acquaint himself with every phase of University life and to hold his knowledge at the disposal of individual students and of students' clubs and societies. This officer is also secretary of the Appointments Board created for the purpose of assisting students in obtaining positions. To this end the Board endeavours to supply employers with accurate reports concerning graduates, who are required to register with the Board while attending the courses at the University.

Extension Lectures.

University Extension Lectures are conducted under the direction of a University Extension Board of from twelve to eighteen members appointed annually by the senate. Courses of lectures upon topics of literary, historical, and scientific interest are given in various centres at a charge of £2 per lecture. At the conclusion of a systematic course of ten lectures, an examination may be held and certificates awarded to successful candidates. In 1930 the Board conducted courses in Sydney, Canberra, and five country towns. The total number of lectures delivered was 99, including 31 broadcast lectures.

Tutorial Classes.

In accordance with the provisions of the University Amendment Act of 1912, the Senate has established regular evening tutorial classes, and the Government contributes an annual grant for the maintenance of tutorial classes and extension lectures, the amount in 1930-31 being £5,550. Tutorial classes are open to unmatriculated as well as to matriculated students, and diplomas are issued to persons who have studied in these classes for at least one year in any one subject. Tutorial classes, which may be established in particular branches of study upon specific requisition by intending students, have been formed in conjunction with the Workers' Educational Association in suburban and country centres as well as at the University. A resident tutor is stationed at Newcastle. Particulars of the classes are shown on a later page with other information relating to the Workers' Educational Association.

SCHOLARSHIPS AND BURSARIES.

It is the policy of the State to assist promising students to obtain secondary and tertiary education by granting scholarships and bursaries and a number are provided by private endowment. Particulars of these scholarships and bursaries and the conditions attached thereto have been given in previous issues of the Year Book.

Scholarships tenable at State secondary schools are not awarded as fees are not charged, and school material is supplied to all pupils. A few scholarships—eight in 1930—are provided by the State to enable boys to attend the Sydney Grammar School.

At Day Continuation Schools in 1930 fifty-eight girls gained scholarships tenable for three years at a technical college. At the Intermediate Certificate and Junior Technical examinations 38 scholarships for Lower Trades Courses were awarded, viz., 28 to boys and 10 to girls, and 12 Hawkesbury Agricultural Scholarships, as well as two scholarships, valued at £25 per annum, tenable for two years, to enable the boy and the girl who gained the best passes to complete the secondary course. At the Leaving Certificate Examination 17 boys were awarded scholarships for diploma courses

at Technical Colleges; in addition, 200 exhibitions were provided exempting the holders from the payment of fees to the University, viz., 124 pupils of State schools, and 76 pupils of registered secondary schools. In the same year 10 boys at evening continuation schools won scholarships for free education and a supply of text-books valued at £1 10s. per annum, tenable at day courses.

Bursary Endowment.

The Bursary Endowment Act, 1912, provides public moneys for bursaries, tenable in public or private secondary schools and in the University of Sydney. The fund is administered by a board, consisting of two representatives each of the University of Sydney, of the Department of Education, and of the private secondary schools registered under the Act.

The bursaries awarded in 1930 numbered 281, of which 268 were accepted, viz., 156 by boys and 112 by girls. Of these 164 were tenable at State high schools and 104 at private schools for 5 years from 1st January, 1930.

Bursaries, tenable for two or three years, are awarded upon the results of the Intermediate Certificate Examination. They are of the value of fourth and fifth year bursaries. Thirteen were awarded to boys and two to girls in 1930.

Bursaries tenable at the University of Sydney may be awarded to candidates at the Leaving Certificate examination who are under 19 years of age and whose parents' means are inadequate for the expense of a University education. The number of such bursaries awarded annually ranges from 25 to 40. Thirty were awarded in 1930, of which 13 were accepted by boys and 7 by girls.

At 30th June, 1930, excluding 147 holders of war bursaries, there were 1,331 pupils holding bursaries under the Bursary Endowment Act, viz., 1,232 were attending courses of secondary instruction, and 99 were attending University lectures. The annual monetary allowances paid in 1929-30 were as follow:—

Allowances.	Bursars.	Allowances.	Bursars.
£		£	
12	490	40	303
18	141	50	167
24	129	65	42
25	57		
30	2	Total ...	1,331

In addition to the bursaries made available by the Bursary Endowment Board, three bursaries, tenable for three years at the Hawkesbury Agricultural College, are awarded by the Department of Agriculture on the results of the College entrance examination. These bursaries exempt their holders from payment of the education and maintenance fee of £30 per annum. There are also three scholarships, tenable for two years, at the farm schools at Bathurst and Wagga Experiment Farms; and one, tenable for one year, at the apprentice school at Wollongbar Experiment Farm.

War bursaries are provided by the Bursary Endowment Board for children of incapacitated and fallen soldiers. The number in operation at 30th June, 1930, was 147, each receiving £10 per annum. The total number awarded since they were initiated in 1916 was 2,290.

The war bursaries are awarded usually to children between the ages of 10 and 13 years. Upon reaching the latter age the children become eligible for benefits under a scheme adopted by the Repatriation Commission to assist such children to obtain higher education and training for skilled trades, technical or professional careers. From the date these benefits became available in February, 1921, to 30th June, 1931, applications to the Commission were approved in 4,350 cases in New South Wales and a sum of £423,573 was expended in the State. This sum included private gifts and bequests, but the greater part was provided by the Commonwealth Government.

For the education of the children of fallen soldiers and sailors assistance is granted also from the Anzac Memorial Bursary Fund which was created by public subscription and vested in the Bursary Endowment Board. Bursaries awarded from this fund are tenable at secondary schools or the University. To 30th June, 1930, the number of such bursaries awarded was 77, of which one at the rate of £25 per annum was awarded in 1929-30.

TRAINING OF SCHOOL TEACHERS.

The Teachers' College which is located in the grounds of the Sydney University is maintained by the State for the training of teachers for the State service. Another college was opened at Armidale in 1928 with the object of decentralising the training. Teachers for private schools also may be trained at the colleges on certain conditions, but few persons avail themselves of this provision.

A course extending over a period of two years prepares teachers for the various classes of primary and infant schools. Teachers of small rural schools are required to undergo an abbreviated course of one year, and the course for teachers of secondary schools extends over four years. Special courses are arranged to meet the requirements of the State schools and for the benefit of individual students possessing special capabilities.

The training of the students enrolled at the Teachers' College is conducted at the University and at various practice schools. There is a hostel for the accommodation of women students in Sydney and a property has been acquired for use as a hostel in connection with the Armidale College.

The staff of the Teachers' College, Sydney, in 1930 included a principal, vice-principal, forty-two lecturers, and two visiting lecturers. The staff at the Armidale College included a principal, eleven lecturers, six visiting or part-time lecturers. At each college there was a warden of women students. Members of the teaching staffs are afforded opportunities to study abroad, and leave of absence, on full pay, may be granted for this purpose.

There were 1,535 students enrolled at the Teachers' Colleges during the year 1930, as shown in the following statement:—

Students.	Men.	Women.	Total.
First year	268	305	573
Second year	204	341	545
Third year	68	50	118
Fourth year	39	21	60
Graduate	5	11	16
Short Course (one year) ...	82	101	183
Home Economics ... ..	...	40	40
Total	666	869	1,535

The library in connection with the Teachers' College, Sydney, contained 37,360 volumes in 1930.

Teachers of Roman Catholic schools are, with few exceptions, members of religious communities. They are trained at thirty-three centres, and are registered by a Board of Registration—a central body appointed by ecclesiastic authority—after they have passed examinations conducted by the board.

Classification of State Teachers.

Teachers in the service of the State are classified, and are promoted from one grade to another according to their efficiency, which is gauged on reports of inspectors and their attainments as tested by written and oral examinations. Students who have completed a course of training at the Teachers' College are required to obtain practical experience as teachers before they are classified.

A comparative statement of the classification of the teaching staff of the State schools (including students in training) at the end of the years 1920 and 1930 is shown below; those in the Technical Education Branch are not included.

Teachers.	1920.			1930.		
	Men.	Women.	Total.	Men.	Women.	Total.
High School Teachers ...	310	274	584	665	623	1,288
Principals and Assistants—						
First Class ...	375	126	501	488	152	640
Second Class ...	1,172	895	2,067	1,416	1,342	2,758
Third Class ...	1,186	1,428	2,614	1,263	1,841	3,104
Unclassified ...	363	1,503	1,866	185	480	665
Awaiting Classification ...				491	720	1,211
Cookery Teachers ...	...	68	68	...	197	197
Sewing Mistresses ...	...	171	171	...	205	205
Manual Training Teachers ...	...	...	...	213	...	213
Visiting Teachers ...	...	...	...	1	42	43
Temporary Teachers ...	...	...	...	23	494	517
Total ...	3,406	4,465	7,871	4,745	6,096	10,841
Subsidised School Teachers ...	26	483	509	49	419	468
Students in Training ...	275	549	824	629	816	1,445
Grand Total ...	3,707	5,497	9,204	5,423	7,331	12,754

There has been a general advance in the standard of educational attainments of teachers in New South Wales during the past ten years. The number of unclassified teachers has decreased absolutely and relatively, and a large increase has occurred among high school teachers and those holding first class certificates. At the end of 1930 there were 1,261 University graduates in the teaching service, viz., 639 men and 622 women.

Teachers awaiting classification consist mainly of ex-students of the Training College ineligible for classification until they have obtained the requisite teaching experience. Most of them possess the educational attainments for second or third class certificates.

Teachers of subsidised schools are not required to be trained, but they must have sufficient educational attainments to teach the curriculum of primary schools, and supervisors have been appointed to instruct them with a view to increasing their efficiency. The average number of pupils enrolled in subsidised schools is seven per teacher, the schools being situated in remote districts.

STATE EXPENDITURE ON EDUCATION.

State Schools.

Although the expenditure on the State schools rose steadily between 1901 and 1911, the recent expansion of the system has caused a very rapid increase in expenditure since that year, but more especially since 1919 on account of the substantial increases in salaries paid to teachers. Part of this additional expenditure has been occasioned by the increase in the number of scholars, but the cost of education per pupil has more than doubled since 1911. The total expenditure on primary and secondary schools during 1930 was £4,485,293.

The following statement provides a comparison of the State expenditure on schools at intervals since 1891. The expenditure on technical education is not included.

Year.	Maintenance and Administration.	School Premises.	Total Expenditure.	Per Pupil—Mean Quarterly Enrolment.		
				Maintenance and Administration.	School Premises.	Total Expenditure.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
1891	578,191	191,374	769,565	3 7 10	1 2 6	4 10 4
1901	703,974	57,663	761,637	3 6 2	0 5 5	3 11 7
1911	1,048,583	193,993	1,242,576	4 13 10	0 17 4	5 11 2
1921	3,229,042	329,795	3,558,837	10 4 4	1 0 10	11 5 2
1926	3,627,652	699,918	4,327,570	10 10 4	2 0 7	12 10 11
1927	3,698,973	721,352	4,420,325	10 8 7	2 0 8	12 9 3
1928	3,939,338	1,069,409	5,008,747	10 12 5	2 17 8	13 10 1
1929	4,207,754	846,625	5,054,379	11 1 4	2 4 7	13 5 11
1930	3,921,501	563,792	4,485,293	10 1 5	1 9 0	11 10 5

The following statement shows the distribution of expenditure, including capital expenditure in connection with primary and secondary schools (but omitting expenditure on technical education) in 1921 and subsequent years:—

Particulars.	1921.	1926.	1928.	1929.	1930.
Sites, Buildings, Additions*—	£	£	£	£	£
Primary Schools‡ ...	173,781	429,501	725,676	465,286	265,065
High Schools ...	26,703	40,742	103,332	121,179	57,329
Teachers' College ...	3,816	...	...	15,428	31,374
Rates (municipal and shire)† ...	36,376	61,531	65,157	74,329	75,016
Rent, Furniture and Repairs ...	89,120	168,144	175,244	170,403	135,008
Salaries and Allowances—					
Primary Schools‡ ...	2,446,638	2,645,591	2,809,100	2,986,730	2,757,693
High Schools ...	200,028	333,966	398,897	451,597	447,248
Evening Continuation Schools... ‡	12,190	16,191	17,463	17,750	17,048
Other Maintenance Expenditure—					
Primary Schools‡ ...	188,975	195,673	245,999	274,283	234,068
High Schools ...	27,314	39,990	49,537	51,967	57,751
Evening Continuation Schools... ‡	1,541	1,558	1,136	1,235	1,222
Bursaries and Scholarships ...	58,285	36,905	41,205	40,306	28,992
Boarding and Conveyance Allowances	36,149	44,503	56,884	51,195	62,869
Training of Teachers ...	98,537	118,315	136,778	154,143	150,434
School Medical Inspections ...	22,197	34,219	36,814	36,683	30,598
School Inspection ...	47,971	50,288	55,230	...	...
Administration and other Expenses	89,216	110,553	90,295	141,865	123,578
Total... ‡	£ 3,558,837	4,327,570	5,008,747	5,054,379	4,485,293

* Includes State Insurance on School Buildings.
ment on behalf of Department of Education.

† Expended by Resumed Properties Depart-

‡ Includes expenditure on super-primary education in intermediate high, district, continuation and rural schools.

The amounts shown in the foregoing tables do not include any allowance for vested residences granted to teachers, of which the annual value was estimated at £50,474 in 1930. The figures are exclusive also of interest paid on loan money used for the erection of schools.

Capital Expenditure on School Buildings, etc.

Large sums have been expended in recent years for the purpose of building new schools, teachers' residences, etc. The total amount so expended during the decennium ended 30th June, 1931, was £5,562,229, the expenditure in each year being as follows:—

Year ended 30th June.	Expenditure from Loan and Public Works Funds.	Year ended 30th June.	Expenditure from Loan and Public Works Funds.
1922	330,084	1927	653,047
1923	530,428	1928	769,943
1924	591,784	1929	788,701
1925	657,119	1930	400,323
1926	505,153	1931	335,647

A large proportion of the moneys was obtained from loans, but in some cases provision was made that the amounts be recouped to the Loan Fund from the Public Works Fund, which represented money derived from the sale of Crown lands and grants from consolidated revenue. The expenditure in 1930-31 included the sum of £180,275 from the Unemployment Relief Fund, being proceeds of special taxation.

Total Public Expenditure on Education.

In addition to expenses incurred in respect of the State school system, the public expenditure on education in New South Wales includes grants and subsidies to the University and other educational and scientific organisations. A summary of the total expenditure by the State in respect of education in various years since 1911 is shown below. The expenditure on buildings, equipment, sites, etc., representing capital expenditure, is distinguished as far as practicable from expenditure for maintenance, including grants and subsidies which may be regarded as annual costs.

Year ended 30th June.	Expenditure.			
	Capital.	Annual.	Total.	Per head of Population.
	£	£	£	£ s. d.
1911	176,778	1,213,368	1,390,146	0 17 5
1921	251,880	3,473,545	3,725,425	1 15 8
1926	512,225	4,039,154	4,551,379	1 19 7
1927	666,304	4,223,077	4,889,381	2 1 8
1928	800,328	4,448,579	5,248,907	2 3 8
1929	798,955	4,756,250	5,555,205	2 5 5
1930	410,356	4,938,942	5,349,298	2 3 2
1931	345,870	4,662,103	5,007,973	2 0 1

These figures are exclusive of amounts spent by the State on the agricultural college and experiment farms and societies for the promotion of agricultural and allied interests, of which particulars are shown in the chapter relating to the agricultural industry. They exclude also the interest paid on loan money invested in works used for public instruction.

EDUCATIONAL AND SCIENTIFIC SOCIETIES.

Many organisations are in existence in New South Wales which have for their objective the encouragement of professional interests, and the advancement of science, art, and literature. These include the Royal Society of New South Wales, which has for its objects the advancement of science in Australia, and the encouragement of original research in all subjects of scientific, artistic, and philosophic interest, and the Linnæan Society of New South Wales, established for the special purpose of promoting the advancement of the botany and natural history of Australia.

Other important scientific societies are the Royal Zoological Society of New South Wales, inaugurated in 1879; a branch of the British Medical Association, founded in 1881; a branch of the British Astronomical Association; the Australasian Association for the Advancement of Science; the Royal Geographical Society; the University Science Society; Australian Historical Society; the Naturalists' Society of New South Wales; and a branch of the Economic Society of Australia and New Zealand formed in 1925.

All the learned professions are represented by associations or societies.

The Royal Art Society holds an annual exhibition of artists' work at Sydney; and of the many musical societies, mention may be made of the Royal Sydney Apollo Society, and the Royal Sydney Philharmonic Society.

Workers' Educational Association.

The Workers' Educational Association of New South Wales was founded at a conference called by the Labour Council of New South Wales in June, 1913. It organises tutorial classes, study circles, summer and holiday schools, and public lectures. In 1930 the membership of the association in New South Wales consisted of 1,313 individual members, and 119 organisations were affiliated with it.

In 1930 fifty-five classes were held, viz., fourteen at the University, seventeen in the city and suburbs, ten in the Newcastle district, and fourteen in other country districts. The number of students enrolled was 1,878, and the effective enrolment was 1,624. The association received an endowment of £500 from the State and its subscription fees amounted to £902.

CONSERVATORIUM OF MUSIC.

The State Conservatorium of Music, which was established in 1915, provides tuition in music, from the elementary to the advanced stages. The studies are divided into two sections. The Music School Section consists of three courses, viz., elementary, intermediate, and advanced—the last-mentioned extending over two years. A certificate is granted on the satisfactory conclusion of each course. The advanced grade certificate of the Music School Section entitles the holders to admission to the diploma section, in which a course of two years' tuition, leading to the professional diploma, is given under the personal direction of the Director of the Conservatorium. A preparatory course is available for juveniles who have not previously received musical tuition.

The number of students enrolled in the various courses of study at the Conservatorium was 1,410 in 1929 and 1,116 in 1930. The latter number included 28 diploma students, of whom three gained the diploma during the year. The receipts in 1930 consisted of fees, receipts from concerts, etc., amounting to £23,719, and the expenditure to £30,442.

MUSEUMS, LIBRARIES, AND ART GALLERY.

The Government of New South Wales maintains a number of museums and libraries and a National Art Gallery. The expenditure by the State on buildings for these institutions to 30th June, 1931, amounted to £486,396.

Museums.

The Australian Museum in Sydney is the oldest institution of its kind in Australia. It is incorporated under control of trustees, with a State endowment, which is supplemented by annual Parliamentary appropriations. It contains fine specimens of the principal objects of natural history, and a valuable collection of zoological and ethnological specimens of distinctly Australian character. A library containing many valuable publications is attached to the institution. Lectures and gallery demonstrations are given in the Museum, and are open to the public. During the year 1930 visitors to the Museum numbered 267,823, as compared with 267,074 in 1929. The expenditure during the year 1930 was £23,446. The institution is supported by a statutory endowment of £1,000 per year and by an annual parliamentary appropriation, the amount received from the Consolidated Revenue Fund in the financial year ended 30th June, 1931, being £19,510.

A Technological Museum has been established as an adjunct to the Central Technical College. It contains a valuable series of specimens illustrative of various stages of manufacturing, and a collection of natural products acquired by purchase, gift, loan, or exchange. Technological Museums are established also at Goulburn, Bathurst, West Maitland, Newcastle, and Albury.

Research work is conducted by the scientific staff at the Technological Museum in connection with the development of the natural resources of Australia.

There is a Mining and Geological Museum attached to the Department of Mines. Its functions include the preparation and collection of minerals to be used as teaching aids in schools and in other institutions.

The Agricultural and Forestry Museum is an adjunct of the Department of Agriculture.

The public have access to the "Nicholson" Museum of Antiquities, the "Macleay" Museum of Natural History, the Museum of Normal and Morbid Anatomy, attached to the Sydney University, and the National Herbarium and Botanical Museum at the Botanic Gardens. Housed in the Macleay Museum is the Aldridge collection of Broken Hill minerals.

Public Library of New South Wales.

The Public Library of New South Wales was incorporated in 1890 with a statutory endowment of £2,000 per annum for the purchase of books. In 1924 the National Library Act authorised the erection of new buildings at an estimated cost of £495,500 and the work of construction is in progress.

The scope of the library, which is essentially a reference institution, is extended by a loan system, under which books are forwarded to individual students in the country, and to institutions, such as libraries, schools of arts, progress associations, lighthouses, associations of primary producers, branches of the Public School Teachers' Associations and of the Agricultural Bureau, and schools.

In June, 1931, the Reference Department of the Public Library (exclusive of the Mitchell Library) contained 319,130 volumes, including 71,938 volumes for country libraries under the lending system. The attendance of visitors during the year 1930-31 numbered 269,393.

The Mitchell Library contains a unique collection, principally of books and manuscripts relating to Australasia and paintings of local historic interest donated by Mr. David Scott Mitchell to the trustees of the Public Library. Mr. Mitchell endowed the library with an amount of £70,000, the income from which is expended on books and manuscripts. In 1931 there were 126,183 volumes in the Mitchell Library, which is located in a separate building. There were 27,414 visitors during the year ended 30th June, 1931.

The total cost to the State of the Public Library buildings was £29,611, and of the Mitchell Library £100,494, at 30th June, 1931. The expenditure on maintaining the Public Library (including the Mitchell Library) during 1930-31 was £25,368, including £12,233 from the Mitchell Library Endowment Fund.

Sydney Municipal Library.

The Sydney Municipal Library is a free lending library administered by the Council of the City of Sydney. It contained 49,971 volumes in 1930.

Maintenance costs during 1930 amounted to £13,762, made up as follows:—Salaries, etc., £8,689; books, periodicals, binding, and electric lighting, £5,073.

Other Libraries.

Local libraries established in a large number of centres throughout the State, may be classed broadly under two heads—Schools of Arts, which have an annual subvention in proportion to the amount of monetary support accorded by the public; and Free Libraries established in connection with municipalities. Under the provisions of the Local Government Act any shire or municipality may establish a public library, art gallery, or museum.

The library of the Australian Museum, though intended primarily as a scientific library for staff use, is accessible to students, and 26,867 volumes may be found on the shelves. In the library attached to the National Herbarium there are over 10,000 volumes.

The libraries in connection with the Technological Museum, and the Technical College and branches, contain approximately 15,200 text-books. In the library of the Teachers' College there are 37,630 volumes; in libraries attached to State Schools, 523,906 volumes; and in the Fisher Library at the University, 196,000 volumes.

The Parliamentary Library contains over 52,000 books, and large numbers of volumes are in the libraries of the law courts and Government offices.

National Art Gallery of New South Wales.

The National Art Gallery contains a good collection of oil paintings, water colours and statuary, including some works of prominent modern artists, and some valuable gifts from private persons.

The present value of the contents of the Gallery is £184,686, and the cost of the building to 30th June, 1931, was £95,100.

The number of paintings, etc., in the Gallery at end of year 1930 was 2,828, and the total amount expended in purchasing works of art during that year was £4,357, distributed as shown below:—

Classification.								Paintings, etc., in Gallery.	Expenditure during 1930.
								No.	£
Oil Paintings	...	...	...	...	...	...	...	609	3,911
Water Colours	...	...	...	...	...	...	...	451	150
Black and White Works	...	...	...	...	...	...	...	942	296
Various Art Works in Metals, Ivory, Ceramics, Glass, Mosaic, etc.	...	...	...	...	...	...	...	826	...
Total	...	...	...	...	...	...	...	2,828	4,357

The total expenditure during the year 1930 amounted to £8,809, including salaries and wages of £3,540.

The attendance at the National Art Gallery during 1930 was 145,126 on week-days and 63,938 on Sundays.

Art students under certain regulations, may copy works and enjoy the benefit of a collection of books of reference on art subjects. Collections of pictures are sent to the principal country towns for temporary exhibition, 316 pictures being so distributed during 1930.

The Gallery has received but small support from private endowments, and consequent upon its limited funds, is restricted mainly to the collection of specimens of contemporary art.

The Wynne Art Prize consisting of the interest on approximately £1,000 is awarded annually to the Australian artist or sculptor producing the best landscape painting of Australian scenery in oils or water colours, or the best production of figure sculpture.

The Archibald Prize is awarded for the best portrait, "preferably of some man or woman distinguished in art, letters, science, or politics painted by any artist resident in Australasia." The amount available for the prize in each year is approximately £400.

LAW COURTS.

ONE of the cardinal principles of the constitution of New South Wales is that of the supremacy of the law of the land inherited from England. By it equal legal status is accorded to all citizens. No person may be punished lawfully except for a breach of law proven in the courts before which all men have equal status, including rights of appeal and the right, in proper cases, to contest the validity of laws and regulations in the law courts.

Laws:

The body of law in force in New South Wales consists of the following elements:—

- (i) The Common Law of England and English statute law inherited on the original settlement of the colony in 1788, or applied by Act of Parliament in 1828.
- (ii) Acts passed by the Parliament of the State of New South Wales, together with regulations, rules, and orders made thereunder, and certain decisions of the State Judges having the force of law.
- (iii) Acts passed by the Parliament of the Commonwealth of Australia within the scope of its allotted powers, together with regulations, rules, and orders made thereunder.
- (iv) Imperial laws binding New South Wales as part of the British Empire, as part of the Commonwealth of Australia, or as a State.

The last-named, however, relate mainly to external affairs or matters of Imperial concern.

The proper subjects for federal legislation are limited in number. In some cases federal powers of legislation are exclusive, in others concurrent with those of the State. In all cases of conflict valid federal laws override State laws. The legislative powers of the Federal Parliament are confined mainly to public law, and to those matters of private law on which interstate uniformity is desirable. The greater part of private law is enacted by the State Parliament.

The legal system of New South Wales is highly developed, having been modelled closely on that of England by incorporating into the body of local law and legal procedure leading features from the English system.

The main features of the system are that established law is enforced by public law courts by judges who hold office until they reach a prescribed retiring age, subject only to good behaviour, as determined by Parliament; the advocates employed at law are subject to the special control of the Supreme Court; and officers of police or prisons are answerable at law for the manner in which their duties are performed.

The jurisdictions of the courts of law are distributed in such a way as to secure prompt trial. Minor civil and criminal cases are relegated to Courts of Petty Sessions within the districts in which they arise, and more important civil cases are heard before a judge of the District Court, who also presides in criminal jurisdiction over Courts of Quarter Sessions.

The Supreme Court of New South Wales has jurisdiction in all matters of law arising in the State, except certain matters of a federal nature, which are reserved for the High Court of Australia. It may delegate certain of its powers, and exercise general powers of supervision over the administration of justice through its right to issue and enforce writs and to hear appeals.

A number of courts of law have been established to deal with certain special matters, viz., Licensing Courts, Fair Rents Courts, Taxation Courts of Review, (Mining) Wardens' Courts, Courts of Marine Inquiry, Land and Valuation Court, and, among criminal courts of magisterial rank, Coroners' Courts and Children's Courts. Special jurisdictions are exercised by the Industrial Commission and by the Workers' Compensation Commission. Special matters arising under the various land laws of the State are dealt with by Local Land Boards. A Transport Appeal Court, consisting of a District Court Judge, hears appeals from certain decisions of the transport trusts and of the State Transport (Co-ordination) Board.

The external courts of law, whose jurisdiction extends to New South Wales are the Judicial Committee of the Privy Council (appellate only), and the High Court of Australia (original in certain matters and appellate in other matters).

Jurisdiction under federal laws is generally exercisable by any State court, presided over by a magistrate or judge, subject to the same limitations as are imposed on their jurisdictions under State laws.

FUGITIVE OFFENDERS AND EXTRADITION.

By the Service and Execution of Process Act (Federal), civil process commenced in any State of the Commonwealth may be served in any other, and judgment obtained in any State may be enforced in any other. In criminal proceedings, warrants issued in one State and endorsed in another may be duly executed in that State and the fugitive surrendered.

Special arrangements governing these matters as between different parts of the British Empire are made by the Fugitive Offenders' Act, 1881 (Imperial).

Extradition to foreign countries is governed by Imperial Acts, or local Acts of special sanction, under treaties concluded with the countries concerned, but such treaties may be arranged only by the Imperial Government, and these are usually made applicable to the whole Empire.

ADMINISTRATION OF LAW.

Ministers of the Crown.

In New South Wales the duty of administering laws is allotted to Ministers of the Crown in their respective spheres, and a table of Acts administered by each Minister, may be found in "The New South Wales Parliamentary Companion." Usually an Attorney-General and a Minister of Justice are appointed, but sometimes these offices are combined and a Solicitor-General is included in the Cabinet. Sometimes the Solicitor-General is a salaried public servant. There is also a Crown Solicitor—a salaried public servant.

The Attorney-General is charged with the conduct of business relating to the higher courts (such as Supreme and District Courts), the offices of the Crown Solicitor, Crown Prosecutors, Clerk of the Peace, and Parliamentary draftsmen, as well as statute law consolidation and certain Acts, including the Poor Prisoners' Defence Act and the Poor Persons' Legal Remedies Act. Furthermore, he corresponds with other Ministers on questions of State on which his legal opinion is required, and with judges on matters within his control, initiates and defends proceedings by or against the State, and determines whether prosecution lies in cases of indictable offences.

The Minister of Justice supervises the working of the magistrates' courts, of gaols and penal establishments, the infliction of punishment and execution of sentences, also the operations of the various offices connected with the

Supreme and District Courts. He administers Acts of Parliament relating to justices, juries, coroners, prisons and prisoners, criminals, inebriates, registration of firms, companies, and licensed trades and callings.

Judges of the Supreme Court.

Judges of the Supreme Court of New South Wales are styled "Justices," and are appointed by Commission of the Governor on the advice of the Executive Council. No person may be appointed Judge of the Supreme Court unless he is a barrister of five years standing. In addition to exercising legal jurisdiction the judges have power to make rules governing court procedure and to control the admission to practice of barristers and solicitors and to supervise their conduct.

A judge is immune from prosecution for the performance of his judicial duties within the scope of his jurisdiction. He holds office "during good behaviour" until the age of seventy years at a salary fixed by statute. By these provisions the judiciary is rendered independent of the executive, but a judge may be removed from office by the Crown on the address of both Houses of Parliament. Each member of the Industrial Commission of New South Wales has the same status and rights as a puisne judge of the Supreme Court.

Judges of the District Court.

Any barrister of five years standing or attorney of seven years standing may be appointed as judge of the District Court by the Governor to exercise the jurisdiction of the Court in districts allotted by the Governor. Such persons hold office during ability and good behaviour up to the age of 70 years. They may be removed from office by the Governor for inability or misbehaviour subject first to appeal to the Governor-in-Council. A judge may not engage in the practice of the legal profession. The chairman of the Workers' Compensation Commission has the same status as a District Court Judge.

Other Officers of the Courts.

Certain ministerial functions are performed by magistrates and justices in addition to their judicial duties, but special officers are appointed for certain purposes in the administration of justice, viz., Crown Prosecutors to act in Criminal Courts in prosecuting persons accused of indictable offences, Clerks of Petty Sessions, the Clerk of the Peace and his deputies, to act as Clerks for the Courts of the Quarter Sessions, Registrars of the Small Debts and District Courts, and bailiffs.

In connection with the Supreme Court there are two important officers in addition to those connected with special jurisdictions, viz., the Prothonotary and the Sheriff.

The Prothonotary of the Supreme Court is its principal officer in the common law and criminal jurisdiction. He acts as registrar of the Courts of Matrimonial Causes, Admiralty, and Criminal Appeal. The Prothonotary or his deputy may be empowered under rules of the court to transact business usually transacted by a judge sitting in chambers, except in respect of matters relating to the liberty of the subject.

The office of Sheriff is regulated by the Sheriff Act, 1900. There is a Sheriff and Under Sheriff. Sheriff's officers are stationed at convenient country centres, where there is a Deputy Sheriff—usually a Police Magistrate. The functions of the Sheriff include the enforcement of judgments and execution of writs of the Supreme Court, the summoning and supervision of juries, and administrative arrangements relating to the holding of courts.

Magistrates.

Magistrates are appointed from among members of the Public Service unless it is certified by the Public Service Board that no member of the service is suitable and available for such office. Persons so appointed must have attained the full age of thirty-five years, and have passed the prescribed examination in law. They hold office at the pleasure of the Governor.

Within the districts of the Metropolis, Parramatta, Newcastle, Broken Hill, Bathurst, and Wollongong, the jurisdiction of the Court of Petty Sessions is exercised exclusively by Stipendiary Magistrates. In country districts jurisdiction in Petty Sessions is exercised by Police Magistrates wherever convenient, and otherwise by honorary justices in minor cases. Police Magistrates were first appointed in 1837, and Stipendiary Magistrates in 1881.

The jurisdiction of magistrates is explained in connection with Courts of Petty Sessions, and their functions comprise those of Justices of the Peace, explained later. In addition they usually act in country centres as District Registrars in Bankruptcy, Revising Magistrates, visiting Justices to gaols, Deputy Sheriffs, Mining Wardens, and Industrial Magistrates.

Justices of the Peace.

Persons of mature age and good character may be appointed as Justices of the Peace by Commission, under the Grand Seal. The office is honorary, and is held during the pleasure of the Crown. No special qualifications in law are required, but appointees must be persons of standing in the community and must take prescribed oaths. Women became eligible for the office under the Women's Legal Status Act, 1918.

The functions of justices are numerous, extending over the administration of justice generally, the maintenance of peace, and the judicial duties of the office. The judicial powers are explained in connection with the Courts of Petty Sessions, and other duties include the issue of warrants for arrests, issue of summonses, administration of oaths, and certification of documents.

In December, 1930, there were approximately 27,480 Justices of the Peace in New South Wales, including 880 women.

Registration of Legal Documents, etc.

The Registrar-General in New South Wales registers certain occurrences and transactions of special legal significance as prescribed by Act of Parliament. Registrations are made of births, deaths, and marriages; of deeds, titles to land, transfers, land leases; of mortgages and liens; of companies and firms, and of documents under the Real Property Act; of bills of sale, and of instruments under the Newspapers and Printing and certain other Acts.

The documents relating to registration are usually available for inspection by the public. Fees are charged in most cases for registration and for inspection. The amount collected as fees for registration, inspection, and searches, and for public documents sold by the Registrar-General during 1929, was £252,763; and in 1930 it was £191,510, of which £132,203 were collected by the Lands Titles Branch and £59,142 by the Deeds branch.

The registration of patents, copyrights, trade marks, and designs, devolves upon the federal authorities. A patent granted under the Commonwealth law is afforded protection in all the States, and in the Territory of Papua, for sixteen years. The copyright in a book, the performing right in a dramatic or musical work, and the lecturing right in a lecture, continue for the author's life and fifty years after his death. The British Copyright Act, subject to certain modifications, is in force in the Commonwealth under the Copyright Act, 1912.

The registration of a trade-mark protects it for fourteen years, but may be renewed from time to time. An industrial design may be protected for five years, and the period extended to fifteen years, provided it is used in Australia within two years of registration.

Under the various Imperial and federal Acts, arrangements may be made by means of reciprocal legislation for the protection in other countries of patents, copyrights, trade-marks, and designs. In all cases the rights of holders under the legislation of a State were conserved.

Public Trustee.

The Public Trustee exercises administrative functions in regard to estates in terms of the Public Trustee Act, 1913, as amended in 1923. The Public Trustee may act as trustee under a will, or marriage or other settlement; executor of a will; administrator under a will where the executor declines to act, is dead or absent from the State; administrator of intestate estates; and as agent or attorney for any person who authorises him so to act. In general the Public Trustee takes out probate or letters of administration in the Probate Court in the ordinary way, but he may file an election to administer in that court in certain cases in testacy or intestacy where the gross value of the estate does not exceed £400. He may act also as manager, guardian, or receiver of the estate of an insane or incapable person, or as guardian or receiver of the estate of an infant. He is a *corporation sole* with perpetual succession and a seal of office and is subject to the control and orders of the Supreme Court.

Where the net value of an intestate estate does not exceed £100, the Public Trustee may pay the whole amount direct to the widow, and he may apply the share of an infant, not exceeding £500, to the maintenance of the infant. As attorney or agent he may collect rents or interest on investments, supervise repairs, prepare taxation returns, and pay taxes, etc. Agents of the Trustee are appointed in towns throughout the State.

Operations are not conducted for profit, and the fees and commission chargeable are regulated to provide sufficient money to cover working expenses only. The accounts of the Public Trust Office are audited by the Auditor-General.

The following is a summary of the transactions during the last five years:—

Particulars.	Year ended 30th June.				
	1927.	1928.	1929.	1930.	1931.
Estates received for Administration	2,217	2,219	2,376	2,246	1,884
	£	£	£	£	£
Amount Received*	1,150,719	1,202,317	1,542,600	1,298,118	1,040,138
Amount Paid*	1,188,629	1,165,359	1,362,891	1,942,154	1,041,634
Commission and Fees	40,002	44,598	45,171	44,857	44,954
Unclaimed Money—					
Paid into Treasury	22,430	9,280	26,434	11,902	5,481
Subsequently Claimed	1,168	765	3,331	310	374
Credit Balances of Estates . . .	4,168,622	4,610,686	4,908,651	5,600,624	6,410,847

* On behalf of estates.

The cost of administration amounted to £43,088 in 1929-30 and to £42,677 in the following year.

JURY SYSTEM.

Crimes and misdemeanours prosecuted by indictment in the Supreme Court or Courts of Quarter Sessions must be tried before a jury of twelve persons, who find as to the facts of the case, the punishment being determined by the judge. Most civil cases may be tried before a special jury of four persons, or a jury of twelve persons, upon application and with the consent of the court. The jury in such cases determines questions of fact and assesses damages. The procedure in relation to juries is governed principally by the Jury Act, 1912, and its amendments, and other Acts regulate special cases.

Persons liable to service on juries include, with certain exceptions, any man above the age of 21 years residing in New South Wales, and having a clear yearly income of £30 or more from real and personal estate, or a real and personal estate of the value of £300 or more. The principal exceptions are foreign subjects, who have not resided in New South Wales for at least seven years, and certain persons attainted of treason or felony. Men specially exempt include judges, members of Parliament, certain public officers, officers of the public service of the Commonwealth, members of the defence forces, employees of the State Governments, clergymen, barristers, solicitors, magistrates, police officers, doctors, dentists, chemists, schoolmasters, certain employees of banks, incapacitated persons, and men above the age of 60 years who claim exemption. Women are not liable for service on juries.

A jurors' list is compiled annually in October for each Petty Sessions District by the senior police officer. This list is made available for public inspection, and revised in December before a magistrate. Lists of persons qualified and liable to serve on special juries are prepared also. They include persons of prescribed avocations.

The jurors summoned to hear an issue are decided by lot. Accused persons and the Crown each have the right to challenge eight jurors in criminal cases, and twenty in capital cases, without assigning reasons. In civil cases twice the number of jurors required are summoned, and one-fourth of the number is struck off by each party to the case.

In criminal cases the verdict of the jury must be unanimous. Where agreement is not reached within twelve hours, the jury may be discharged, and the accused tried before another jury. In civil cases the verdict of three-fourths of the jury may be accepted after six hours' deliberation, but failing agreement within twelve hours, the jury is discharged and a new trial held.

LEGAL PROFESSION.

The legal profession in New South Wales is controlled by regulations of the Supreme Court, which prescribe the conditions of entry to the profession, regulate studentships at law and specify the legal examinations which must be passed prior to admission to practice. Separate boards have been established to govern the admission of barristers and of solicitors.

Any solicitor duly admitted to practice has the right of audience in all courts of New South Wales, but the Supreme Court may suspend or remove from the roll any solicitor for proven misconduct or malpractice. Barristers have, in general, no legal right to fees for their services in court, but scales of charges for certain services rendered by solicitors are prescribed by regulation and in certain instances costs of suits are taxed off by an officer of the Supreme Court.

The following table shows the number of members of the legal profession in practice at intervals since 1911, and illustrates the increase in numbers in recent years:—

End of Year.	Barristers.	Solicitors.		
		Sydney.	Country.	Total.
1911	156	603	411	1,014
1921	185	681	431	1,112
1926	229	835	477	1,312
1927	227	858	494	1,352
1928	233	898	503	1,401
1929	233	972	517	1,489
1930	235	988	555	1,543

The number of barristers at the end of 1930 included 28 King's Counsel. The number stated in the table does not include the District Court judges, the Master in Equity, magistrates, State officials who are barristers, non-practising barristers, nor those on the roll—but not resident—in New South Wales. There were also 65 certificated conveyancers.

Barristers are organised under the Council of the Bar of New South Wales, and solicitors under the Incorporated Law Institute of New South Wales. There is also a Society of Notaries.

Poor Persons' Legal Expenses.

Under the Poor Prisoners' Defence Act, 1907, a person committed for trial for an indictable offence may apply for legal aid for his defence before the jury is sworn. If the judge or committing magistrate considers that the person is without adequate means, and that such legal aid should be supplied, the Attorney-General may arrange for the defence of the accused and for payment of expenses of all material witnesses.

The Poor Persons' Legal Remedies Act, 1918, authorises judges to make rules regulating the practice and procedure, and the costs and fees payable in respect of proceedings to which poor persons are parties. Such proceedings may not be instituted without permission, and judges to whom applications for permission are made are authorised to act as conciliators. The rules made under this Act do not apply to criminal proceedings.

Barristers and solicitors have enrolled under this Act to give their services free of charge on being assigned in a proper case. Out-of-pocket expenses are paid by the Crown.

COURTS OF CIVIL JURISDICTION.

Courts of Petty Sessions (Small Debts Court).

A limited civil jurisdiction is conferred by the Small Debts Recovery Act, 1912, on magistrates and justices sitting as Small Debts Courts to determine, in a summary way according to equity and good conscience, actions for the recovery of debt or damages. The jurisdiction of these courts is limited to cases involving not more than £50. A police or stipendiary magistrate may exercise the full jurisdiction of the court, two justices of the peace may hear cases involving amounts up to £30, and one justice up to £5. In cases of indefinite demands jurisdiction extends only to cases involving £10, or, by consent of the parties, up to £30, but the courts may not deal with matters involving titles to freehold or future rights.

In general, appeal may be made from a decision of the court only when it exceeds its jurisdiction or violates natural justice.

The principal officers of the court are a registrar, who acts as clerk to the bench and may enter judgment in cases of default of defence, or where claims are admitted and agreed upon, and such bailiffs as are appointed from time to time for the service and execution of judgments.

Particulars of the transactions of Courts of Petty Sessions in their civil jurisdiction during the last five years are shown below:—

Year.	Plaints entered.	Verdicts for Plaintiff.		Executions issued.	Garnishee Orders issued.
		Number.	Amount.		
			£		
1926	77,365	31,569	288,735	10,390	5,374
1927	84,740	34,633	336,058	11,646	6,337
1928	88,033	33,398	368,242	12,904	7,147
1929	92,016	39,153	395,233	14,321	7,239
1930	92,054	45,147	462,803	17,089	7,665

In garnishee cases the Court may order that all debts due by a garnishee to the defendant may be attached to meet a judgment debt, and by a subsequent order, may direct the garnishee to pay so much of the amount owing as will satisfy the judgment debt. In respect of wages or salary, garnishee orders may be made only for so much as exceeds £2 per week. The garnishee cases in 1930 numbered 7,665.

DISTRICT COURTS.

District Courts have been in existence in New South Wales since 1858 as intermediaries between the Small Debts Courts and the Supreme Court. They are presided over by judges with special legal training, who have jurisdiction only over cases arising in districts allotted to them. Sittings are held at places and times appointed by the Governor-in-Council. In 1931 there were eight District Court Judges and sittings were arranged in sixty-two districts. The courts sit at intervals during ten months of the year in Sydney, and three or more times per year in important country towns. A registrar and other officers are attached to each court.

Ordinarily cases are heard by a judge sitting alone, but a jury may be empanelled by direction of the judge, or upon demand by either plaintiff or defendant, in any case where the amount claimed exceeds £20. The jurisdiction of the Court extends over issues of fact in equity, probate, and divorce proceedings remitted by the Supreme Court, and over actions at Common Law involving an amount not exceeding £400, or £200 where a title to land is involved.

The findings of the District Court are intended to be final, but new trials may be granted, and appeals may be made to the Supreme Court in certain cases.

Particulars of suits brought in District Courts in their original jurisdictions during the last five years are given in the following table:—

Year.	Causes Tried.		Causes Discontinued or Settled without hearing.	Judgment for Plaintiff by Default, Confession, or Agreement.	Causes referred to Arbitration.	Total Suits disposed of.	Total Suits arising during Year.	Causes Pending and in Arrear.
	Verdict for Plaintiff.	Verdict for Defendant (including Nonsuit, etc.).						
1926	824	327	3,039	4,911	4	9,105	9,174	4,420
1927	896	369	3,249	5,780	14	10,308	11,155	5,267
1928	1,091	417	3,881	6,362	9	11,760	11,521	5,028
1929	1,353	461	3,665	7,405	9	12,883	14,144	6,289
1930	1,373	474	4,123	9,204	4	15,178	15,710	6,821

Of the cases tried during 1930, 146 were tried by jury and 1,701 without a jury. The amount of judgment for plaintiffs during the year was £143,092.

In addition to the suits covered by the foregoing table a considerable amount of work is done in the District Courts under various Acts.

SUPREME COURT.

The Supreme Court of New South Wales was established in 1824 under the Charter of Justice. Jurisdiction is exercised by a Chief Justice and not more than eight Puisne Judges, of whom four are engaged usually in the Common Law and Criminal jurisdictions, and the remainder in Equity, Bankruptcy, Probate, Lunacy, and Matrimonial Causes.

The Court possesses original jurisdiction over all litigious matters arising in the State (other than special matters concerning land and industrial arbitration), in certain cases where extra territorial jurisdiction has been conferred, in Admiralty, and in appeal. Its original jurisdiction is exercised usually by one judge. The procedure and practice of the Court are defined by statute, or regulated by rules which may be made by any three or more judges. In proper cases appeals may be carried from findings of the Supreme Court to the High Court of Australia or to the Privy Council.

Particulars are given below of each division of the civil jurisdiction of the Court.

Common Law Jurisdiction.

The jurisdiction of the Supreme Court at Common Law extends to cases not falling within any other jurisdiction. Actions are tried usually in the first instance in sittings at nisi prius, before one judge and a jury of four, or of twelve in special cases. A jury may be dispensed with by consent of both parties and under statutes governing certain cases. A judge may sit "in chambers" to deal with questions not requiring to be argued in court.

The following table gives particulars of causes set down and writs issued in the Supreme and Circuit Courts (Common Law Jurisdiction) during the last five years. The number of writs issued includes cases which were settled by the parties without further litigation.

Particulars.	1926.	1927.	1928.	1929.	1930.
Writs Issued	6,625	7,386	7,560	8,139	10,064
Judgments Signed	3,182	3,549	3,643	3,928	4,835
Causes Tried—					
Verdict for Plaintiff	205	233	202	251	217
" Defendant	61	54	47	78	71
Jury Disagreed	2	1	1	1	2
Nonsuits	21	20	16	26	15
Total	289	308	266	356	305
Causes—					
Not proceeded with	345	311	396	400	423
Referred to Arbitration... ..	1	1	3	1	1
Total Causes dealt with...	635	620	665	757	729

Litigation in this jurisdiction, as indicated by the number of writs issued, has increased steadily. The difference between the number of writs issued and judgments signed indicates the extent to which suits are not proceeded with, and the difference between the number of judgments signed and the number of causes tried indicates the extent to which cases are settled without legal proceedings in court.

Equity Jurisdiction.

The jurisdiction of the Supreme Court in Equity (which includes infancy) is exercised by the Chief Judge in Equity, by the Judge in Bankruptcy sitting in Equity, or by either sitting with two other Judges. The procedure of the Court is governed by the Equity Act, 1901, and subsidiary rules. The jurisdiction extends to granting equitable relief by enforcing rights not recognised at Common Law and by special remedies such as the issue of injunctions, writs of specific performance, and a jurisdiction in infancy. The Court in making binding declarations of right may obtain the assistance of specialists such as actuaries, engineers, or other persons. In deciding legal rights incidental to its cases, it exercises all the powers of the Common Law jurisdiction of the Supreme Court, and may award damages in certain cases.

Attached to the Court there is a Master in Equity who performs administrative duties and performs judicial functions where directed in determining certain minor matters, such as conducting inquiries, taking accounts, and taxing costs. He is also Registrar of the Court, and controls the records and funds within its charge.

The transactions in Equity during the year ended 30th June, 1931, included the following:—Decrees 201; orders on motions and petitions 1,293; orders by Judge in Chambers 346, and by Master in Equity 12.

Lunacy Jurisdiction.

Jurisdiction in Lunacy in the Supreme Court is exercised as a separate jurisdiction by the Chief Judge in Equity. There is a Master in Lunacy (who is also Master in Equity) to perform administrative work and manage estates. The Court upon hearing evidence, with or without examination of the person, may declare any person to be of unsound mind or incapable of managing his own affairs, or it may direct that such question be determined by a jury of four or twelve persons. When such a declaration is made the Master in Lunacy may assume the management of such person's estate until his discharge or death, or a committee of management may be appointed subject to supervision by the Master in Lunacy.

The amount of trust funds of insane persons and patients vested in the Master in Lunacy at 30th June, 1931, was £919,009. In addition there were assets of considerable value in the form of scrip, bonds, mortgages, etc., and real estate. A deduction at the rate of 2 per cent. from the net income of estates of insane patients managed by the Master in Lunacy amounted in 1930-31 to £3,815 and the fees collected to £195.

Bankruptcy Jurisdiction.

Bankruptcy law and procedure in New South Wales were virtually codified by a consolidating Act passed in 1898. The State law has been superseded by the Bankruptcy Act of the Commonwealth which came into force on 1st August, 1928, so that the State Act applies only to matters not dealt with in the federal Act, and to proceedings pending at 1st August, 1928.

Under the federal law any person unable to meet his debts may surrender his estate for the benefit of his creditors, or the latter may apply for compulsory sequestration under certain conditions provided the aggregate amount of indebtedness exceeds £50. Upon the issue of an order of sequestration the property of the bankrupt vests in the official receiver named in the order, and no creditor has any remedy against the property or person of the bankrupt except by appeal to the Court. Under certain conditions a bankrupt may compound with his creditors or enter into a scheme of arrangement, if approved by the Court.

An Inspector-General in Bankruptcy has been appointed under the Commonwealth Act, and bankruptcy jurisdiction in New South Wales, which forms one of the federal bankruptcy districts, is vested in the Supreme Court of the State. One judge in particular exercises the jurisdiction, but for purposes of convenience all the Supreme Court Justices are invested with bankruptcy jurisdiction. A Federal Court of Bankruptcy has been constituted also, in terms of an amending Act passed in July, 1930.

The Court has power to decide questions of priorities and other questions of law affecting a bankrupt estate. Questions of fact may be tried before a jury.

The Registrar in Bankruptcy has such duties as the Attorney-General of the Commonwealth directs, or as are prescribed, and he exercises powers of an administrative nature delegated by the Court. He may hear debtors' petitions, make full examination of bankrupts or of persons suspected to be indebted to a bankrupt, make sequestration orders, and grant orders of discharge where the applications are not opposed. There are deputy registrars in the country districts.

Official receivers who manage assigned estates for the benefit of creditors, act under the general authority and directions of the Registrar, and the receiverships are distributed amongst them by the Court. Persons registered by the Court as qualified to act as trustees, as well as official receivers, may be appointed by resolution of the creditors to manage sequestrated estates.

Particulars of the operations in New South Wales under the Bankruptcy Act of the Commonwealth are shown in the chapter of this Year Book relating to Private Finance.

Probate Jurisdiction.

Probate jurisdiction extends over all property, real or personal, in New South Wales of deceased persons, testate or intestate. The jurisdiction is exercised by a Probate Judge, or by any judge acting on his behalf. By probate rule of 18th October, 1906, the Registrar in Probate exercises jurisdiction in granting probate and letters of administration in all matters where no contention has arisen. The Registrar or any interested party may refer any matter to the Court. The Registrar also exercises jurisdiction in minor dealings affecting estates where no objection is raised by any interested party.

Until the granting of probate or letters of administration the property of deceased persons vests in the Chief Justice, and cannot be legally dealt with except in minor matters. In this way the rights of the successors, the creditors, and the State are safeguarded. Cases of disputed wills are tried by the Judge, with or without a jury, to determine issues of fact, and jurisdiction is exercised over administrators and executors.

The following table shows the number and values of estates dealt with in the past six years:—

Year.	Probates Granted.		Letters of Administration.		Total.	
	Number of Estates.	Gross Value of Estates.	Number of Estates.	Gross Value of Estates.	Number of Estates.	Gross Value of Estates.
		£		£		£
1926	4,257	19,877,443	2,475	2,194,979	6,732	22,072,422
1927	4,369	21,880,669	2,554	3,550,107	6,923	25,430,776
1928	4,641	23,605,364	2,581	3,037,228	7,222	26,642,592
1929	5,355	23,010,133	2,795	3,079,249	8,150	26,089,382
1930	4,616	23,460,033	2,623	2,693,246	7,239	26,153,279
1931	4,574	19,049,172	2,195	2,201,860	6,769	21,251,032

The values shown above represent the gross value of estates, inclusive of those not subject to duty, and of estates dealt with by the Public Trustee.

In some cases probate or letters of administration are taken out a second time and such estates are duplicated in the foregoing figures. Where estates are less than £300 in value probate or letters of administration may be granted on personal application to the Registrar, without the intervention of a solicitor.

Jurisdiction in Matrimonial Causes (Divorce).

This jurisdiction was conferred on the Supreme Court by the Matrimonial Causes Act, 1873. Previously marriages could be dissolved only by special Act of Parliament. This Act, with its amendments, was consolidated in 1899. A Judge of the Supreme Court is appointed Judge in Divorce, but any other judge may act for him. The forms of relief granted are dissolution of marriage, judicial separation, declaration of nullity of marriage, and orders for restitution of conjugal rights. Orders for the custody of children, alimony, damages, and settlement of marriage property may be made. Decrees for the dissolution of marriage are usually made provisional for a short period, and absolute at the expiration thereof if no reason to the contrary is shown, *e.g.*, collusion.

The grounds on which dissolution may be granted on petition and the conditions as to domicile have been set out in previous issues of this Year Book.

The following statement shows the number of petitions in matrimonial causes made and granted in New South Wales during the past three years in comparison with the average per year in quinquennial periods since 1908:—

Year.	Petitions for Divorce, Judicial Separation, and Nullity of Marriage Lodged.	Number of Petitions Granted.					Restitution of Conjugal Rights.	
		Divorces.		Petitions for Judicial Separation Granted.	Nullity of Marriage.		Petitions.	Decrees granted.
		Decrees <i>Nisi</i> Granted.	Decrees <i>Nisi</i> made Absolute.		Decrees <i>Nisi</i> Granted.	Decrees <i>Nisi</i> made Absolute.		
1908-12*	453	260	260	12	4	4	28	18
1913-17*	642	393	342	9	3	3	74	51
1918-22*	1,041	672	562	13	7	5	236	141
1923-27*	1,391	992	903	13	9	8	266	168
1928	1,508	1,069	913	6	8	8	330	179
1929	1,595	1,132	1,066	17	17	12	315	192
1930	1,476	1,141	933	7	13	11	298	179

* Average per year.

The number of petitions lodged in *forma pauperis* during 1930 was 582, of which 519 were for divorce, 6 for nullity of marriage, 8 for judicial separation, and 49 for restitution of conjugal rights.

The number of petitioners of each sex in cases where decrees for divorce or nullity of marriage were made absolute, or judicial separation was granted, during each of the past ten years was as follow:—

Year in which Petition was granted.	Number of Successful Petitions lodged by			Year in which Petition was granted.	Number of Successful Petitions lodged by		
	Husband.	Wife.	Total.		Husband.	Wife.	Total.
1921	389	418	807	1926	323	524	847
1922	296	397	693	1927	421	667	1,088
1923	314	438	752	1928	373	554	927
1924	359	486	845	1929	429	666	1,095
1925	439	645	1,084	1930	396	555	951

The proportion of the petitions lodged by husbands is about 40 per cent.

The grounds of suits in which decrees for divorce or nullity of marriage were made absolute during each of the past five years were as follow:—

Ground of Suit.	1926.	1927.	1928.	1929.	1930.
Adultery	189	257	190	249	202
Bigamy	6	7	8	6	7
Cruelty and Repeated Assaults	3	12	6	9	5
„ „ Habitual Drunkenness	19	16	20	15	15
Desertion	472	643	558	611	552
Habitual Drunkenness and Neglect to Support, or Neglect of Domestic Duties	24	9	12	21	22
Non-compliance with Order for Restitution of Conjugal Rights	119	121	125	156	135
Other	3	3	2	11	6
Total	835	1,068	921	1,078	944

In the 933 cases in which decrees for divorce were made absolute during 1930, the duration of marriage was as follows:—Under 5 years, 45; 5-9 years, 297; 10-14 years, 280; 15-19 years, 148. In 128 cases the duration was between 20 and 30 years; in 31 it was between 30 and 40 years; and in 4 between 40 and 50 years. In the case of 316 marriages there were no children; one child in 270 cases; two children, 190; three children, 78; four children, 36; and five or more children in 37 cases. In 6 cases, the details were not stated.

Admiralty Jurisdiction.

Jurisdiction as a Colonial Court of Admiralty was conferred on the Supreme Court of New South Wales on 1st July, 1911, by Order-in-Council, under the Colonial Courts of Admiralty Act (Imperial), 1890. The Court may sit also as a Prize Court by authority of a proclamation of August, 1914, under the Prize Courts Act (Imperial), 1894.

Courts of Marine Inquiry.

Cases of shipwreck or casualty to British vessels, or the detention of any ships alleged to be unseaworthy, and charges of misconduct against officers of British vessels arising on or near the coast of New South Wales, or on any ship registered at or proceeding to any port therein, are heard by one or more authorised Judges of the District Court or Police or Stipendiary Magistrates sitting with two or more assessors as a Court of Marine Inquiry.

The proceedings of the Court are governed by the Navigation Acts of the State and Commonwealth.

Licensing Courts.

Under the Liquor Act of 1912 and its amendments, a Licensing Court in each of the licensing districts in New South Wales deals with applications for new licenses, renewals, removals, or transfers of existing licenses to manufacture or sell intoxicating liquors.

Three police magistrates, appointed as licensing magistrates, constitute the Licensing Courts for all the districts of the State. The same magistrates constitute the Licenses Reduction Board. They may delegate minor functions to a police or stipendiary magistrate. The Court sits as an open court, and appeals from its decisions lie to the District Court.

Particulars relating to the operations of the Licensing Courts and the Licenses Reduction Board are shown in the chapter entitled "Social Condition."

Fair Rents Courts.

These courts were established under the Fair Rents Act, 1915, for the regulation of the rents of dwellings let at a rental not exceeding the rate of £3 per week. The jurisdiction was extended in 1926 to retail shops at rentals not exceeding £6 per week, but it was curtailed by an amendment passed in 1928, which provides also that the Fair Rents Act will cease to have effect on 1st July, 1933.

Particulars of the operations of the Courts are published in the chapter "Food and Prices" of this Year Book.

(Mining) Wardens' Courts.

By virtue of the Mining Act, 1906, and amendments, mining wardens may hold courts to determine disputes within their districts as to the possession of mining lands, or claims under mining contracts. In general their procedure is summary, and their decisions final, but appeal lies in certain cases to a District Court sitting as a Mining Appeal Court or, on points of law, by way of stating a case to the Supreme Court.

Taxation Courts of Review.

Judges of the District Courts have been authorised to sit as Taxation Courts of Review under the Land and Income Tax Act, 1895. The jurisdiction extends to the hearing and determining of appeals lodged against assessments by the Commissioner of Taxation by persons within the local jurisdiction of the Court. Points of law may be referred to the Supreme Court, but otherwise no appeal is allowed.

INDUSTRIAL TRIBUNALS.

A system of industrial arbitration was inaugurated in 1901, when courts of law were established to determine certain disputes between employers and employees relating to working conditions. The system has been changed fundamentally from time to time, and the statutory basis of the present system is the Industrial Arbitration Act, 1912, with subsequent amendments. The Industrial Arbitration (Amendment) Act, 1926, substituted an Industrial Commission for the former Court of Industrial Arbitration as from 15th April, 1926.

The constitution of the Industrial Commission, as provided by the Industrial Arbitration (Amendment) Act passed in December, 1927, consists of a President and two other members, holding office during good behaviour with the same status and rights as a puisne Judge of the Supreme Court. Persons eligible for appointment as a member of the Commission are puisne judges of the Supreme Court, District Court Judges, barristers of five years standing, and solicitors of seven years standing. The Commission has authority to adjudicate in cases of illegal strikes, lockouts or unlawful dismissals; to inquire into any industrial matter referred by the Minister; to determine a standard of living and to declare the living wage; to hold conferences regarding the settlement of any industrial matter; to hear appeals under the Act and to exercise the powers of the Board of Trade under the Monopolies Act. There is a Deputy Commissioner who exercises powers delegated by the Commission.

Conciliation committees may be established for various industries on the recommendation of the Industrial Commission. Their functions are to make awards governing working conditions. The committees have exclusive original jurisdiction in respect of industrial matters arising in industries for which they have been established.

Industrial magistrates are appointed under the Act of 1912, with jurisdiction over cases arising out of non-compliance with awards, and statutes governing working conditions of employees. Their powers are cognate with those of police magistrates.

Details of the constitution and operations of these tribunals are published in the chapter relating to "Industrial Arbitration."

Workers' Compensation Commission.

A special and exclusive jurisdiction was conferred on the Workers' Compensation Commission to determine all questions arising under the Workers' Compensation Act, which came into force on 1st July, 1926, and its amendments. The Commission is a body corporate, with perpetual succession, and it consists of a barrister of five years standing, appointed as chairman with the same status, salary, and rights as a District Court Judge, together with two members appointed for a period of seven years and representing employers and employees respectively. A medical referee may be summoned to sit as assessor with the Commission.

The Chairman alone decides points of law, but, on other matters the decision of the Commission is that of a majority of its members, and such decisions are to be based on the real merits of the case without strict observance of legal precedent. Either the chairman or a majority of the Commission may refer any question of law for the decision of the Supreme Court by way of stating a case, but otherwise the determinations of the Commission are final, and may not be challenged in any court.

For the purpose of conducting its proceedings the Commission has the powers of a Commissioner under the Royal Commissions Act, 1923.

During the year 1929-30, the Commission in open Court dealt with 1,341 applications for determination regarding the liability of employers to pay compensation and in Chambers considered 1,236 applications by dependants of deceased workers, or by workers under a legal disability. Further particulars relating to compensation are shown in the chapter relating to Employment.

*Land Boards.**

Local Land Boards each consisting of a salaried chairman, usually possessing legal and administrative experience, and of two other members (paid by fees) possessing local knowledge, were first appointed under the Crown Lands Act of 1884. These boards sit as open courts, and follow procedure similar to that of Courts of Petty Sessions. Their functions are to determine questions under the Crown Lands Acts, and other matters referred by the Minister. Sittings are held as required at appointed places in each of twelve Land Board Districts in the Eastern and Central Divisions of the State. There are also special Land Boards for the Yanco, Murrumbidgee, and Coomealla Irrigation Areas.

The Western Land Board which is charged with the management and control of Crown Lands in the Western Division of the State, discharges the functions of a local land board within the area of its jurisdiction.

Land and Valuation Court.

The Land Court of Appeal, established originally in 1880, was re-constituted at the close of 1921 as the Land and Valuation Court. This court is presided over by a judge, whose status is equal to that of a Judge of the Supreme Court, and who may sit as an open court at such places as he determines, with two assessors in an advisory capacity. The procedure of the court is governed by rules made by the Judge, who also exercises powers over witnesses and the production of evidence similar to those of a Judge in the Supreme Court. On questions of fact the decisions of the Judge are final, but appeal may be made to the Supreme Court against his decision on points of law.

Broadly stated, the functions of the court are to hear and determine the more important matters and appeals arising under the Crown Lands Acts and cognate Acts, cases involving the ratable-ness of lands and the more important appeals from valuations made by the Valuer-General or by valuers under the Local Government Act.

COURTS OF FEDERAL JURISDICTION.

By the Commonwealth Judiciary Act, 1903-1927, jurisdiction under federal laws is vested in the courts of the States within the limits of their several jurisdictions, as to locality, subject-matter, etc. Justices of the Peace are, however, excluded from exercising federal jurisdiction. Certain Acts (*e.g.*, the Postal Act and Customs Act) also confer jurisdiction in special cases on State Courts. Bankruptcy jurisdiction under federal legislation is vested in the Supreme Court of New South Wales. A Federal Court of Bankruptcy was constituted in 1930.

There are two Commonwealth courts which possess certain jurisdiction, exclusive of State courts, viz., the High Court of Australia and the Commonwealth Court of Conciliation and Arbitration. An account of the latter court and of special industrial tribunals appointed under the Industrial Peace Acts is given in the chapter of this volume entitled "Industrial Arbitration."

The High Court of Australia was established in 1903, and consists of a Chief Justice and five puisne justices. Its principal seat is at the seat of Government, but sittings are held in the various States, and district registrars are appointed as required. The jurisdiction of the Court, which may be exercised in the first instance by one judge, is exclusive with regard to suits between States or any State and the Commonwealth, matters arising directly under a treaty, or writs of mandamus or prohibition against a federal officer or court. The High Court is constituted also as a Court of Appeal for Australia. The Federal Court of Bankruptcy consists of one or two Judges appointed by the Governor-General by Commission.

LOWER COURTS OF CRIMINAL JURISDICTION.

Courts of Petty Sessions (Police Courts).

These Courts are held daily in large centres, and periodically, as occasion demands, in small centres. They operate under various statutes (chiefly the Crimes Act, 1900, Police Offences Act, 1901, and Vagrancy Act, 1902), which describe the nature of offences, penalties, and certain procedure, and prescribe the number of justices or magistrates for the trial of various offences. Cases are heard by a Stipendiary Magistrate in the Sydney, Broken Hill, Parramatta, Newcastle, Bathurst, and Wollongong districts, and in other districts by a Police Magistrate, or by Justices of the Peace. The procedure is governed in a general way by the Justices Act, 1902, and its amendments. These courts deal with minor offences, which may be

treated summarily, while serious charges are investigated, and the accused committed to higher courts when a *prima facie* case is made out.

Offences punishable summarily by Courts of Petty Sessions include most offences against good order and breaches of regulations. Certain offences are made punishable summarily with the consent of the accused. The courts deal also with certain other cases, such as proceedings arising under the Master and Servants Act, the Deserted Wives and Children Act, Child Welfare Act, and administrative regulations.

Appeal against fine or imprisonment is heard by the Court of Quarter Sessions, but on a disputed point of law the magistrate may state a case for the Supreme Court.

Children's Courts.

Children's Courts were established by proclamation under the Infant Protection Act, 1904, and the Neglected Children and Juvenile Offenders Act, 1905, which were consolidated with other enactments by the Child Welfare Act, 1923. Each court consists of a special magistrate with jurisdiction within a proclaimed area. Elsewhere the jurisdiction of a court may be exercised by a special magistrate, or two Justices of the Peace. The magistrates exercise all the powers of a Police or Stipendiary Magistrate in respect of cases involving children as parties or witnesses to the exclusion of ordinary courts of law. By this means children are protected against the adverse influences which they would encounter in the ordinary courts.

The jurisdiction embraces proceedings concerning maintenance of infants, offences by or against children, and neglected or uncontrollable children. The Court is endowed with extensive powers, such as the committal of children to reformatory homes, release on probation, etc.

Appeal from its decision lies in proper cases to the Supreme Court, Quarter Sessions, or in certain circumstances to a District Court.

Separate statistics of the proceedings of Children's Courts are not available, as they are included with those of ordinary Courts of Petty Sessions.

Cases before Magistrates' Courts.

Particulars of the number of offences charged, and convictions obtained in Courts of Petty Sessions and Children's Courts, are shown below. Except where otherwise stated the figures represent the total number of offences charged, and where multiple charges are preferred at the same time, separate account is taken of each. The figures should not be used for the purpose of comparison with other States or countries, unless the same rules are observed in tabulating the statistics of crime. They are not comparable, for instance, with the statistics of Magistrates' Courts in the States of Victoria, South Australia, and Western Australia, where an accused person charged with a number of offences at the same time is counted once only:—

Year.	Offences Charged.				Per cent.		
	Withdrawn or Discharged.	Convicted.	Committed to Higher Courts.	Total.	With- drawn.	Con- victed.	Com- mitted to Higher Courts.
1911	8,878	65,058	1,178	75,114	11·8	86·6	1·6
1921	11,877	80,214	2,594	94,685	12·6	84·7	2·7
1926	14,199	100,644	1,832	116,675	12·2	86·2	1·6
1927	14,478	107,657	1,895	124,030	11·7	86·8	1·5
1928	15,140	119,936	2,008	137,079	11·0	87·5	1·5
1929	16,638	113,398	2,403	132,439	12·6	85·6	1·8
1930	19,143	102,670	2,725	124,533	15·4	82·4	2·2
1931	17,317	101,675	2,751	121,743	14·2	83·5	2·3

Toward the end of 1916 provision was made whereby persons arrested for drunkenness were allowed to forfeit a deposit (nominally bail) in lieu of appearing in court. The amount was originally fixed at 5s., the usual penalty imposed, but it has been increased to 10s. Approximately one-third of the cases of drunkenness are dealt with in this manner, and they are included in the statistics as convictions, as well as those cases where the offender is admonished and set free without penalty.

It is not possible to determine the number of distinct persons charged in each year, as particulars obtained from persons accused of minor offences, particularly vagrants, do not form a reliable basis for identification.

Only a small proportion of the offences for which summary convictions are effected are really criminal offences, that is, offences against person or property. The following table shows a classification of the offences for which summary convictions were recorded, also the rate per 1,000 of mean population:—

Year.	Number of Convictions for Minor Offences.					
	Against the Person.	Against Property.	Against Good Order.		Other Offences.	Total Summary Convictions.
			Drunkenness.	Other.		
1911	1,664	3,404	29,299	14,886	15,805	65,058
1921	2,127	5,924	28,702	18,086	25,375	80,214
1926	1,913	7,328	31,861	16,485	43,557	100,644
1927	1,924	8,114	32,649	17,401	47,569	107,657
1928	1,889	8,274	35,155	18,967	55,651	119,936
1929	1,930	9,677	33,136	18,846	49,809	113,398
1930	1,893	9,859	25,655	15,228	50,035	102,670
1931	1,849	11,708	20,559	15,598	51,961	101,675
Number per 1,000 of Mean Population.						
1911	1.00	2.04	17.60	8.94	9.49	39.07
1921	1.01	2.81	13.61	8.58	12.04	38.05
1926	0.82	3.16	13.51	7.10	18.76	43.35
1927	0.81	3.42	13.75	7.33	20.03	45.34
1928	0.78	3.41	14.49	7.82	22.93	49.43
1929	0.78	3.93	13.44	7.65	20.21	46.01
1930	0.76	3.96	10.31	6.12	20.09	41.24
1931	0.74	4.67	8.19	6.22	20.71	40.53

There has been a marked increase in convictions classified under the heading "other offences," which consist mainly of breaches of administrative law, *e.g.*, traffic regulations and local government by-laws. A large proportion are minor breaches or are committed through inadvertence or in ignorance of the law, and are met with the infliction of a fine. As local

and other administrative activities have been extended, it is a natural corollary that such offences should become more numerous. Thus the convictions under the traffic regulations have increased to such an extent that in recent years they have represented more than half the offences classified in this group, and the number in 1930 was 25,885 as compared with 4,192 in 1921. Excluding offences of this class, the number of convictions per head of population in 1930 was 19 per cent. lower than in 1921. It is noticeable, however, that there has been an increase in summary convictions for offences against property. The number of convictions for drunkenness in 1930 was the lowest since 1919, and the proportion 24 per cent. lower than in 1921.

Coroners' Courts.

The office of Coroner was established in New South Wales by letters patent in 1787, and is regulated by the Coroners Act, 1912, which consolidated previous laws.

Every Stipendiary or Police Magistrate has the powers and duties of a coroner in all parts of the State, except the Metropolitan Police District, which is under the jurisdiction of the City Coroner. In districts not readily accessible by Police Magistrates, a local resident, usually a Justice of the Peace, is appointed coroner.

At the discretion of the Coroner, inquiries are held into the causes of violent or unnatural deaths, into the causes of deaths in gaols, and into the origin of fires causing damage or destruction to property, but may be dispensed with where the Coroner deems inquiry unnecessary. The Coroner may order the attendance of any medical practitioner at the inquest, and may direct him to hold a post-mortem examination. On the evidence submitted the Coroner is empowered to commit for trial persons adjudged guilty of manslaughter, murder, or arson.

In certain cases a jury of six persons may be empanelled to find as to the facts of the case, and on their verdict against any person he may be committed for trial. The instructions to coroners provide that an inquest should be held into the cause of every death occurring among prisoners in gaols and lock-ups. In such cases a jury of six freemen and six prisoners is empanelled. Persons apprehended by the police subsequent to the decisions of coroners are charged in the Courts of Petty Sessions.

During 1930 fourteen persons were committed for trial by coroners on charges of murder, 31 for manslaughter, and 13 for arson. The coroners held inquiries into the origin of 243 fires and found that 30 fires were accidental, and 55 were caused wilfully. In 158 cases the evidence was insufficient to indicate the origin.

HIGHER COURTS OF CRIMINAL JURISDICTION.

The higher courts of criminal jurisdiction consist of the Central Criminal Court (which sits in Sydney and is presided over by a Judge of the Supreme Court), of the Supreme Court on circuit, and of Courts of Quarter Sessions, held at important centres throughout the State, each presided over by a Judge of the District Court as chairman. The courts deal with indictable offences which are the more serious criminal cases. Offences punishable by death may be tried only before the Central Criminal Court, which exercises the criminal jurisdiction of the Supreme Court, or before the Supreme Court on circuit.

All persons charged with criminal offences must be charged before a judge with a jury of twelve chosen by lot from a panel provided by the sheriff. The jury finds as to the facts of the case, and its verdict must be unanimous. If unanimity is not reached within twelve hours, a verdict is not returned, and the accused may be tried before another jury.

Courts of Quarter Sessions.

These Courts are held at times and places appointed by the Governor-in-Council, in districts which coincide with those of District Courts. Forty-three places were appointed in 1931, courts being held usually at the conclusion of District Court sittings, from two to four times a year in country centres, but eleven times in Sydney, and six times in Parramatta.

In addition to exercising their original jurisdiction, the courts hear appeals from Courts of Petty Sessions and certain appeals from other courts, *e.g.*, Licensing Courts. Appeals from Quarter Sessions are heard by the Court of Criminal Appeal.

Central Criminal Court and Supreme Court on Circuit.

The Central Criminal Court exercises the criminal jurisdiction of the Supreme Court in Sydney, and a Judge of the Supreme Court exercises a similar jurisdiction in circuit towns. Usually capital offences, the more serious indictable offences committed in the metropolitan area, and offences which may not be tried conveniently at Quarter Sessions, or at sittings of the Supreme Court in the country, are tried at the Central Criminal Court. Appeal from the finding of these courts lies to the Court of Criminal Appeal, consisting of three or more Judges of the Supreme Court and, in proper cases, to the High Court of Australia or the Privy Council. A Judge of the Supreme Court sitting in Sydney may act as a Court of Gaol Delivery, to hear and determine the cases of untried prisoners upon returns of such prisoners supplied by the gaolers of the State under rules of the Court.

Cases before Higher Criminal Courts.

The following table relates to the number of distinct persons charged before Courts of Quarter Sessions, sittings of the Supreme Court at circuit towns, and the Central Criminal Court, and it shows the number convicted for each of the classes of more serious offences. Where two or more charges were preferred against the same person, account has been taken only of the principal charge.

Year.	Distinct Persons Charged.	Not Guilty, etc.	Convictions—Principal Offence.					
			Against Person.	Against Property.	Against Currency, and Forgery.	Other Offences.	Total Persons Convicted	
							Number.	Per 10,000 of Population.
1911	979	441	141	313	48	36	538	3·23
1912	993	373	136	410	48	26	620	3·55
1913	1,125	353	189	478	60	45	772	4·24
1921	1,722	611	166	853	48	44	1,111	5·27
1926-27	1,181	437	156	515	23	50	744	3·17
1927-28	1,348	471	191	615	23	48	877	3·65
1928-29	1,369	523	179	588	31	48	846	3·46
1929-30	1,495	461	172	805	29	28	1,034	4·15
1930-31	1,711	503	170	977	36	25	1,208	4·83

In view of the facts that trials of accused persons in higher criminal courts take place on indictment by the Attorney-General, and usually after

magisterial inquiry into the sufficiency of evidence for such trials, and that the question of guilt is decided by a jury of laymen, it is interesting to note that only about two-thirds of the persons charged are convicted, and in the case of offences against the person the proportion is less than one-half.

Of the persons convicted during the year ended 30th June, 1930, the males numbered 1,002 and females 32. The proportion per hundred thousand of each sex was: Males 79, females 3.

The following table shows the number of persons convicted for specific offences included in the foregoing statement:—

Offences,	Number of Offenders Convicted.				
	1911.	1921.	1926-27.	1928-29.	1929-30.
Murder	3	8	7	3	3
Attempted Murder, Shooting with Intent ...	3	3	2	3	9
Manslaughter	4	13	6	7	8
Rape and other Offences against Females ...	29	21	33	48	31
Unnatural Offences	2	23	15	25	19
Abortion and Attempts to Procure... ..	3	2	4	3	2
Bigamy	16	22	18	15	18
Assault	80	63	55	50	65
Burglary and Housebreaking	62	244	198	267	384
Robbery and Stealing from the Person ...	14	35	45	34	54
Stealing Horses, Cattle, Sheep	26	48	1	4	7
Embezzlement and Stealing by Servants ...	26	42	18	21	25
Larceny and Receiving	131	376	160	169	221
Fraud and False Pretences	38	80	59	54	74
Arson ... ..	...	1	4	4	2
Forgery, Uttering Forged Documents ...	41	44	22	25	26
Conspiracy	10	16	38	20	17
Perjury and Subornation	10	17	5	8	9

In so far as the number of persons convicted indicates the vogue of crime, the above statement shows that during post-war as compared with pre-war years, the increase in crime occurred principally in burglary and housebreaking. On the other hand considerable decreases took place in the number of assaults and cases of forgery.

COURTS OF APPELLATE JURISDICTION.

Generally speaking, appellate jurisdiction is exercised, in cases where appeals are permitted, by the District Courts and Courts of Quarter Sessions from Magistrates' Courts, by the Supreme Court from District Courts and Courts of Quarter Sessions, by the High Court of Australia from the Supreme Court, and (in certain cases) by the Privy Council from either of the two last-named courts. Appeal on points of law (usually by stating a case) may be made to the Supreme Court from any ordinary court of the State or from any special court (*e.g.*, Land, Industrial Commission, and Workers' Compensation Commission).

A Court of Criminal Appeal, presided over by Judges of the Supreme Court, was established in 1912.

Civil Appeals to the Supreme Court.

Three or more Judges of the Supreme Court may sit in its various civil jurisdictions (1) *in Banco*, to hear appeals from District Courts or from decisions of justices in chambers, and to consider motions for new trials and kindred matters—in certain circumstances such cases may be heard by one justice; (2) as a Full Court of three or more justices, to hear appeals

from orders and decrees made by one justice in the various jurisdictions of the court. One judge may sit in chambers to hear applications for writs of mandamus or prohibition, and to determine special cases stated by magistrates.

Appeals to the High Court of Australia.

Appeal to the High Court of Australia from judgments of the Supreme Court of New South Wales may be made in any case by permission of the High Court, and as of right in cases involving a matter valued at £300 or more, or involving the status of any person under laws relating to aliens, marriage, divorce or bankruptcy, provided that appeal lay to the Privy Council in such case at the date of establishment of the Commonwealth. Such appeal may be made even if a State law provides that the decision of the Supreme Court is final.

Appeals to the Privy Council.

Appeals from Dominion Courts to the Crown-in-Council are heard by the Judicial Committee of the Privy Council by virtue of the royal prerogative to review decisions of all Courts of the Dominions, which can be limited only by Act of Parliament.

The cases which may be heard on appeal by the Judicial Committee were defined by Order-in-Council in 1909. Appeal may be made as of right from determinations of the Supreme Court involving any property or right to the value of £500 or more, and as of grace from the Supreme or High Court in any matter of substantial importance, including criminal cases in special circumstances. Except where the High Court consents no appeal may be made to the Privy Council upon any question as to the limits *inter se* of the constitutional powers of the Commonwealth or States.

APPEALS IN CRIMINAL CASES.

Appeals to Quarter Sessions.

The right of appeal from Courts of Petty Sessions to Courts of Quarter Sessions lies against all convictions or orders by magistrates, excepting adjudication to imprisonment for failure to comply with an order for the payment of money, for the finding of sureties for entering into a recognizance or for giving security, and orders for the payment of wages and convictions for breaches of discipline under the Seamen's Act, 1898. The Appeal Court rehears the cases, deciding questions of fact as well as of law.

Court of Criminal Appeal.

The Court of Criminal Appeal was established by the Criminal Appeal Act of 1912, which prescribes that the Supreme Court shall be the Court of Criminal Appeal, constituted by three or more Judges of the Supreme Court as the Chief Justice may direct. Any person convicted on indictment may appeal to the Court against his conviction (1) on any ground which involves a question of law alone, or (2) with the leave of the Court or upon the certificate of the judge of the court of trial, on any ground which involves a question of fact alone, or of mixed law and fact, or any other ground which appears to the Court to be sufficient. With the leave of the Court, a convicted person may appeal also against the sentence passed on conviction. In such appeal the Court may quash the sentence and substitute another either more or less severe.

In addition to determining appeals in ordinary cases the Court has power, in special cases, to record a verdict and pass a sentence in substitution for the verdict and sentence of the Court of trial. It also may grant a new trial, either on its own motion or on application of the appellant.

POLICE.

THE police force of New South Wales is organised under the Police Regulation Act of 1899 and amendments. The Commissioner of Police, under direction of the Colonial Secretary, is charged with the superintendence of police, and is responsible for the organisation, discipline, and efficiency of the force. Superintendents and inspectors of police are appointed by the Governor as subordinates of the Commissioner. Sergeants and constables are appointed as required by the Commissioner, but such appointments may be disallowed by the Governor.

No person may be appointed constable unless he is of sound constitution, able-bodied, under the age of 30 years, of good character, and able to read and write. Any person who has been convicted of a felony, is in other employment, or keeps a house for the sale of liquor, is incapable of acting as an officer of police. A high physical standard is required of recruits.

Pension and gratuity rights accrue to officers who retire by reason of medical unfitness for duty, or on or after attaining the age of 60 years. Where an officer is disabled or killed in the execution of his duty, a special allowance not exceeding his salary at the time of disablement may be paid to him or his dependents. Particulars of the pension fund are shown in the chapter entitled "Social Condition."

The primary duties of the police are to prevent crime, to detect offenders and to bring them to justice, to protect life and property, to enforce the law, and to maintain peace and good order throughout the State. In addition, they perform many duties in the service of the State, *e.g.*, they act as clerks of petty sessions in small centres, as Crown land bailiffs, foresters, mining wardens, inspectors under Fisheries and other Acts, and they collect a large volume of statistical returns. In the metropolitan area the police regulate the street traffic.

New South Wales is divided into nine superintendents' districts, containing 679 police stations, and a police force numbering 3,735, of whom twelve are women, *viz.*, four matrons and eight special constables. The distribution of the force in December, 1930, was as follows:—

Classification.	Commissioner and Superintendents.	Inspectors.	Sergeants.	Constables.	Trackers.	Total.
General	12	64	596	2,470	22	3,164
Criminal Investigation Branch...	...	3	30	41	...	74
Others on detective work ...	...	...	27	139	...	166
Traffic ... ..	...	2	15	232	...	249
Mounted Traffic Patrol ...	...	...	1	15	...	16
Water ... ..	...	1	14	51	...	66
Total	12	70	683	2,948	22	3,735

The mounted police numbered 782, including the inspectors and superintendents, 172 sergeants, 506 constables, and 22 black trackers.

The following statement shows for various years since 1901 the strength of the police establishment (exclusive of trackers and women police) in relation to the population. With a greater volume of administrative legislation their duties have been increased considerably during the period:—

Year.	Number of Police.	Inhabitants to each Policeman.	Year.	Number of Police.	Inhabitants to each Policeman.
1901	2,172	634	1927	3,105	774
1911	2,487	684	1928	3,439	712
1921	2,734	779	1929	3,623	684
1926	2,966	792	1930	3,701	673

During each period intervening between the years shown above there was a decline in the strength of the police force in relation to the population until 1926. In each subsequent year the net additions to the force have been greater than the increase in population.

A comparative statement of the annual expenditure of the Police Department is shown below:—

Year ended 30th June—			Expenditure.				State Contribution to Superannuation Fund.
			Salaries.	Contingencies.	Total.	Per Head of Population.	
			£	£	£	s. d.	£
1911	...	...	392,602	99,951	492,553	5 11	24,000
1921	...	...	833,818	223,283	1,062,101	10 2	80,000
1926	...	...	949,842	258,222	1,208,064	10 6	153,650
1927	...	...	964,817	269,690	1,234,507	10 6	170,600
1928	...	...	1,111,101	291,853	1,402,954	11 8	165,200
1929	...	...	1,210,918	313,421	1,524,339	12 5	167,450
1930	...	...	1,286,700	353,990	1,640,690	13 3	175,525
1931	...	...	1,291,737	302,089	1,593,826	12 9	190,800

PRISONS.

A PRISON may be established by proclamation of the Governor, at any premises prepared and maintained as a prison at the public expense. A Comptroller-General is appointed by the Governor for the care of prisons and custody of convicted prisoners. Persons in custody awaiting trial are held by the Comptroller-General for the Sheriff.

All prisons must be visited at least once each week by a magistrate appointed to be "Visiting Justice," who may enter and inspect, and report to the Chief Secretary upon any matter connected with the gaol as often as he deems necessary. Such justice may hear and determine complaints against prisoners and award as punishment a term of solitary confinement. In addition Judges of the Supreme Court may visit prisons and sit as a Court of Gaol Delivery to determine cases of untried prisoners.

At 30th June, 1931, there were 26 gaols in New South Wales. Six were classed as principal gaols, 11 as minor, and 9 as police gaols. The principal gaols were the State Penitentiary for men and the State Reformatory for Women—both at Long Bay, Sydney—and the gaols at Parramatta, Bathurst, Goulburn, and Maitland. Each of these gaols is used for a particular class of prisoners.

The State Penitentiary is used for prisoners awaiting trial, etc., and those sentenced at metropolitan courts to short periods of detention, and it is a centre from which long-sentence prisoners are distributed to country establishments. The State Reformatory is used for female prisoners of all classes. At Goulburn Gaol special treatment is provided for first offenders, and at Bathurst and Parramatta prisoners convicted more than once are imprisoned.

The smaller gaols are used for prisoners undergoing short sentences, and for the detention of those who require special treatment apart from other long-sentence prisoners. Among the minor gaols are the Afforestation Camps at Tuncurry, Bombala, Glen Innes, Oberon and Tumbarumba and the Emu Plains Prison Farm. At the Prison Farm, prisoners—usually first offenders—under 25 years of age are trained in farm work; at Tuncurry older men are employed on a pine plantation, and similar work is provided at other afforestation camps. At these establishments the conditions of gaol life are modified with the object of befitting the men to lead useful lives after release, and for this reason the prisoners sent to the camps are selected with discrimination.

The police gaols are used for the detention of persons sentenced in the various districts for periods not exceeding fourteen days.

In the larger gaols the prisoners are classified according to character and previous record, and the principle of restricted association is in operation.

PRISONERS.

The number of gaol entries during various years since 1901 and the number of prisoners in gaol at the close of each year are shown below. The figures are exclusive of persons detained under the Inebriates Act:—

Year.	Number of Gaol Entries during Year.	Prisoners under Sentence.							
		Received during Year.				In Prison at end of Year.			
		Males.	Females.	Total.	Per 1,000 of Population.	Males.	Females.	Total.	Per 10,000 of Population.
1901	14,361	8,899	2,941	11,840	8.6	1,605	207	1,812	12.3
1911	9,532	6,086	1,347	7,433	4.5	1,134	115	1,249	6.9
1921	8,817	5,541	1,073	6,614	3.1	1,272	97	1,369	6.0
1925-26	8,750	5,811	1,059	6,870	3.0	1,378	85	1,463	6.1
1926-27	8,158	5,248	941	6,189	2.6	1,434	69	1,503	6.1
1927-28	9,414	6,194	958	7,092	3.0	1,690	85	1,775	6.9
1928-29	10,033	6,530	1,093	7,623	3.1	1,710	89	1,799	6.8
1929-30	11,271	7,378	1,286	8,664	3.5	1,749	94	1,843	7.4
1930-31	12,148	8,563	1,264	10,127	4.1	1,628	63	1,691	6.7

The number of gaol entries shown in the table includes convicted persons, persons awaiting trial, debtors, naval and military offenders, and persons on remand, some of whom were received and counted several times.

The number of persons received into prison under sentence, counted once each time received, in 1930-31 was 10,127, viz., males 8,863, and females 1,264. The total number was above the average of recent years owing to an increase in the number detained for short periods in default of the payment of fines. Nevertheless the ratio to the population 4.1 per 10,000 was slightly lower than in 1911 and less than half the ratio in 1901.

The number of distinct persons received into gaol under sentence in 1930-31 was 7,882, of whom 719 were women. The number was greater by 1,287 than in the preceding year, but there were fewer prisoners in gaol at 30th June, 1931, than there were twelve months earlier.

The sentences imposed on the prisoners received into gaol during the years ended 30th June, 1930 and 1931, were as follows:—

	1929-30	1930-31
Not exceeding one week	2,393	3,557
Over one week and not exceeding one month ..	2,573	3,040
Over one month and not exceeding six months ..	2,084	1,862
Over six months and not exceeding one year ..	470	500
Over one year and not exceeding two years ..	285	329
Over two years and not exceeding five years ..	88	130
Over five years and not exceeding ten years ..	15	8
Over ten years	5	2
Life	3	5
Death	3	..
Term not specified	745	694
	8,664	10,127

Capital punishment may be inflicted in New South Wales, but executions are unusual. Since the beginning of the year 1918 there have been four executions—two in 1924, and two in 1927.

The prisoners remaining in gaol under sentence on 30th June, 1931, numbering 1,691, included 60 serving life sentences, and 90 who had been declared habitual criminals and sentenced for an indefinite period.

The system of indeterminate sentences was introduced in terms of the Habitual Criminals Act, 1905, which empowers a judge to declare as an habitual criminal any person convicted for the third or, in some cases, the fourth time of certain criminal offences, as specified in the Act. The declarations were made only in the case of convictions on indictment until the Act was amended in 1924 to extend the system to persistent offenders, who are convicted summarily. In such cases a stipendiary or police magistrate may direct that an application be forwarded to a Judge of the Supreme Court or a Court of Quarter Sessions to have the prisoner declared an habitual criminal.

In gaol, the habitual criminal serves the definite sentence imposed for the offence of which he has been convicted, then he is detained for an indefinite term, until he is deemed fit for freedom. The indeterminate stage is divided into three grades—intermediate, higher, and special. A minimum period of 4 years 8 months must be spent in the lower grades before the prisoner can gain admission to the special grade, wherein cases may be brought under consideration with a view to release on license. After release he is required to report to the authorities at stated intervals during a period specified in the license.

The Habitual Criminals Act prescribes that while under detention as an habitual criminal every prisoner must work at some useful trade, and receive a share of the proceeds of his work. As the majority of these persons have not been trained in any branch of skilled labour, facilities are afforded them, while serving the definite term, to acquire training in some remunerative employment.

Eighteen men were declared habitual criminals during the year ended 30th June, 1931, and 18 in the previous year. At 30th June, 1931, there were under detention 38 men who had not yet completed the definite period of their sentence, and 52 men who had passed into the indeterminate stage.

Among the special classes of prisoners are those known as "maintenance confinees," who have been imprisoned for disobeying orders of the courts for the maintenance of their wives and children. Such prisoners are required to work, and the value of the work, after deducting the cost of the prisoner's keep, is applied towards the satisfaction of the orders for maintenance, etc.

During 1929-30 the number of maintenance confinees received into gaol was 573, as compared with 449 during the year 1928-29. Gaol earnings to the amount of £3,178 were paid to dependants of confinees during the year. Eleven confinees paid the amount of their orders from gaol earnings, and 119 partly from gaol earnings. The number received in 1930-31 was 645, and 130 were in gaol at the end of that year.

Sickness and Mortality in Gaols.

The medical statistics of prisons show that, with an average daily number of 1,909 inmates during 1929-30, the total number of cases of sickness treated in hospital was 512. Thirteen prisoners died, and 13 were released on medical grounds. The death rate per 1,000 of the average number of inmates was 6.8. There were no executions during the year.

Particulars relating to cases of venereal diseases amongst prisoners and those detained in lock hospitals are shown in the chapter entitled "Social Condition."

Industrial Activity in Prison Establishments.

It is accepted as a principle that useful employment is one of the most important factors in promoting discipline and good conduct in the gaols and in reforming those who have lapsed into crime. Therefore employment at industries calculated to inspire interest, to encourage some degree

of skill, and subsequently to prove remunerative, is provided under the supervision of competent instructors. The principal activities are farming, gardening, bread-baking and minor manufactures, and the scope for employment in skilled trades is being extended steadily. Under a system introduced in April, 1922, prisoners may receive payment for work produced in excess of a fixed task.

In 1930-31 the value of prisoners' labour of a productive nature, excluding domestic employment, amounted to £68,255.

BIRTHPLACES, RELIGIONS, AND EDUCATION OF PRISONERS.

The number of persons serving sentences in gaols at 30th June, 1930, were distributed according to birthplaces and to religions as follow:—

Birthplace.	Males.	Females.	Total.	Religion.	Males.	Females.	Total.
New South Wales ...	1,039	66	1,105	Church of England	855	37	892
Other Australian ...	307	9	316	Roman Catholic .	615	48	663
New Zealand ...	53	3	56	Methodist ...	52	2	54
England and Wales ...	165	5	170	Presbyterian ..	136	7	143
Scotland ...	62	2	64	Other Christian ..	28	...	28
Ireland ...	34	6	40	Non-Christian ..	17	...	17
Other British ...	26	...	26	No religion ...	45	...	45
Foreign Countries ...	62	2	64	Not stated ...	1	...	1
Not stated ...	1	1	2	Total ...	1,749	94	1,843
Total ..	1,749	94	1,843				

Thirteen prisoners were illiterate, 6 could read English, but could not write, and 7 could read and write in a foreign language only.

REMISSION OF SENTENCES.

First Offenders.

Special provision is made by the Crimes Act, 1900, and its amendments, for lenience towards any person convicted of a minor offence and sentenced to imprisonment, provided such person has not been convicted previously of an indictable offence. The term "minor offence" includes offences punishable summarily, and any other offence to which the court applies these provisions of the Act. In such cases the execution of the sentence is suspended upon the offender entering into recognisance to be of good behaviour for a fixed period, which may not be less than twelve months. Such persons are required to undergo an examination to facilitate future identification and to report periodically to the police. During the period of probation they may be arrested and committed to prison for the term of sentence imposed for any breach of the conditions of their release.

The hearing of charges against female first offenders must be in private unless the defendant elects to be heard in open court, and reports of such cases may not be published. In terms of an amending Act passed in 1929 this law does not apply to cases of larceny in retail shops.

The following table shows particulars concerning persons released as first offenders in the various years since 1901; cases of children released on probation by the Children's Courts are not included.

Year.	First Offenders Released on Probation.			Year.	First Offenders Released on Probation.		
	By Higher Courts.	By Magistrates Courts.	Total.		By Higher Courts.	By Magistrates Courts.	Total.
1901	156	23	179	1927	30	364	394
1911	220	61	281	1928	*	*	*
1921	246	395	641	1929	21	436	457
1926	29	502	531	1930	2	573	575

* Not available.

Prisoners released on Probation.

By good conduct and industry certain classes of prisoners may gain the remission of part of their sentences. They are released on license on terms similar to those applied to first offenders as described above.

The licenses operate for the unexpired portion of the sentence, and a breach of the conditions of release may be punished by the cancellation of the license, and recommitment to gaol for the balance of the sentence. Licenses under the Crimes Act were granted to 97 men and 2 women during the year ended 30th June, 1930, and to 90 men and 8 women during 1930-31.

COST OF ADMINISTRATION OF JUSTICE.

The following table shows the amount expended by the State in the administration of justice, in the protection of property, and in the punishment of criminals, in New South Wales during 1920-21, 1925-26, and in each of the last three years; also the amount of fines and fees, and net returns from prisoners' labour paid into the Consolidated Revenue:—

Expenditure and Revenue.	1920-21.	1925-26.	1928-29.	1929-30.	1930-31.
Expenditure—					
Law Administration—	£	£	£	£	£
Salaries, Pensions, etc., of Judges	59,106	61,434	67,693	68,091	63,903
Other	288,742	379,158	418,697	409,935	380,919
	347,848	440,592	486,390	478,024	444,822
Police—					
Administration, etc. ...	1,062,201	1,208,064	1,524,339	1,640,690	1,593,826
Payments to Pension Fund ...	80,000	153,650	167,450	175,525	190,800
	1,142,201	1,361,714	1,691,789	1,816,215	1,784,626
Prisons	126,122*	187,284	212,131	226,908	215,809
Total Expenditure ...	1,616,171	1,989,590	2,390,310	2,521,147	2,445,257
Revenue—					
Fees	100,188	149,332	201,659	220,140	210,418
Fines and Forfeitures ...	45,303	47,332	63,969	88,765	62,503
Receipts by Prisons Department	212	15,380	10,107	18,312	15,029
Total Revenue ...	145,703	212,044	275,735	327,217	287,950
Net Cost	1,470,468	1,777,546	2,114,575	2,193,930	2,157,307
Expenditure per Head of Mean Population—	s. d.	s. d.	s. d.	s. d.	s. d.
Law Administration ...	3 4	3 10	4 0	3 10	3 7
Police	10 11	11 10	13 10	14 8	14 3
Prisons	1 2	1 8	1 8	1 10	1 9
Total Expenditure ...	15 5	17 4	19 6	20 4	19 7
Revenue	1 5	1 10	2 3	2 8	2 4
Net Cost	14 0	15 6	17 3	17 8	17 3

* Calendar year preceding.

The expenditure on law administration includes the salaries, etc., of judges, and the expenditure of the Departments of the Attorney-General and of Justice, except the expenditure on prisons, which is shown separately, and on sub-departments not directly concerned in the administration of the law, and certain other expenses.

The expenditure by the Police Department shown above is not absorbed solely by police services proper, since the members of the police force perform extensive administrative services for other Departments of State.

The receipts of the Prisons Department as stated in the table do not include the value of work done by the prisoners for the prisons and Government departments.

POPULATION.

EARLY ENUMERATIONS.

THE growth of the population of New South Wales between 1788 and 1856 is traced on page 223 of the Official Year Book for 1922, and the area and population at each territorial readjustment are shown on page 1 of this issue.

The Census.

In the majority of countries a census enumeration is taken at intervals of ten years, but in some the interval has been reduced to five years.

The rapidity of modern progress and the increasing importance of watching the relative change of economic factors, combined with the difficulty of estimating approximately a population or its composition as regards sex, age, occupation, distribution, &c., at a date distant from that on which such facts were accurately known, have resulted in a movement for the adoption of the shorter interval.

It has been found that up to five years such estimates have been of much practical value, but after that period their value rapidly decreases.

For these reasons it is regrettable that it has been deemed advisable to postpone the next census of the Commonwealth from 1931 to 1935. The last census was taken in 1921.

With the exception of the territory ceded to the Commonwealth Government in 1911, New South Wales has occupied its present boundaries since 1859, and census particulars are available at regular decennial intervals since 1861. These particulars furnish a connected and accurate summary of the development of population since that date, and a survey of the growth of the total population of New South Wales, including Lord Howe Island, is shown in the following table:—

Year.	Population.	Index Number of Population.	Increase in Population since previous Census.			Number of Persons per Square Mile.
			Numerical.	Proportional.	Average Annual Rate.	
1861†	350,860	100	172,192*	per cent. 91.00	per cent. 6.98	1.12
1871†	503,981	144	153,121	43.64	3.69	1.61
1881†	751,468	214	247,487	49.11	4.08	2.41
1891†	1,132,234	323	380,766	50.67	4.19	3.64
1901†	1,359,133	387	226,899	20.04	1.84	4.38
1911†	1,648,746	470	289,613	21.31	1.95	5.32
1921†	2,101,968	599	453,222	27.49	2.46	6.79.
1922†	2,174,553	619	72,585	3.45	1.96	7.03
1923†	2,211,106	630	109,138	5.19	1.86	7.15
1924†	2,256,090	643	154,122	7.33	1.90	7.30
1925†	2,300,081	656	198,113	9.42	1.91	7.42
1926†	2,349,401	669	247,433	11.77	1.95	7.59
1927†	2,401,884	684	299,916	14.27	2.00	7.76
1928†	2,446,874	697	344,906	16.41	1.98	7.91
1929†	2,479,147	707	377,179	17.94	1.90	8.01
1930†	2,502,039	713	400,071	19.03	1.80	8.21

* Since 1851.

† Census held at end of March or beginning of April.

‡ 31st December.

The annual rate of growth was 1.95 per cent. in 1925, 2.14 per cent. in 1926, 2.23 per cent. in 1927, 1.87 per cent. in 1928, 1.32 per cent. in 1929, and 0.92 per cent. in 1930.

*61467—A

Aboriginals are not included in the population shown above for 1861; the numbers included in the totals of subsequent years are 983 in 1871; 1,643 in 1881; 8,280 in 1891; 4,287 in 1901; 2,012 in 1911; 1,597 in 1921. The population of the Federal Capital Territory is excluded in 1911 and subsequent years.

A steady growth of population proceeded until 1891. This growth was especially marked between 1851 and 1861, when the gold discoveries were attracting eager fortune-hunters from other parts of the world, many of whom remained as settlers. After the gold rushes had ceased, the growth of population proceeded at a slower rate, but though neither the average annual rate of increase nor the proportionate increase of that period was again attained, the actual numerical expansion in later periods has been greater. Indeed, the lull which occurred in the growth of population during the sixties developed gradually into a period of increasingly rapid expansion after 1871, and the next twenty years were, from a relative point of view, a time of unexcelled development. This expansion, however, came to an end when the trade boom ended in the commercial crisis of the early nineties.

The next twenty years were a period of little progress in the development of population, the reasons being the commercial and industrial stagnation which followed the crisis of 1893, and the heavy decline in the birth-rate which lowered the rate of natural increase.

A new period of prosperity began early in the twentieth century, and the full weight of the trade revival was felt in the period 1911 to 1921, when the tide of population turned more definitely in favour of the growth of the State. Despite the serious effects of the Great War in diminishing the birth-rate, in temporarily stopping immigration, and in causing an exodus of men of reproductive ages, many of whom did not return, and despite the losses occasioned by the influenza epidemic of 1919, the period showed a greater relative expansion than either of its predecessors, and by far the greatest numerical increase on record. From 1921 to 1923 the volume of immigration was very restricted, and the increase in population depended mainly upon natural causes. Immigration, however, was substantial in the five years 1924 to 1928, but declined in 1929, and with the advent of the severe depression of 1930 there was an appreciable loss of population by migration from the State. The net increase in the population of the State in the nine and three-quarter years between the last census and the end of 1930 has been 400,071, or 19.03 per cent., equal to an annual rate of 1.80; the corresponding figures for the ten years which elapsed between the censuses of 1911 and 1921 were an increase of 453,222, or 27.49 per cent., equal to an annual rate of 2.46 per cent.

The estimated population at the end of the year and the mean population of New South Wales, including aboriginals, for the last eleven years were as follow:—

Year.	Estimated Population at End of Year.			Mean Population.
	Males.	Females.	Total.	
1920	1,068,568	1,024,421	2,092,989	2,068,585
1921	1,085,275	1,044,230	2,129,505	2,108,369
1922	1,108,582	1,065,971	2,174,553	2,150,862
1923	1,128,089	1,083,017	2,211,106	2,192,146
1924	1,151,639	1,104,451	2,256,090	2,230,166
1925	1,172,470	1,127,611	2,300,081	2,275,886
1926	1,197,428	1,151,973	2,349,401	2,321,917
1927	1,224,847	1,177,037	2,401,884	2,374,264
1928	1,247,091	1,199,783	2,446,874	2,426,300
1929	1,261,970	1,217,177	2,479,147	2,464,510
1930	1,271,356	1,230,683	2,502,039	2,489,657

Population of Australian States.

The following table shows the population of each State of the Commonwealth at the last two censuses, and at 31st December, 1930, also the proportion of population in each State. Aborigines of full blood are excluded from account.

State or Territory.	Population, Census 1911.	Population, Census 1921.	Estimated Population, 31st Dec., 1930.	Proportion in each State or Territory.		
				1911.	1921.	1930.
				per cent.	per cent.	per cent.
New South Wales ...	1,646,734	2,100,371	2,500,487	36·96	38·67	38·61
Victoria ...	1,315,551	1,531,280	1,790,817	29·53	28·19	27·65
Queensland ...	605,813	755,972	948,195	13·60	13·92	14·64
South Australia ...	408,558	495,160	582,127	9·17	9·13	8·99
Western Australia ...	282,114	332,732	420,606	6·33	6·06	6·50
Tasmania ...	191,211	213,780	220,644	4·29	3·91	3·41
Northern Territory ...	3,310	3,867	4,616	0·08	0·07	0·07
Federal Capital Terr....	1,714	2,572	8,541	0·04	0·05	0·13
Commonwealth ...	4,455,005	5,435,734	6,476,033	100·00	100·00	100·00

During the inter-censal period 1911 to 1921, the population of New South Wales increased at an average annual rate of 2·46 per cent., which was faster than that of any other State of the Commonwealth. The next highest rate was in Queensland, 2·24 per cent.; South Australia, 1·94 per cent.; Western Australia, 1·66 per cent.; Victoria, 1·53 per cent.; and Tasmania, 1·12 per cent. The average for the whole of Australia was 2·00 per cent.

Growth of Population of New South Wales.

The extent to which each source—natural increase and net immigration—has contributed to the growth of the population of New South Wales during each census period since 1861 was shown on page 226 of the Official Year Book for 1922. In calculating the increase from 1901 to 1921 the population of the Federal Capital Territory has been omitted, but the aboriginal inhabitants have been taken into consideration throughout.

The actual growth of population in New South Wales during each of the last eleven years was as follows:—

Year ended December—	Increase during Year.			Increase per cent. during Year.		
	Natural.	Net Immigration.	Total.	Natural.	Net Immigration.	Total.
1920	33,013	20,253	53,266	1·62	0·99	2·61
1921	34,600	1,916	36,516	1·65	0·09	1·74
1922	36,036	9,012	45,048	1·69	0·43	2·12
1923	33,061	3,492	36,553	1·52	0·16	1·68
1924	32,849	12,135	44,984	1·48	0·55	2·03
1925	33,792	10,199	43,991	1·50	0·45	1·95
1926	30,938	18,382	49,320	1·34	0·80	2·14
1927	31,088	21,395	52,483	1·32	0·91	2·23
1928	32,106	12,884	44,990	1·34	0·53	1·87
1929	28,057	4,216	32,273	1·15	0·17	1·32
1930	30,884	(-)7,992	22,892	1·24	(-)0·32	0·92

From 1917 to 1919 the return of troops caused an increasing flow of arrivals, and restored a temporarily absent element of population. In 1920 the last detachments of soldiers returned, and there was considerable immigration from other States. During 1921 migration returned to its

ordinary channels, and the net immigration of the year was inconsiderable. The annual gain by migration to the end of 1927 grew rapidly though irregularly, and has since declined.

After 1914 the annual number of births diminished until 1919, and the natural increase showed a considerable falling off, especially in 1919, when the epidemic of influenza caused heavy mortality. In 1920 and 1921 the number both of births and deaths increased, but the increase of births was the greater. The natural increase in 1922 was numerically the greatest on record, but proportionately was considerably below that of former years. A slight decline both in numbers and proportion occurred between 1923 and 1925, while in 1926 a decrease in the number of births synchronised with an increase in the number of deaths and, excepting some of the war years, resulted in the lowest natural increase recorded for any year since 1911. Somewhat similar conditions have operated from 1927 to 1930 with regard to the birth and death rates, and the natural increase per cent. in the last year was only slightly higher than in 1929, and was lower than in other years covered by the table. Excluding the war period, the rate of increase in the population in 1930 was the lowest since 1901, in which year the departures exceeded the arrivals by over 10,000.

MIGRATION.

A very large movement of population takes place each year into and out of New South Wales, but is due more to the movement of tourists, business men, and persons following itinerant callings, than to immigration or emigration properly so-called. During the war period and the years immediately following there were very considerable movements of troops.

The net immigration is the excess of arrivals in New South Wales over departures from the State, and is the result principally of intercourse with overseas countries. In recent years until 1920 the greater part of the immigrants to New South Wales came from or through other Australian States; but, in 1921, with the virtual cessation of movement of troops, the direction of interstate migration changed and the number of departures to other States until 1927 exceeded the number of arrivals therefrom. During 1928 there was an appreciable falling off in the excess of arrivals, the total gain by migration being 12,884 as against 21,395 in 1927; during 1929 the increase dropped to 4,216, while in 1930 the State lost by migration 7,992 persons.

The interstate and overseas movement of people to and from New South Wales, as estimated for each of the past eleven years, is shown in the following table:—

Year.	Arrivals in New South Wales.			Departures from New South Wales			Excess of Arrivals over Departures.	
	Interstate. *	From other Countries Direct.	Total.	Interstate *	To other Countries Direct.	Total.	Interstate. *	Other Countries Direct.
1920	311,068	72,515	383,583	303,222	60,108	363,330	7,846	12,407
1921	284,927	57,190	342,117	288,084	52,117	340,201	(-) 3,157	5,073
1922	277,938	53,326	331,264	283,432	38,820	322,252	(-) 5,494	14,506
1923	283,014	48,084	331,098	290,691	36,915	327,606	(-) 7,677	11,169
1924	300,816	55,066	355,882	304,095	39,652	343,747	(-) 3,279	15,414
1925	308,241	55,201	363,442	311,035	42,208	353,243	(-) 2,794	12,993
1926	288,354	62,395	350,749	288,793	43,574	332,367	(-) 439	18,821
1927	244,456	65,485	309,941	242,541	46,005	288,546	1,915	19,480
1928	231,523	60,756	292,309	230,885	48,540	279,425	638	12,246
1929	211,940	52,406	264,346	211,356	48,774	260,130	584	3,632
1930	172,390	41,987	214,377	174,450	47,919	222,369	(-) 2,060	(-) 5,932

(-) Denotes excess of departures.

* Including movement of population to and from overseas countries via other States.

Oversea Migration.

Since the middle of 1924 statistics have been collected as to the residential intentions of persons arriving and departing overseas in each of the Australian States. These distinguish between persons migrating for permanent settlement, Australians travelling abroad, and visitors from other countries. The following summary shows the numbers in the various categories in the years 1928 to 1930, comparing the totals for New South Wales with those for all Australia. Owing to the difficulty of securing accurate records at all coastal points the recorded totals are not the actual numbers, and a small addition is made to the number of departures in order to adjust the balance:—

Heading.	1928.		1929.		1930.	
	New South Wales.	Commonwealth.	New South Wales.	Commonwealth.	New South Wales.	Commonwealth.
Arrivals—						
Immigrants... ..	21,583	48,233	14,475	31,698	8,164	17,537
Australians returning ...	16,445	24,834	17,035	25,652	14,848	23,369
Visitors	22,758	26,721	20,891	24,892	18,975	22,186
Not stated ... ..	...	4	5	6	.....	1
Total arrivals ...	60,786	99,792	52,406	82,248	41,987	63,093
*Departures—						
Emigrants	10,194	20,110	11,604	22,445	14,433	28,417
Australians who intend to return	15,757	24,704	15,508	25,125	12,135	20,898
Visitors	22,581	27,731	21,661	25,708	21,351	25,186
Not stated	8	15	1	7	.....	.....
Total departures...	48,540	72,560	48,774	73,285	47,919	74,501

* Approximate only, includes allowance for unrecorded departures.

Immigrants in the above table are described as persons arriving from overseas intending to reside permanently in Australia, and "emigrants" as Australian citizens departing with the intention of residing permanently in some other country. It is noteworthy that the particulars for New South Wales relate to persons arriving from overseas at New South Wales ports irrespective of which State is their ultimate destination.

The majority of travellers between Australia and other countries embark or disembark at ports in New South Wales, and this is particularly noticeable in respect of visitors from abroad.

Nationality of Oversea Migrants.

Since the middle of 1924, the nationality of overseas migrants has been recorded, and the following table shows the numbers of each of the principal nationalities arriving in or departing from Australia *via* the ports of New South Wales in 1928, 1929, and 1930.

Nationality.	1928.			1929.			1930.		
	Arri-vals.	Depar-tures	Excess of Arri-vals.*	Arri-vals.	Depar-tures.	Excess of Arri-vals.*	Arri-vals.	Depar-tures.	Excess of Arri-vals.*
British	50,897	41,079	9,818	44,717	41,354	3,363	34,867	40,396	(-)-5,529
French	568	562	6	500	563	(-) 63	550	532	18
German	397	293	104	294	300	(-) 6	340	339	1
Italian... ..	1,050	470	580	727	562	165	667	664	3
Jugo Slavs	309	229	80	210	246	(-) 36	218	298	(-) 80
Russians	165	92	73	67	94	(-) 27	90	110	(-) 20
United States	1,886	1,713	173	1,674	1,548	126	1,323	1,424	(-) 96
Other European	1,951	945	1,006	1,129	1,061	68	940	1,079	(-) 139
Total, European	57,223	45,383	11,840	49,318	45,728	3,590	39,000	44,842	(-)-5,842
Chinese	2,514	2,482	32	2,195	2,310	(-) 115	2,056	2,350	(-) 294
Indians	493	271	212	501	382	119	520	315	205
Japanese	156	136	20	117	124	(-) 7	135	169	(-) 34
Syrians	97	28	69	32	28	4	45	47	(-) 2
Other Asiatic	91	93	(-) 2	59	57	2	45	44	1
Pacific Islanders	187	132	55	141	126	15	154	146	8
Other Non-Europeans	35	15	20	43	9	34	32	6	26
Total, Non-European	3,563	3,157	406	3,088	3,046	42	2,987	3,077	(-) 90
Grand Total	60,786	48,540	12,246	52,406	48,774	3,632	41,987	47,919	(-)-5,932

* (-) Denotes excess of departures.

The numbers in the above table embrace migrants arriving or departing, visitors from overseas, and Australian residents travelling abroad. An adjustment for unrecorded departures has been made, as explained on the preceding page.

Passports.

Under the Passports Act, 1920 (Federal), no person who is or appears to be more than 16 years of age may embark at any place in the Commonwealth for a journey to any place beyond the Commonwealth unless he is the holder of a passport or other document authorising his departure, properly endorsed for the journey, or unless he is the subject of any special or statutory exemption in that regard. The fee for issuing a passport is 10s., and it is valid for a period of five years unless specially limited to a shorter period.

The statutory exemptions extend to members of the naval or military forces of any British Dominion on duty, members of the crew of a departing vessel who were members on its arrival or are by occupation seafaring men,

any natural born British subject proceeding to New Zealand, any other person proceeding to New Zealand under permit, any officer of the Administration, or any *bona fide* resident or tourist with a return ticket proceeding to Papua or Norfolk Island, any person holding a certificate exempting him from the dictation test, and any aboriginal native of Asia or of any island of the East Indies or of the Indian or Pacific oceans.

Immigration.

At Common Law aliens have no legal right of admission to any British country, and immigration to and emigration from New South Wales are regulated principally by statutes of the Federal Parliament, *e.g.*, the Immigration Act (1901-30) and the Contract Immigrants Act, 1905.

Any person may be refused admission to Australia who fails to write from dictation by an officer not less than fifty words in any prescribed European language; or any person who has not the prescribed certificate of health; any feeble-minded person; any person suffering from serious transmissible disease or defect, tuberculosis or certain other serious diseases; any person convicted of crime in certain circumstances; any prostitute or person living by prostitution; any advocate of revolution, assassination, or the unlawful destruction of property; any Turk of Ottoman race; or any person 16 years of age or over not possessed of a passport as prescribed. Should such persons gain admission, they may be deported. Usually persons formerly domiciled in the State cannot be excluded from return after temporary absence. For a period of five years from 2nd December, 1920, persons of German, Austro-German, Bulgarian or Hungarian parentage and nationality were excluded, but upon the expiration of that period no further restrictions were imposed. Ex-enemy subjects repatriated during the late war are required to obtain approval of their readmission.

Assisted Immigration.

In December, 1930, all provisions for assisting immigrants were suspended, but in March, 1931, it was decided that assisted passages would be granted to wives and children (under 14 years) of persons in permanent employment in New South Wales.

Particulars of the earlier history of assisted migration will be found in previous issues of the Year Book.

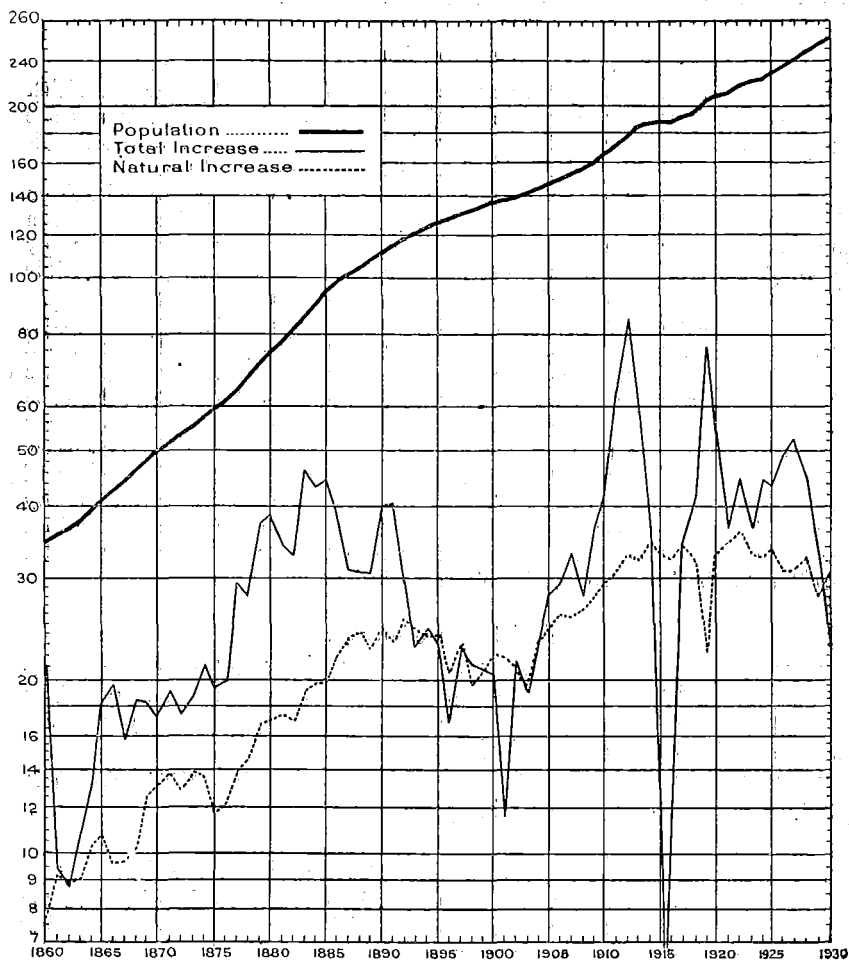
Numbers of Assisted Immigrants.

The following table shows particulars of the manner of choosing and the age and sex of assisted migrants who arrived in New South Wales during each of the last eight calendar years:—

Year.	Selected.	Nominated.	Adults and Children over 12 years of age.		Children under 12 years of age.		Grand Total.
			M.	F.	M.	F.	
1923	984	4,058	2,134	1,841	527	540	5,042
1924	1,499	4,714	2,575	2,334	660	644	6,213
1925	2,239	6,548	3,812	2,993	1,030	952	8,787
1926	1,572	11,257	5,082	4,539	1,633	1,575	12,829
1927	1,542	8,718	3,593	4,174	1,268	1,225	10,260
1928	1,628	7,104	3,190	3,726	940	876	8,732
1929	1,008	4,418	2,004	2,342	563	517	5,426
1930	169	1,005	357	588	106	123	1,174

POPULATION AND ANNUAL INCREASE, 1860 TO 1930.

Ratio Graph.



NOTE.—(i) The numbers at the side of the graph represent 10,000 of population, 1,000 Total Increase and 1,000 Natural Increase.

(ii) In 1916 there was a decrease of 8,711 in the population owing to the departure of troops and the curve fell below the limits of the graph.

The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual numbers are shown by means of the numbers at the side of the graph.

The following statement shows the migration to the State since 1832, and the total number of assisted migrants who arrived in New South Wales under various schemes, inclusive of Victoria and Queensland before

their separation. After 1905 the number of migrants nominated by residents of the State and the number selected abroad are shown separately.

Period.	Immigrants assisted.				
	Nominated.	Selected.	Total Arrivals.		
			Males.	Females.	Total.
1832-1905 § ...	...	...	104,106	107,866	211,972
1905-1909 § ...	6,144	2,713	*	*	8,857
1909-1914 § ...	32,406	12,444	23,816	21,034	44,850
1914-1919 § ...	4,123	1,322	2,067	3,378	5,445
1919-1924** ...	22,214	4,384	13,927	12,671	26,598
1925 ...	6,548	2,239	4,842	3,945	8,787
1926 ...	11,257	1,572	6,715	6,114	12,829
1927 ...	8,718	1,542	4,861	5,399	10,260
1928 ...	7,104	1,628	4,130	4,602	8,732
1929 ...	4,418	1,008	2,567	2,859	5,426
1930 ...	1,005	169	463	711	1,174
1832-1930 ...	103,937†	29,021†	167,494†	168,579†	344,930

* Information not available.

† Excluding immigrants, 1905-1909.

‡ 1905 to 1930.

§ To 30th June.

** 5½ years ended 31st December, 1924.

There was a revival in this class of migration in 1926, but the last four years show a downward tendency. This was the result of the increasing difficulty in securing employment in various callings. In October, 1927, the State Government decided to restrict nominations to such classes as were not likely to disturb the labour market, and this system operated since that date, being applied more vigorously as the industrial situation became more acute, until December, 1930, when it was decided that all assisted migration should cease.

Occupations of Assisted Migrants.

The following statement shows the distribution of assisted migrants in their respective occupational classes in each of the last five years:—

Classification of Occupations.	1926.		1927.		1928.		1929.		1930.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Manufacture of—										
Wood products ...	82	...	59	...	90	1	11	...	2	...
Metal, Engineering, &c. ...	689	...	420	...	335	1	134	...	20	...
Food, Drink, &c. ...	51	1	42	28	63	14	53	10	7	2
Clothing, &c. ...	82	160	78	64	49	129	37	89	8	22
Books, Printing, &c. ...	17	8	19	13	20	7	8	5	1	...
Other Manufactures ...	61	7	31	4	21	14	6	9	1	3
Building Industry ...	151	...	142	...	178	...	101	...	17	...
Mining Industry ...	824	...	190	...	122	...	63	...	2	...
Rail and Tram Transport ...	56	...	80	...	22	...	16	...	2	...
Other Land Transport ...	81	1	76	...	50	...	33	...	3	...
Shipping and Wharf Labouring ...	26	...	19	...	12	...	11	...	2	...
Rural Industries ...	1,554	2	1,326	...	1,432	1	970	...	161	...
Domestic and Hotel Workers ...	20	1,143	11	1,422	8	1,440	3	1,013	...	268
Other trades ...	750	188	581	171	401	186	290	140	64	47
Dependents—										
Over 12 years of age ...	638	3,029	574	2,452	447	1,933	268	1,076	56	246
Under 12 years of age ...	1,933	1,575	1,208	1,225	940	876	563	517	104	123
Total each sex ...	6,715	6,114	4,861	5,899	4,130	4,002	2,567	2,859	463	711
Grand Total ...	12,829		10,260		8,732		5,426		1,174	

Latterly selected migrants have been mainly rural workers and household servants. Nominated migrants have been distributed over many trades, but more especially those of the rural and mining industries, and engineering, and the manufacture of metals.

Country of Origin of Assisted Migrants.

Nearly all the assisted migrants in the last eight years have come from the United Kingdom; the relatively small number from other countries is shown in the following statement:—

Year ended 31st Dec.	Assisted Migrants from—						Total Assisted Migrants.		
	United Kingdom.		Other British Possessions.		Foreign Countries.				
	Nom-in-ated.	Selected.	Nom-in-ated.	Selected.	Nom-in-ated.	Selected.	Nom-in-ated.	Selected.	Total.
1923	4,005	984	8	...	45	...	4,058	984	5,042
1924	4,614	1,499	25	...	75	...	4,714	1,499	6,213
1925	6,425	2,239	56	...	67	...	6,548	2,239	8,787
1926	11,089	1,572	148	...	20	...	11,257	1,572	12,829
1927	8,533	1,542	183	...	2	...	8,718	1,542	10,260
1928	6,988	1,628	116	...	...	...	7,104	1,628	8,732
1929	4,384	1,008	34	...	...	...	4,418	1,008	5,426
1930	975	169	29	...	1	...	1,005	169	1,174

Adolescent Migrants.

A number of private organisations have operated to assist the immigration of young persons, including the Dreadnought Fund Trust, the Dr. Barnardo Homes, the Salvation Army, and the Catholic Immigration League, but all new activities were suspended in December, 1930.

The Dreadnought Fund was established in 1909 by public subscription to defray the cost of building for the Imperial Navy a war vessel of the Dreadnought type. On the institution of the Australian Navy it was decided to use part of the funds to assist the immigration of lads from 17 to 20 years of age, for the purpose of following rural pursuits. Under this scheme 63 boys were brought to New South Wales in 1921, 637 in 1922, 472 in 1923, 620 in 1924, 1,016 in 1925, 1,019 in 1926, 865 in 1927, 671 in 1928, 379 in 1929, and 42 in 1930.

The local organisation known as Dr. Barnardo Homes has worked in conjunction with an English institution of that name, arranging passages and paying the passage money to Australia of boys trained in their homes and on farms in England. The local organisation places the boys with farmers, where the home conditions are found to be satisfactory. From October, 1921, when the first of these boys were landed in Sydney, to December, 1922, 97 Barnardo boys had arrived in New South Wales. During 1923 a further 123 arrived, 51 in 1924, 88 in 1925, 50 in 1926, 43 in 1927, 48 in 1928, 75 in 1929, and 50 in 1930. The State also received 32 Barnardo girls in 1923, 101 in 1924, 42 in 1925, 48 in 1926, 38 in 1927, 43 in 1928, 56 in 1929, and 14 in 1930.

During 1923 an additional scheme was inaugurated under which 251 British farm lads, between the ages of 15 and 18 years, were received upon assisted passages and provided with rural employment in New South Wales, whilst 305 arrived in 1924, 75 in 1925, 314 in 1928, and 153 in 1929. In 1930 there arrived also 9 Salvation Army girl domestics, 5 Wembley lads, and 20 Little Brothers.

The Juvenile Migrants Act passed in 1926 provides for the reception of juvenile migrants between the ages of 14 and 18 years on their signing an undertaking to remain under the control of the Minister for Labour and Industry while in New South Wales, until attaining the age of 18 years. The Minister is empowered by the Act to place such migrants for training and employment on a Government training farm or with any fit and proper person. Such migrants are not indentured, and have power to terminate their employment, provided notification of such termination is supplied to the Minister.

Passage Money for Assisted Migrants.

Prior to the war several steamship companies conveyed migrants from the United Kingdom at very low rates, the State Governments contributing a portion. Since the war the cost per berth has increased, and since 1st May, 1925, under the Imperial scheme, contributions have been made in equal proportions by the Federal and Imperial Governments towards the cost of assisted passages for approved persons from the United Kingdom. Contributions are on the following scale:—

	Government Subsidy.	Paid by Migrant.
	£ s. d.	£ s. d.
Children under 12 years	16 10 0	Nil.
Juveniles over 12 and under 14 years ..	27 10 0	5 10 0
Wives with one or more children ..	22 0 0	11 0 0
Wives without children	16 10 0	16 10 0
Children over age 14 who wish to accom- pany parents	Nil.	33 0 0

One child under 3 years of age in each family is carried free.

In the case of persons nominated for assisted passages by relatives or friends in the State, nominators are required to guarantee that adequate provision will be made for their maintenance.

Contract Immigrants.

The admission of immigrants under contract to perform manual labour is regulated by the Contract Immigrants Act, 1905. Such contracts must be made by or on behalf of an Australian resident on the one part. In every case they are subject to Ministerial approval which may be withheld if the fulfilment of the contract is likely to prejudice the public welfare as affecting an industrial dispute or the conditions or standards prevailing in local industry. Except in the cases of contract migrants who are British subjects born in the United Kingdom or descended from a British subject there born, it must be shown that there is difficulty in obtaining workers of equal skill and ability within the Commonwealth. The Act, however, does not apply to domestic servants and personal attendants accompanying their employers.

British Settlers' Welfare Committee.

This committee has taken up the work previously carried on by the New Settlers' League, which is now defunct.

It was formed to undertake the obligations entered into with the British Government as to the after-care of migrants, and works in close co-operation with the State Government to this end.

Its officers, with the aid of committees in important centres, keep in touch with all lads and other migrants.

DISTRIBUTION OF POPULATION.

The population of New South Wales is distributed in a rather remarkable manner. At 31st December, 1930, including shipping, the city of Sydney contained 109,500 persons in a small area surrounded by an extensive group of suburbs with 1,144,060 inhabitants, making a total of 1,253,560 dwellers in the metropolis. Outside the boundaries of the metropolis, in what is termed the extra metropolitan area, there are two municipalities and three shires, containing in all 57,250 inhabitants. Then scattered throughout the State are 132 municipalities, with a total population of 531,130; of these, 11 municipalities in the County of Cumberland contained 50,750 persons, and the four large mining centres of Newcastle, Broken Hill, Lithgow, and Wollongong, with 152,590 inhabitants; leaving 327,790 in 117 of the larger rural towns incorporated as municipalities. Distributed over the remainder of the State—99 per cent. of its area—are 659,988 persons; of whom a small number live in the unincorporated towns, and only 14,308 in the unincorporated portion of the Western Division, which covers 40.5 per cent. of the area of the State.

The tendency of migrants to remain in the capital city was shown by the fact that at the census of 1921, of the 14,447 males and 18,799 females with length of residence of under five years, 8,749 males and 11,719 females were resident in the metropolis. In each case the proportion is slightly over 60 per cent.

The distribution of population at 31st December, 1930, together with the proportion in each division and the average population per square mile, are shown in the following table:—

Division.	Area (including Harbours, Rivers and Lakes).	Population at 31st December, 1930, including Shipping and Aborigines.		
		Total.	Proportion in each Division.	
	sq. miles.		per cent.	per sq. mile.
Sydney	5	109,500	4.4	21,900.0
Suburbs of Sydney	262	1,144,060	45.7	4,366.6
Metropolis	267	1,253,560	50.1	4,695.0
Extra Metropolitan Area	451	57,250	2.3	126.9
Total	718	1,310,810	52.4	1,825.6
Country Municipalities	2,301	531,130	21.2	230.8
Country Shires	181,099†	645,680	25.8	3.6
Western Division (Part unincorporated)	125,309	14,308	0.6	0.1
Lord Howe Island	5	111	0.0	22.2
Total, New South Wales ...	309,432†	2,502,039	100.0	8.1

† Excludes Federal Territory, 940 sq. miles.

The population of the metropolitan area as defined in the Local Government Act represents one-half of the total population; one-fifth of the people reside in the country municipalities, and less than one-third in the remaining rural districts.

The density of population diminishes rapidly from city, suburban, country urban to rural districts. The average density of population in New South Wales, though low, is greater than that of any other State of the Commonwealth except Victoria and Tasmania.

The low average in New South Wales—8.09 per square mile—is due largely to the inclusion of the extensive and practically unpeopled Western Division, much of which must remain sparsely settled until means are found to overcome its natural disability of a low average rainfall. The average density of population in the Eastern and Central Divisions of the State is 135 persons per square mile.

Municipal and Shire Population.

Slightly more than two-thirds of the population of New South Wales live within the municipalities and practically the whole of the remainder within shires. Although the area unincorporated is more than two-fifths of the total it contains less than 15,000 inhabitants. The number of inhabitants of municipalities, shires, and unincorporated districts of each division of New South Wales at 31st December, 1930, is shown below:—

Division,	Municipalities.	Shires.	Total.
Metropolis	1,253,560	...	1,253,560
Balance—Cumberland	58,580	69,730	128,310
North Coast... ..	38,300	88,640	126,940
Hunter and Manning	149,520	133,530	283,050
South Coast	50,710	43,920	94,630
Northern Tableland	22,190	30,120	52,310
Central Tableland	60,670	71,890	132,560
Southern Tableland	22,150	25,110	47,260
North-Western Slope	17,940	35,740	53,680
Central-Western Slope	20,860	36,840	57,700
South-Western Slope	40,770	63,430	104,200
North-Central Plain	7,560	18,800	26,360
Central Plain	7,110	15,410	22,520
Riverina	13,920	61,940	75,860
Western Division—			
Incorporated	28,680	...	28,680
Unincorporated ... ..	...	...	14,308
Lord Howe Island ... ..	...	...	111
New South Wales	1,792,520	695,100	2,502,039

Particulars of the area, population, and number of dwellings in each municipality and shire of the census of 1921 are shown at pages 6 to 17 of the Statistical Register for 1924-25.

Urban and Rural Population.

The population of New South Wales, in common with that of most other countries of the world, tends more and more to congregate in metropolitan and urban centres. A comparison of the number and proportion of inhabitants in metropolitan, urban, and rural divisions from 1891 to 1921 was published on page 235 of the Official Year Book for 1922.

The outstanding features of the population at the present time are the dominance of the metropolitan element and the diminishing relative importance of the country towns, incorporated and unincorporated, and of the rural districts.

Internal Migration.

Tables published on page 236 of the Official Year Book for 1922 show that there was considerable migration from the country districts to the city during the last three inter-censal periods.

Throughout the period the flow of population was continuous from the South Coast, from the whole of the Tableland Divisions, and from the Western Division. During the period 1911 to 1921 emigration from country divisions was more pronounced than ever before, and occurred from every rural district of the State considered in a general way, except where special settlement was brought about by the Murrumbidgee Irrigation project.

The Population of the Metropolis.

Up to 31st December, 1928, the metropolis was taken to include the City of Sydney, forty municipalities, the Ku-ring-gai Shire (proclaimed a municipality 1st November, 1928), and the islands of Port Jackson, embracing an area of 181 square miles. It has been decided, however, to include in the metropolitan area from 1st January, 1929, the municipalities of Auburn, Bankstown, Lidcombe, Granville, and Parramatta. The new boundaries of the metropolis may be described as follow:—On the east the sea coast; on the south, the waters of Botany Bay and George's River; on the west, the western boundaries of Bankstown, Granville, Parramatta, Ryde, Eastwood, and Ku-ring-gai municipalities; on the north, the eastern boundary of Ku-ring-gai, the north-eastern boundary of Willoughby, and the northern boundary of Manly municipalities. The area embraced by the new boundaries is 267 square miles.

The following statement shows the population of each municipality within the present boundaries of the metropolis at the censuses of 1911 and 1921, and at 31st December, 1930, including aboriginals and shipping:—

Municipality.	Population.			Municipality.	Population.		
	Census, 1911.	Census, 1921.	31st Dec., 1930.		Census, 1911	Census, 1921.	31st Dec., 1930.
City of Sydney ...	119,774	111,059	109,500	Lane Cove ..	3,306	7,592	14,900
Alexandria ...	10,123	9,793	10,380	Leichhardt ...	24,254	29,356	31,470
Annandale ...	11,241	12,648	13,140	Lidcombe ...	5,419	10,524	15,740
Asbfield ...	20,431	33,637	39,780	Manly ...	10,465	18,507	26,230
Auburn ...	5,559	13,563	19,910	Marrickville ...	30,653	42,240	46,590
Balmain ...	32,038	32,122	33,240	Mascot ...	5,836	10,929	13,910
Bankstown ...	2,039	10,670	22,320	Mosman ...	13,243	20,063	25,140
Bexley ...	6,517	14,746	20,360	Newtown ...	26,498	28,169	28,660
Botany ...	4,409	6,214	7,970	North Sydney ...	34,648	48,446	55,120
Burwood ...	9,382	15,711	19,550	Paddington ...	24,317	26,364	27,080
Canterbury ...	11,335	37,639	73,860	Parramatta ...	12,476	14,595	17,710
Concord ...	4,076	11,013	22,430	Petersham ...	21,712	26,236	28,340
Darlington ...	3,816	3,651	3,660	Randwick ...	19,475	50,849	74,080
Drummoyne ...	8,678	18,764	29,090	Redfern ...	24,427	23,978	24,160
Eastwood ...	968	2,133	2,960	Rockdale ...	14,095	25,190	37,640
Enfield ...	3,444	8,530	14,020	Ryde ...	5,281	14,855	26,030
Erskineville ...	7,299	7,553	7,620	St. Peter's ...	8,410	12,700	13,890
Glebe ...	21,944	22,772	23,170	Strathfield ...	4,046	7,594	12,280
Granville ...	7,231	13,328	19,230	Vaucluse ...	1,673	3,730	7,400
Homebush ...	676	1,622	3,190	Waterloo ...	10,072	11,199	12,920
Hunter's Hill ...	5,019	7,334	9,760	Waverley ...	19,832	36,797	52,360
Hurstville ...	6,533	13,394	21,700	Willoughby ...	13,037	28,074	42,420
Kogarah ...	6,954	18,226	29,700	Woollahra ...	16,992	25,461	34,470
Ku-ring-gai ...	9,459	19,213	28,480				
				Total ..	660,112	968,783	1,253,500

Some of the suburbs nearest the city have attained their maximum development as residential districts and some are even losing population as industrial and commercial establishments extend. The rate of growth of population is now greatest in the more remote municipalities, such as Auburn, Bankstown, Bexley, Canterbury, Concord, Hurstville, Kogarah, Lane Cove, and Ryde.

In addition to the suburbs enumerated above there are in close proximity to the city, a number of important centres of population of a more or less suburban character, since a large proportion of their inhabitants gain their livelihood in the city. A definition of an extended metropolitan area was given in the Local Government Act of 1919 (Schedule Four). It includes the following additional localities, whose populations, including aboriginals and shipping, are shown:—

Locality.	Population.		
	Census, 1911.	Census, 1921.	31st Dec., 1930.
Municipalities—			
Dundas	1,136	3,523	5,600
Ermington and Rydalmere	1,716	1,981	2,230
Shires—			
Hornsby	8,907	15,291	21,440
Sutherland	2,896	7,707	12,280
Warringah	2,823	9,644	15,700
Total Extra-Metropolitan Area	17,478	38,146	57,250
Population of Metropolis as shown above...	669,112	968,783	1,253,560
Metropolitan Area as defined in Local Government Act	686,590	1,006,929	1,310,810

The population of the metropolis, including aboriginals and shipping, at census periods and at the end of each year since 1925 is shown in the following table, together with the proportion which the metropolitan population bears to that of the whole State:—

Year.	Population.			Increase during Interval.		Males per cent.	Proportion of Population of State in Metropolis.
	Males.	Females.	Total.	Numerical.	Per cent.		
							per cent.
1861	47,778	49,283	97,061	43,137*	80·00*	49·21	27·7
1871	68,266	70,913	139,179	42,118	43·39	49·05	27·6
1881	114,936	112,230	227,166	87,987	63·22	50·60	30·2
1891	197,550	189,884	387,434	160,268	70·55	50·99	34·2
1901	241,700	246,232	487,932	100,498	25·94	49·54	35·9
1911	312,074	324,279	636,353	148,421	30·42	49·04	38·5
1921	439,691	466,412	906,103	269,750	42·34	48·54	43·1
1925	508,790	530,600	1,039,390	133,287	14·71	48·95	45·2
1926	525,225	545,285	1,070,510	31,120	3·00	49·06	45·5
1927	541,840	559,350	1,101,190	30,680	2·87	49·20	45·8
1928	555,350	572,120	1,127,470	26,280	2·39	49·26	46·1
1929†	610,570	628,090	1,238,660	20,950	1·72	49·29	50·0
1930†	617,210	636,350	1,253,560	14,900	1·19	49·24	50·1

*Since 1851.

†Area extended as from 1st January, 1929.

In calculating the numerical increase and the increase per cent, in 1929 over 1928 in the above table, the municipalities of Auburn, Bankstown, Granville, Lidcombe, and Parramatta, which have been included in the metropolitan areas, were taken into consideration.

The proportion of the population of the State resident in the metropolis has increased rapidly in the past half-century and especially in the last fifteen years. The apparently large increase in 1928, however, is due to the inclusion of the five municipalities mentioned above. Since 1891 the proportion of females in the metropolis has increased, so that at the census of 1921 there was an excess of three females in every hundred of the population.

The population of the capital cities (including suburbs) of the States of the Commonwealth is shown below:—

Metropolis.	Census, 1911.*	Census, 1921.*	31st December, 1930.†				Proportion to Population of Whole State.
			Males.	Females.	Total.		
						per cent.	
Sydney‡	669,112	968,783	617,210	636,350	1,253,560	50·1	
Melbourne	588,971	766,465	479,500	535,100	1,014,600	56·7	
Adelaide	189,646	255,375	157,928	166,492	324,420	55·7	
Brisbane	139,480	209,946	...	...	313,251	33·0	
Perth	106,792	154,873	102,800	101,980	204,780	48·7	
Hobart	39,937	52,361	...	...	85,780	26·3	

* Excluding Shipping. † Including Shipping. ‡ New Boundaries. § 31st March, 1931.

THE TOWNS OF NEW SOUTH WALES.

As might be expected from the nature of the industries of the State there are in New South Wales comparatively few large towns. Outside the metropolitan area, the only towns of outstanding importance are Newcastle and Broken Hill, and the existence of both is due to the rich mineral deposits in their neighbourhood. Lithgow, the third, and Cessnock, the fourth, largest towns outside County Cumberland, are also dependent on mining. Apart from these and the centres in the County of Cumberland dependent upon the city, there are only five country municipal towns with a population exceeding 10,000; eleven, including one unincorporated, between 5,000 and 10,000; and twenty-two, including one unincorporated, between 3,000 and 5,000.

The following table affords a comparison of the populations at the last four censuses and at the end of the years 1929 and 1930 of the towns which at the end of 1930 had more than 3,000 inhabitants, including aboriginals

and shipping, the metropolitan and closely dependent municipalities being shown first, the order being the numerical importance in 1921.

Municipality.	Population.					
	Census 1891.	Census 1901.	Census 1911.	Census 1921.	31st Dec., 1929 (estimated).	31st Dec., 1930 (estimated).
Sydney and Suburbs*	387,331	487,900	636,388	906,103	1,238,660	1,253,560
Parramatta*	11,677	12,560	12,476	14,595		
Auburn*†	2,026	2,948	5,559	13,563		
Granville*	4,248	5,094	7,231	13,328		
Bankstown*†	108	1,246	2,039	10,670		
Lidcombe*†	2,084	4,406	5,419	10,524	5,500	5,600
Dundas*	881	1,087	1,136	3,523		
Newcastle and Suburbs	50,662	54,991	55,380	86,267	104,640	104,170
Broken Hill	19,789	27,500	30,974	26,338	23,480	22,990
Lithgow	3,865	5,268	8,196	13,275	15,320	15,300
Goulburn	10,916	10,612	10,023	12,715	12,740	12,560
Maitland	10,214	10,073	11,318	12,009	11,790	11,810
Bathurst	9,162	9,223	8,578	9,441	9,510	9,690
Katoomba	1,592	2,270	4,924	9,057	10,100	10,060
Lismore	2,925	4,464	7,382	8,712	10,050	10,370
Albury	5,447	5,821	6,309	7,752	9,580	9,320
Wagga Wagga	4,596	5,108	6,419	7,679	9,030	8,920
Orange	5,064	6,331	6,722	7,398	8,610	8,590
Cessnock†	203	165	3,957	7,343	14,120	13,930
Tamworth	4,602	5,799	7,147	7,264	7,890	7,690
Wollongong	3,058	3,554	4,673	6,708	10,230	10,130
Kurri Kurri§	...	...	4,154	5,542	7,030	6,845
Armidale	3,826	4,249	4,739	5,417	7,270	7,090
Dubbo	3,551	3,409	4,455	5,032	5,920	6,180
Glen Innes	2,532	2,918	4,089	4,974	4,680	4,680
Grafton	3,618	4,173	4,685	4,593	5,110	4,900
Forbes	3,011	4,294	4,436	4,376	4,970	5,120
Inverell	2,534	3,293	4,549	4,369	5,350	5,390
Parkes	2,449	3,181	2,935	3,941	5,830	5,660
Wellington	1,545	2,984	3,958	3,924	3,370	3,560
Windsor*	2,033	2,039	3,466	3,808	3,310	3,360
Cowra	1,546	1,811	3,292	3,732	4,450	4,490
Kempsey	2,194	2,329	2,947	3,613	3,630	3,660
Penrith*	3,099	3,559	3,683	3,605	4,010	4,150
Cootamundra	2,026	2,424	2,967	3,531	4,190	4,280
Casino	1,486	1,926	3,429	3,461	3,260	4,090
Young	2,746	2,755	3,140	3,284	3,620	3,870
Singleton	2,595	2,872	2,999	3,275	3,400	3,420
Mudgee	2,410	2,789	2,942	3,170	3,070	3,090
Temora	915	1,603	3,784	3,049	3,240	3,420
Moree	1,143	2,298	2,937	3,028	3,690	3,990
Narrandera	1,815	2,255	2,374	2,986	3,550	3,670
Murrumburrah	1,226	1,448	2,136	2,958	3,000	3,000
Ballina	1,140	1,819	2,124	2,768	3,050	3,800
Bowral	2,258	1,752	1,751	2,620	3,140	3,200
Queanbeyan	1,262	1,219	1,273	1,825	4,030	3,840
Murwillumbah	492	772	2,220	2,861	2,940	3,010
Deniliquin	2,273	2,644	2,496	2,660	2,980	3,240

*Towns in County Cumberland.

†Not incorporated 1891.

‡Incorporated 1926 and district enlarged.

§Locality, not incorporated, Aborigines excluded.

It would appear that the population of the unincorporated town of Weston reached a total of 3,685 in 1930. The foregoing list excludes municipalities with extensive areas or whose boundaries embrace more than one distinct locality.

The total population of these larger towns has grown at a fairly uniform rate during the whole of the period covered, and the towns of County Cumberland have shown an especially rapid increase in the last eighteen years.

Newcastle, after twenty years of slow progress, made rapid headway between 1911 and 1921, largely on account of the growth of its manufacturing industries, and the advance is still being maintained. The other rural towns, on the whole, have maintained a steady growth throughout, but the decline of the silver-lead mining industry—due largely to derangement of the markets of the world—has arrested the growth of Broken Hill, which has actually lost population since the year 1911. Lithgow, a coal-mining and partly manufacturing town, continued to grow rapidly until 1927, but during 1928 the population declined by 1,310, due to slackness in the coal-mining industry and the removal of portion of the ironworks to Port Kembla, a slight increase being shown in 1929. Goulburn has developed, after twenty years of stagnation, into the leading town of the interior not dependent on mining; and Katoomba, a tourist centre 60 miles from Sydney, has grown rapidly.

A list of the mining settlements of the State, together with the number of their population at each of the last four censuses, was published on pages 155 and 156 of the Official Year Book for 1923.

SEX DISTRIBUTION.

As is the case in most of the younger countries, the population of New South Wales contains a surplus of males over females, although in older countries females are usually the more numerous.

The disparity in New South Wales is brought about by the operation of several factors. The development of the colony was first stimulated actively by the "gold rushes" and later depended on the pastoral and mining industries. This, combined with its remoteness from the Old World, led to far greater immigration of men than of women. In recent years the predominance of males among immigrants has tended to increase the disparity between the sexes.

On the other hand, despite the excess of male over female births, the higher rate of mortality among males renders the natural increase of females the greater. Thus, during the ten years, 1910 to 1919, the natural increase consisted of 147,640 males and 166,544 females. As a consequence the excess of males diminished, and the diminution was hastened by the war. During the ten years ended 1930 the natural increase of females was 17,021 greater than that of males, while the increase of males by migration was 13,547 greater than the increase of females from the same cause.

The distribution of the sexes at each census from 1871 to 1921, and at the end of each of the subsequent years was as follows:—

Year.	Distribution of Population in Sexes (including aboriginals).				Males per 100 Females.
	Males.	Females.	Proportion of Males.	Proportion of Females.	
			per cent.	per cent.	No
{1871	275,551	228,430	54·67	45·33	121
1881	411,149	340,319	54·86	45·14	121
1891	612,562	519,672	54·14	45·86	118
1901	712,456	646,677	52·42	47·58	110
1911	858,850	789,896	52·09	47·91	109
1921	1,072,424	1,029,544	51·02	48·98	104
1922	1,108,582	1,065,971	50·98	49·02	104
1923	1,128,089	1,083,017	51·02	48·98	104
1924	1,151,639	1,104,451	51·05	48·95	104
1925	1,172,470	1,127,611	50·98	49·02	104
1926	1,197,428	1,151,973	50·97	49·03	104
1927	1,224,847	1,177,037	50·99	49·01	104
1928	1,247,091	1,199,783	50·97	49·03	104
1929	1,261,970	1,217,177	50·90	49·10	104
1930	1,271,356	1,230,683	50·81	49·19	103

From an analysis of the excess of males at each age-group at the census of 1921, it was concluded* that, although the tendency of the natural increase to maintain the predominance of males was greater between 1911 and 1921 than in the previous decade, it is clear, from the fact that the greatest surpluses of males were then at ages 50 to 65, that as time passes the proportion of females will increase.

BIRTHPLACES OF THE POPULATION.

Broadly speaking, nationality is determined in New South Wales by the common law principle of locality of birth, although it is also provided that, irrespective of place of birth, any child whose father was a British subject, or a child born on a British vessel, shall be deemed a British subject.

The nationality of the population of the State at the census of 1921 was preponderatingly British, no less than 99.1 per cent. of the inhabitants being of British allegiance. The proportion born in Australia was 84.4 per cent.

ABORIGINALS.

The number of aboriginals in New South Wales during the first century after the date of settlement is not accurately known, but it is certain that they have never been numerous.

The first careful enumeration was made in 1891, when it was found that only 8,280 aboriginals of full blood were in existence. Since that date the numbers recorded at successive censuses have declined rapidly to 4,287 in 1901, 2,012 in 1911, and 1,597 in 1921.

Certain particulars relating to aboriginals are collected annually by the Aborigines' Protection Board through the agency of the police, but, owing to the difficulty of tracing individuals, it is not considered that a complete enumeration is obtained by this means. The number of aboriginals of full blood recorded at 30th June, 1930, was 992, of whom 582 were males and 410 were females. The number recorded by the same means at the date of the census in 1921 was 1,281, or 316 less than the total actually enumerated at the census.

Of the aboriginals of full blood enumerated in 1930, 176 were nomadic, 188 were in regular employment and 361 were living on reserves.

The numbers of half-castes enumerated at successive censuses were as follow:—In 1891, 3,183; in 1901, 3,147; in 1911, 4,512; and in 1921, 4,560, of whom 2,349 were males and 2,211 females. The number recorded at the annual collection of 30th June, 1930, was 7,926, comprising 4,318 males and 3,608 females. However, it is considered probable that this number is considerably overstated through the inclusion of full-bloods, for various reasons, and possibly through the inclusion of quadroons and persons of lesser caste.

Of the half-castes enumerated in 1930, 1,085 were nomadic and 2,238 were living on reserves.

NATURALISATION.

Under certain conditions a person of foreign allegiance may be granted a certificate of naturalisation, which entitles him to all the political and other rights, powers, and privileges, and subjects him to all obligations to which natural-born British subjects are entitled, or subject in the Commonwealth of Australia, except insofar as special distinction is made by law between the prerogatives of natural born and naturalised British subjects. The issue of these certificates is now exclusively a function of the Commonwealth.

* Official Year Book, 1922, page 243.

The privileges of naturalisation have not been widely sought in New South Wales on account of the smallness of the non-British element in the population. There were 625 persons naturalised during 1930. Since 1849 the total number of persons naturalised was 20,777, of whom 6,833 were of German origin; 1,829 were Swedes; 1,353 Russians; 1,271 Danes; 1,666 Italians; and 905 French. There were also 1,254 Asiatics, of whom 910 were Chinese and 321 Syrians. Of the total, slightly more than 20 per cent. were of persons naturalised during the period since 1919. The principal nationality affected was that of Greeks, 912 of whom changed during the last eleven years as against 428 previously. Corresponding figures for others were Italians, 771 and 895; Germans, 447 and 6,386; Russians, 283 and 1,070; Syrians, 178 and 143; Swedes, 163 and 1,666; Danes, 155 and 1,116; Poles, 121 and nil; and Finns, 82 and nil. Only 2 Chinese have been naturalised in New South Wales since the passage of the Chinese Restriction and Regulation Act of 1888. Certificates of naturalisation issued under former State laws remain in force under the present Federal statute Nationality Act, 1920).

VITAL STATISTICS.

REGISTRATION OF BIRTHS, DEATHS, AND MARRIAGES.

CIVIL registration of births, deaths, and marriages was inaugurated in New South Wales in March, 1856, when a general registry was established, and a Registrar-General appointed by the Governor. The laws relating to registration were consolidated by the Registration of Births, Deaths, and Marriages Act, 1899, and the Acts relating to marriage by the Marriage Act, 1899, which has been amended by the Marriage (Amendment) Acts, 1924 and 1925. New South Wales was divided into 218 registry districts at 1st January, 1931, in each of which a District Registrar has been appointed.

The births of all children born alive are required to be registered within sixty days of the birth, and a child is considered to have been born alive if it has breathed and has been wholly born into the world whether it has had an independent circulation or not. Usually, births are registered promptly in order to obtain the benefit of the maternity allowance. Stillbirths are not registered, though provision has been made whereby cases of stillbirth, attended by midwives registered under the Nurses' Registration Act, will be notified; but the returns forwarded under the Act have been too incomplete to give any indication of the number of stillbirths.

Before interment, notice of the death of any person must be supplied to the District Registrar by a relation of the deceased, or by the householder or tenant of the house or place in which the death occurs. Such notice must be accompanied by a proper certificate as to the cause of death. When a dead body is found, the death is registered by the Coroner or by the nearest Justice of the Peace.

Marriages may be celebrated only by a minister of religion registered for that purpose by the Registrar-General or by the District Registrar for marriages of the district in which the intended wife ordinarily resides. In the latter case the parties to be married must sign, before the District Registrar officiating, a declaration that they desire to be married, and affirming the usual place of residence of the intended wife. The proportion of marriages performed by Registrars has increased steadily from 3.5 per cent. in 1917 to 8.6 per cent. in 1930. Marriage of minors is permissible only with the written consent of parents or guardians. Marriage with a deceased wife's sister or a deceased brother's widow is valid in law in New South Wales.

At the beginning of 1931 there were registered 2,206 persons as Ministers of religion for the celebration of marriages in New South Wales. Of these, 616 belonged to the Church of England, 635 were Roman Catholics, 313 Methodist, 284 Presbyterian, 79 Congregational, 89 Baptist, 58 belonged to the Salvation Army, 30 were Seventh Day Adventists, 37 belonged to the Church of Christ, 7 to the Latter Day Saints, and 7 to the Jewish faith. There were 27 other religious bodies, represented by 51 ministers.

CONJUGAL CONDITION OF THE POPULATION.

The proportion of married persons living in New South Wales at the census of 1921 was considerably more than one-third of the population, being 37.4 per cent., which represents an increase from 33.5 per cent.

at the previous census. The actual numbers and proportions of the population (exclusive of aboriginals), arranged in groups according to conjugal condition, at the census of 1921 were as follow:—

Conjugal condition.	Number.			Proportion per cent.		
	Males.	Females.	Total.	Males.	Females.	Total.
Never married—						
Under age 15 ...	343,979	334,385	678,364	32·19	32·56	32·37
Age 15 and over ...	302,574	237,693	540,267	28·32	23·14	25·78
Married ...	391,844	391,886	783,730	36·68	38·16	37·40
Widowed ...	27,851	60,701	88,552	2·60	5·91	4·23
Divorced ...	2,214	2,395	4,609	·21	·23	·22
Not stated ...	3,039	1,810	4,849	...	...	...
Total ...	1,071,501	1,028,870	2,100,371	100·00	100·00	100·00

The persons never married constituted 58.15 per cent. of the total population, but of these 678,364 (or 32.37 per cent. of the population) were under the age of 15 years. The number of males over the age of 15 years who have never been married was 302,574, and of females 237,693. The higher marriage rate of the decade 1911-1921 as compared with the preceding decade, coupled with the increasing proportion of persons of marriageable age, had the effect of considerably raising the proportion of married persons in the population. The proportion of married to the number of persons over the age of 15 years rose from 49.2 per cent. in 1911 to 55.1 per cent. in 1921. The number of males never married is considerably greater than the number of females never married, because of the facts that women generally marry at earlier ages than men, and that there is an excess of males over females in the population.

The following table affords a comparison of the proportions of each of the principal groups to the total population where the necessary particulars were stated at each of the last seven censuses:—

Census.	Males.				Females.			
	Never married.	Married.	Widowed.	Divorced.	Never married.	Married.	Widowed.	Divorced.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1861	69·34	28·23	2·43	*	61·09	35·14	3·77	*
1871	69·96	27·59	2·45	*	62·89	32·82	4·29	*
1881	70·64	26·94	2·42	*	63·52	31·75	4·73	*
1891	69·78	27·41	2·78	·03	62·87	32·11	5·00	·02
1901	68·46	28·69	2·75	·10	62·43	32·00	5·46	·11
1911	65·00	32·18	2·67	·15	59·30	35·03	5·52	·15
1921	60·51	36·68	2·60	·21	55·70	38·16	5·91	·23

* Divorce proceedings were first permitted under Matrimonial Causes Act, 1873.

There has been a steady decline since 1881 in the proportions of both sexes never married, and a corresponding increase in the proportions married. This is the result partly of the higher marriage rate since 1901, which in turn has been due in a large measure to the altered age-constitution of the population consequent on the declining birth-rate. The proportion of widowers has shown no appreciable increase during the period, although the proportion of widows has constantly increased, attaining the high proportion of nearly 6 per cent. of the total female population in 1921. The

increase in the proportion of divorced persons of both sexes has been relatively very rapid. The numbers and proportions of widowed and divorced persons shown are exclusive of those who had re-married.

MARRIAGES.

The number of marriages celebrated in New South Wales during 1930 was 17,383, corresponding to a rate of 6.98 per 1,000 of the population.

The following table shows the average annual number of marriages and the rates per 1,000 of the population since 1880:—

Period.	Average Annual Number of Marriages.	Rate per 1,000 of Population.	Period.	Average Annual Number of Marriages.	Rate per 1,000 of Population.
1880-84	6,738	8.39	1915-19	15,345	7.97
1885-89	7,679	7.67	1920-24	18,374	8.55
1890-94	7,954	6.80	1925-29	19,481	8.21
1895-99	8,700	6.74	1927	20,052	8.45
1900-04	10,240	7.37	1928	20,076	8.27
1905-09	12,080	7.97	1929	19,535	7.93
1910-14	15,978	9.17	1930	17,383	6.98

A review of the marriage rates since 1880 shows that the rates declined steadily for ten years prior to 1894, when they reached the lowest point, being only 6.25 per 1,000 of population. After that year an improvement, remarkable for its regularity, was experienced, until in 1912 the rate (9.55 per 1,000) was the highest then recorded. In 1915 the rate was slightly higher, probably due in part to marriages contracted by soldiers prior to their departure for the war. Owing to the absence of many marriageable men the rates for the next three years showed a decline, but coincident with the return of men from active service the rate rose appreciably in 1919 and still more in 1920. The movement of the subsequent years shows a sharp decline followed by a recovery. The average for the last five years, though appreciably less than in the quinquennia immediately before and after the war, was greater than for any other similar period since 1880. The comparatively low rate in 1930 was probably due to the prevailing industrial depression.

The following statement shows the marriage rate per 1,000 of the population in each State, the Commonwealth of Australia, and in New Zealand in 1930, compared with the rates of the previous five years:—

State.	1925.	1926.	1927.	1928.	1929.	1930.
<i>New South Wales...</i>	8.14	8.28	8.45	8.27	7.93	6.98
Victoria ...	8.00	7.90	7.88	7.52	7.31	6.52
Queensland ...	7.60	7.34	7.04	6.95	6.67	6.59
South Australia ...	7.82	8.06	7.98	7.18	6.42	5.70
Western Australia ...	7.46	7.58	8.07	8.29	8.18	7.66
Tasmania ...	7.05	6.79	6.82	7.09	8.01	6.70
Commonwealth ...	7.91	7.92	7.95	7.73	7.45	6.71
New Zealand ...	7.84	7.90	7.62	7.58	7.79	7.77

Divorces.

The number of marriages dissolved annually by divorce and decree of nullity has increased materially during recent years, and they are now of considerable magnitude in relation to the number of marriages celebrated annually. Particulars of the duration of such marriages and number of issue are shown in the chapter, "Law Courts," of this Year Book.

The number of marriages dissolved in New South Wales by decrees of divorce made absolute or by declarations of nullity, in 1930, was 944, being in the proportion of 5.4 per cent. to the number of marriages celebrated during the year. The corresponding numbers for 1929 were 1,078, equivalent to 5.5 per cent. of marriages.

Condition before Marriage.

During the year 1930, of the males married, 15,972 were bachelors, 1,009 were widowers, and 402 were divorced. Of the females, 16,186 were spinsters, 736 were widows, and 461 were divorced. The proportion of males remarried was 8.12 per cent., and of females 6.89 per cent.

The following table shows at quinquennial intervals since 1891 the proportion of first marriages and of re-marriages per 10,000 married:—

Period.	Bridegrooms per 10,000 married.		Brides per 10,000 married.	
	Bachelors.	Widowers and Divorced Men.	Spinsters.	Widows and Divorced Women.
1891	9,229	771	9,216	784
1896	9,184	816	9,172	828
1901	9,270	730	9,268	732
1906	9,262	738	9,352	648
1911	9,407	593	9,456	544
1916	9,377	623	9,362	638
1921	9,246	754	9,214	786
1926	9,229	771	9,280	720
1927	9,242	758	9,325	675
1928	9,237	763	9,344	656
1929	9,214	786	9,321	679
1930	9,188	812	9,311	689

The proportions of widows and divorced women who re-married in the years 1916 and 1921 were greater than in the case of widowers and divorced men, whereas the reverse has usually been the case; the variation is probably due to the loss of life among married men at the war.

The following table shows the number of males and females of each condition married in each of the last five years:—

Year.	Number of Males married who were —			Number of Females married who were—		
	Bachelors.	Widowers.	Divorced.	Spinsters.	Widows.	Divorced.
1926	17,738	1,109	372	17,836	889	494
1927	18,533	1,117	402	18,698	895	459
1928	18,544	1,105	427	18,759	834	483
1929	17,999	1,083	453	18,209	810	516
1930	15,972	1,009	402	16,186	736	461

The proportion of re-marriages has shown a tendency to increase during the past sixteen years, but latterly the increase has been due mainly to the re-marriages of divorced persons. The number of widows re-married increased from 950 in 1919 to 1,223 in 1920, but it has since decreased steadily.

Age at Marriage.

The numbers of brides and bridegrooms in age groups in each of the last five years are shown in the following table. The ages recorded are those stated at marriage by the contracting parties, without verification, and they represent age last birthday.

Year.	Ages of Bridegrooms.				Ages of Brides.			
	Under 21 years.	21 to 29 years.	30 to 44 years.	45 and over.	Under 21 years.	21 to 29 years.	30 to 44 years.	45 and over.
1926 ...	1,380	11,679	5,085	1,075	4,985	10,647	3,027	560
1927 ...	1,405	12,546	4,956	1,145	5,285	11,184	3,008	575
1928 ...	1,519	12,403	5,016	1,138	5,426	11,079	3,000	571
1929 ...	1,405	12,339	4,611	1,180	5,167	10,939	2,843	586
1930 ...	1,401	10,797	4,108	1,077	5,053	9,441	2,370	519
1930	B. 1,400	10,689	3,424	459	S. 5,046	9,230	1,733	177
	W. 1	64	431	513	W. 5	72	364	295
	D. ...	44	253	105	D. 2	139	273	47

B, bachelors; S, spinsters; W, widowed; D, divorced.

Further details of the ages and condition of persons married each year are published in the Statistical Register of New South Wales.

In 1930 approximately 76 per cent. of first marriages among men and 89 per cent. among women were celebrated before attaining age 30, and the majority of marriages of persons over 45 years of age were re-marriages of one or both of the contracting parties.

The following statement shows the average age at marriage both of bridegrooms and of brides in various years since 1918. The difference between the ages at marriage of males and females is on the average about $3\frac{1}{2}$ years, the males being the older.

Year.	Average Age of—		Average Age of—		Year.	Average Age of—		Average Age of—	
	All Bridegrooms.	Bachelors.	All Brides.	Spinsters.		All Bridegrooms.	Bachelors.	All Brides.	Spinsters.
1919	years. 29·7	years. 28·7	years. 26·2	years. 25·3	1926	years. 29·2	years. 23·0	years. 25·8	years. 24·7
1920	29·5	28·5	26·1	25·2	1927	29·1	27·8	25·6	24·6
1921	29·7	28·5	26·2	25·2	1928	29·0	27·8	25·6	24·6
1924	29·4	28·1	25·9	24·8	1929	29·0	27·7	25·5	24·5
1925	29·4	28·1	25·8	24·8	1930	29·0	27·6	25·3	24·2

The average age at marriage of both bridegrooms and brides increased by nearly twelve months between 1908 and 1918. Since the latter year there has been a steady reduction, and the average ages at marriage are now less than they were 20 years ago.

Marriages of Minors.

The number of minors married at each individual age is shown annually in the Statistical Register. The number of brides at each age under 21 in 1930, were 1 at 13; 7 at 14; 59 at 15; 325 at 16; 704 at 17; 1,204 at 18; 1,382 at 19; and 1,371 at 20. The corresponding numbers of bridegrooms were 7 at 16; 52 at 17; 205 at 18; 474 at 19; and 665 at 20.

The following are the numbers and proportions of brides and bridegrooms married under the age of 21 years:—

Year.	Minors.		Percentage of—	
	Bride-grooms.	Brides.	Bride-grooms.	Brides.
1881	149	1,660	2·37	26·42
1891	177	2,083	2·09	24·65
1901	351	2,546	3·33	24·15
1911	701	3,499	4·59	22·92
1921	833	3,850	4·50	20·79
1924	1,144	4,389	6·33	24·27
1925	1,291	4,645	6·97	25·08
1926	1,380	4,985	7·18	25·94
1927	1,405	5,285	7·01	26·36
1928	1,519	5,426	7·57	27·03
1929	1,405	5,167	7·19	26·45
1930	1,401	5,053	8·06	29·07

The proportion of minors among bridegrooms increased over a long period of years up to the year 1912, when it was 4·62 per cent., fluctuating thence down and up to 4·68 per cent. in 1920. In the years that have ensued there has been a sustained increase, and over 8 per cent. of the bridegrooms married in 1930 were minors. Among brides the proportion of minors has always been much larger than among bridegrooms, but it decreased continuously, with irregular fluctuations until the low level of 20·79 per cent. was reached in 1921. Since that year there has been an appreciable increase, and the proportion in 1930 was 29·07 per cent.

Mark Signatures in Marriage Registers.

In 1870 the proportion of signatures made in the marriage register with marks was as high as 188·8 per 1,000 of the whole, but in 1929 the number of persons who signed in this way was only 61, and in 1930, 41, equals to 1·2 per 1,000 persons married in each year.

Marriages according to Denomination.

Of the marriages performed in New South Wales, over 93 per cent. are celebrated by ministers of religion licensed under the authority of the Registrar-General. The number of marriages at which clergymen officiated was 18,200 in the year 1929 and 15,886 in 1930. The number contracted before District Registrars was 1,335 in 1929 and 1,497 in 1930, the proportion being 6·8 per cent. in 1929 and 8·6 per cent. in 1930.

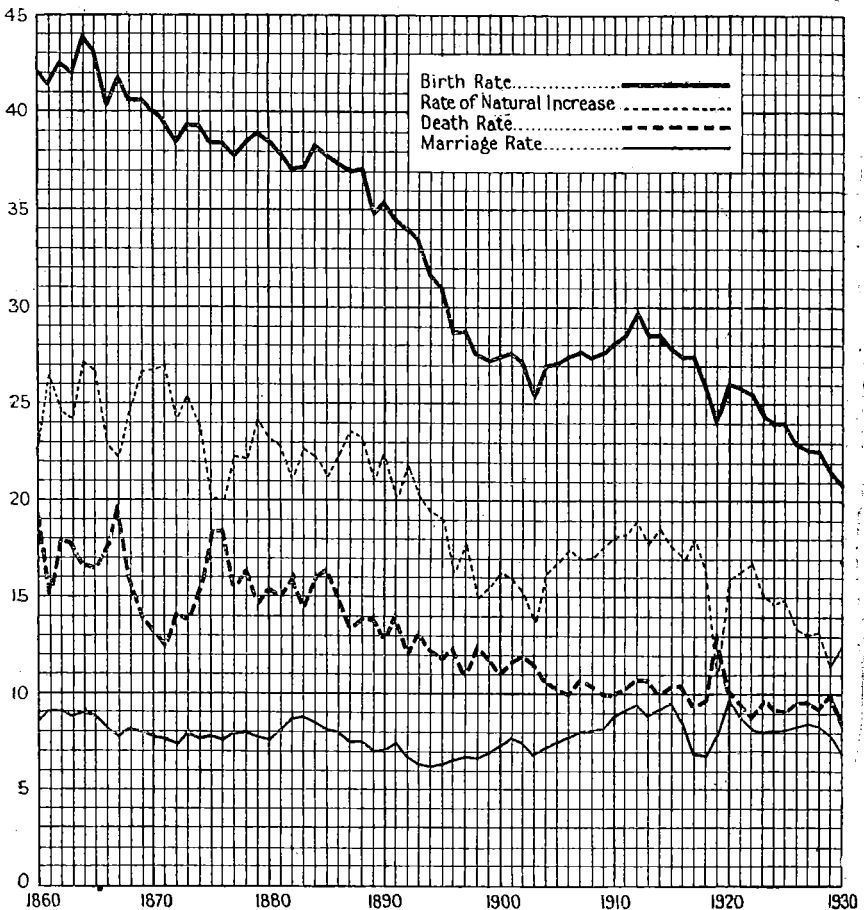
The following table gives the number and proportion per cent. of marriages registered by the several denominations during 1930 in comparison with the last ten years:—

Denomination.	1930.		1921-30.	
	Marriages.	Proportion per cent.	Marriages.	Proportion per cent.
Church of England ...	7,133	41·03	79,379	42·57
Roman Catholic ...	3,614	20·79	38,105	20·43
Presbyterian...	2,195	12·63	24,926	13·37
Methodist ...	1,970	11·33	21,935	11·76
Congregational ...	364	2·09	4,304	2·31
Baptist ...	248	1·43	2,732	1·46
Hebrew ...	57	·33	468	·25
All Other Sects ...	305	1·76	3,387	1·82
District Registrars ...	1,497	8·61	11,236	6·03
Total Marriages ...	17,383	100·00	186,472	100·00

The proportion per cent. of the number of adherents of the principal denominations at the census of 1921 to the total population was—Church of England, 49·60; Roman Catholic, 24·27; Presbyterian, 10·62; and Methodist, 8·79.

Thus the proportion of marriages, according to the rites of the two principal churches, was considerably below the proportional number of their adherents, while in the case of the Presbyterian and Methodist churches, the position was the reverse.

RATES OF BIRTHS, DEATHS, MARRIAGES, AND OF NATURAL INCREASE, 1860-1930.



The numbers at the side of the Graph represent rates per 1,000 of mean population.

BIRTHS.

After the first few years included in the above graph the birth-rate shows a steady downward tendency. It fell sharply after 1888, and declined continuously until 1903, but after that year there was an improvement, and the rate in 1912 was the highest since 1895. During the war years, coincident with the decline in the marriage rate, there was a falling-off in the

birth-rate, which reached its lowest point in 1919, perhaps partly in consequence of an epidemic of influenza. However, despite a slight revival in the marriage rate, the birth-rate remained low and has continued to fall still further in the years succeeding the war. The birth-rate of 1924 was lower than in any previous year, and there has since been a pronounced decline.

The following table shows the average annual number of births and the birth-rate per 1,000 of the total population since 1880:—

Period.	Average Annual Number of Births.	Birth-rate per 1,000 of Population.	Period.	Average Annual Number of Births.	Birth-rate per 1,000 of Population.
1880-84	30,417	37·89	1915-19	51,331	26·64
1885-89	36,877	36·85	1920-24	54,321	25·27
1890-94	39,550	33·80	1925-29	53,814	22·68
1895-99	37,042	28·68	1927	53,858	22·68
1900-04	37,498	26·99	1928	54,800	22·59
1905-09	41,788	27·66	1929	52,672	21·37
1910-14	50,190	28·79	1930	52,136	20·94

The rates shown above are calculated by the usual "crude" method of relating the births to the total population, which is not altogether satisfactory. A preferable method for purposes of strict analysis is to relate the number of mothers giving birth to children at various ages to the total number of women at corresponding ages, or to relate the annual number of births to the number of women of child-bearing ages living during the year. Unfortunately these methods can be followed with exactitude only at census dates, since at any other time it is very difficult to make a reliable estimate of the number living at various ages, on account of migration and other influences.

The birth-rate per 1,000 women living at various groups of reproductive ages, from 15 to 45 years, have been calculated for the last four census years, and are shown in the following table:—

Ages of Mothers (years).	1891.	1901.	1911.	1921.	Decrease per cent. in rates, 1891 to 1921.
15-19	35·30	30·87	33·75	32·72	7·3
20-24	170·90	134·65	141·45	146·57	14·2
25-29	247·48	177·95	187·35	168·99	31·3
30-34	288·81	168·42	161·20	140·18	41·3
35-39	196·15	136·60	122·27	101·71	48·1
40-44	96·61	70·79	54·51	43·78	54·7
15-44	161·74	117·46	118·50	109·84	32·1

The crude birth-rate for New South Wales was 9·5 per cent. lower in 1921 than in 1911. The rate, calculated on the basis of the number of women of reproductive age, was only 7·4 per cent. lower.

From the foregoing table it will be seen that the decline since 1891 has been general in all age-groups, although it was more marked at the later than at the earlier ages, and became increasingly pronounced as age advanced. The contrast in experience in regard to the first and last quinquennia of the normal years of child-bearing is particularly striking. Whereas the

birth-rate for women in the last quinquennium of child bearing years in 1901 was 174 per cent. greater than the rate for those in the first quinquennium of child bearing years, the corresponding proportion in 1921 was only 34 per cent. The rate in age group 20-24 has shown a persistent improvement since 1901, and that for the group 15-19 was higher in 1921 than in 1901.

The crude birth-rates per 1,000 of the population of each State of the Commonwealth and of New Zealand in the last seven years are given in the following table:—

State.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
New South Wales ..	24·07	24·00	22·88	22·68	22·59	21·37	20·94
Victoria ...	22·01	21·49	20·84	20·30	19·70	18·99	18·56
Queensland ...	23·87	23·82	22·58	22·24	21·76	19·99	20·14
South Australia ...	21·88	21·06	20·55	20·12	19·76	18·40	17·19
Western Australia ...	23·09	22·23	22·14	22·03	21·79	22·00	21·98
Tasmania	25·07	24·44	23·62	23·01	22·13	22·44	22·11
Commonwealth ...	23·24	22·89	22·02	21·67	21·33	20·31	19·93
New Zealand ...	21·57	21·17	21·05	20·29	19·56	19·01	18·80

Birth-Rates—Metropolis and Remainder of the State.

An informative analysis of the birth rate of New South Wales is made below by distinguishing the births occurring in Sydney and suburbs from those in the remainder of the State. Prior to the year 1893 the metropolitan crude birth-rate was the higher, but since then, with the exception of the year 1913, the country has consistently shown a higher crude rate.

Period.	Number of Births.			Births per 1,000 of Population.		
	Metropolis.*	Remainder of State.*	New South Wales.	Metropolis.*	Remainder of State.*	New South Wales
1880-84	49,058	103,026	152,084	40·16	36·90	37·89
1885-89	65,866	118,517	184,383	41·50	34·69	36·85
1890-94	68,754	128,998	197,752	34·11	33·63	33·80
1895-99	61,224	123,986	185,210	26·73	29·75	28·68
1900-04	63,694	123,795	187,489	25·16	28·05	26·99
1905-09	72,409	136,529	208,938	25·50	28·80	27·56
1910-14	95,529	155,423	250,952	27·66	29·53	28·79
1915-19	100,216	156,439	256,655	25·02	27·81	26·64
1920-24	110,908	160,696	271,604	23·53	26·57	25·27
1925	22,036	32,579	54,615	21·51	26·03	24·00
1926	21,487	31,639	53,126	20·40	24·94	22·88
1927	20,588*	33,270*	53,858	18·98*	25·81*	22·68
1928	21,151*	33,649*	54,800	18·96*	25·67*	22·59
1929	22,347*	30,325*	52,672	18·18*	24·55*	21·37
1930	21,927*	30,209*	52,136	17·61*	24·28*	20·94

* Since 1st Jan., 1927, births have been allocated according to usual address of mother. In Jan., 1929, the area of the Metropolis was increased by the inclusion of the municipalities of Auburn, Bankstown, Granville, Lidcombe and Parramatta.

The age and sex constitution of the metropolitan population is considerably different from that of the remainder of the State, therefore, comparisons of crude birth-rates are to be taken with reserve, except as indicating the direction of the general trend. Prior to 1927, the classification was according to place of registration of birth, but, from 1st January, 1927, the usual address of the mother was adopted as the basis of distribution. This change made an apparent reduction in the number of metropolitan births.

The Sexes of Children.

Of the 52,136 children born during 1930 (exclusive of those still-born), 26,642 were males and 25,494 were females, the proportion being 105 males to 100 females. As far as observation extends, the number of female births has not exceeded that of males in any year, although the difference has sometimes been very small.

The table below shows the number of males born to every 100 females born, both in nuptial and ex-nuptial births, during the last fifty years:—

Years.	Nuptial Births.	Ex-Nuptial Births.	All Births.	Years.	Nuptial Births.	Ex-Nuptial Births.	All Births.
1880-84	104·9	103·9	104·8	1910-14	105·2	105·1	105·2
1885-89	105·4	98·8	105·1	1915-19	105·3	104·0	105·2
1890-94	105·7	105·4	105·7	1920-24	104·6	107·3	104·8
1895-99	105·0	105·4	105·1	1925-29	105·6	106·5	105·7
1900-04	104·3	102·8	104·2	1930	104·2	109·1	104·5
1905-09	105·0	104·9	105·0				

Plural Births.

During the year 1930, there were 583 cases of plural births, of which one child or more was registered, comprised of 577 cases of twins; 5 cases of triplets and 1 case of quadruplets. The live children thus born numbered 1,164, twins (561 males, 586 females), triplets (7 males and 6 females) and quadruplet (4 males). There were 9 still-births. Of these 583 cases, 22 were classified as ex-nuptial.

The number of children born at plural births was 2.23 per cent. of the total births.

The following table shows the number of cases of twins and triplets born in New South Wales during the years 1929 and 1930 and the last ten years, excluding those cases in which all were still-born, and distinguishing nuptial and ex-nuptial:—

	Twins.	Triplets.		Twins.	Triplets.
1929 Nuptial ...	519	4	1920-29 Nuptial ...	5,386	46
Ex-Nuptial ...	30	...	Ex-Nuptial ...	234	2
Total ...	549	4	Total ...	5,620	48
1930 Nuptial ...	555	5	1921-30 Nuptial ...	5,371	45
Ex-Nuptial ...	22	...	Ex-Nuptial ...	228	2
Total ...	577	5	Total ...	5,599	47

A case of quadruplets occurred in 1930, the previous case recorded being in 1913.

The total number of confinements recorded during the ten years was 533,262; hence the rates per million confinements were 10,500 cases of twins and 88 of triplets; otherwise stated, there were 11 plural births in every 1,000 confinements.

EX-NUPTIAL BIRTHS.

The number of ex-nuptial births in 1930 was 2,541, equal to 4.87 per cent. of the total births and 1.02 per 1,000 of population. A statement of the ex-nuptial births in New South Wales at intervals since 1900 is given below:—

Year.	Number of Ex-Nuptial Births.	Ratio per cent. to Total Births.	Crude Rate per 1,000 of Population.	Year.	Number of Ex-Nuptial Births.	Ratio per cent. to Total Births.	Crude Rate per 1,000 of Population.
1900	2,605	7.01	1.92	1926	2,748	5.17	1.18
1905	2,912	7.37	2.00	1927	2,693	5.00	1.13
1910	2,900	6.37	1.79	1928	2,707	4.94	1.12
1915	2,681	5.07	1.42	1929	2,720	5.16	1.10
1920	2,635	4.88	1.27	1930	2,541	4.87	1.02
1925	2,756	5.05	1.21				

Over the whole State the proportion of ex-nuptial to total births has declined in a marked degree since 1905. It rose gradually from 4.35 per cent. in 1880 to 7.37 per cent. in 1905, after which a rapid decline occurred to 4.80 per cent. in 1916. The ratio rose again during the years 1917 to 1919, when the number of legitimate births declined. It fell to 4.9 per cent. in 1920, and three years later it began to rise again as the total number of births decreased. The rise and fall of this proportion followed in a general way the same course as the ex-nuptial birth-rate per 1,000 inhabitants, which rose between 1884 and 1894 from 1.57 to 2.09 per 1,000 of population. It remained near that level until 1905, then commenced to decline slowly but continuously.

The most accurate test to the extent of ex-nuptial births is obtained by relating the total number of such births recorded to the number of unmarried women of child-bearing age. This can only be done satisfactorily at census periods, but it indicates that, though the proportion of such births was increasing up to about 1890, it declined considerably in the next thirty years, the proportion of ex-nuptial children born, per 1,000 unmarried women aged 15 to 45, having fallen from 18.41 in 1891 to 16.10 in 1901, 14.18 in 1911, and 12.49 in 1921, a decrease of 32 per cent. since 1891.

The Legitimation Act, 1902.

In 1902 an Act was passed to legitimise 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 Act, any child who comes within the scope of its purpose born before or after the passing thereof, is deemed to be legitimised from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. The total number of registrations under the Act up to the end of the year 1930 was 10,608. The number in each year of the last ten years is shown in the following table:—

Year.	Registrations.	Year.	Registrations.
1921	444	1926	532
1922	371	1927	646
1923	397	1928	668
1924	396	1929	496
1925	414	1930	385

NATURAL INCREASE.

The excess of births over deaths, or "natural increase," during 1930 was 30,884, equal to 12.40 per 1,000 of the population.

The following table shows the natural increase of population since 1890 in the Metropolis, in the remainder of the State, and in the whole of New South Wales:—

Year.	Natural Increase.					Annual Rate of Natural Increase per 1,000 of Population.
	Metropolis.*	Remainder of State.	Whole State.			
			Males.	Females.	Total.	
1890-94	38,859	82,787	57,233	64,413	121,646	20.79
1895-99	33,056	74,575	49,885	57,746	107,631	16.67
1900-04	34,470	73,377	49,695	58,152	107,847	15.52
1905-09	42,513	88,132	61,652	68,993	130,645	17.23
1910-14	58,969	101,218	75,648	84,539	160,187	18.38
1915-19	56,584	97,413	71,992	82,005	153,997	15.98
1920-24	65,737	103,822	80,484	89,075	169,559	15.77
1925-29	54,546*	101,425*	73,812	82,169	155,981	13.15
1927	10,170*	20,918*	14,827	16,261	31,088	13.09
1928	10,743*	21,363*	15,489	16,617	32,106	13.24
1929	9,878*	18,179*	13,026	15,031	28,057	11.38
1930	11,973*	19,811*	14,502	16,332	30,884	12.40

* Since 1st January, 1927, births have been distributed according to usual residence of mother, and deaths according to usual residence of deceased. The area of the metropolis was increased in 1928. See foot-note to Table on page 503.

Despite slight fluctuations the rate of natural increase is declining, and since 1922 the decline has been rapid. The change in the basis for distributing births and deaths in 1927 has materially altered the allocation between metropolis and remainder of State.

On account of the decrease in death-rates, the rate of natural increase prior to the war period had been improving slightly for about sixteen years. The increase per 1,000 of population for the five years 1915-19, however, was 13 per cent. lower than that for the previous quinquennium; in 1922 it showed a slight improvement as compared with the years immediately preceding it, but the average for the five years ending 1930 shows a decline of 31 per cent. below the pre-war average.

Although the number of males born is more numerous than that of females, the increase of population from the excess of births over deaths is greatly in favour of the latter, since there is a disproportionately large number of deaths among males. There is also a greater mortality among male than among female children, and by this cause alone the natural excess of male births is almost neutralised. During the ten years which closed with 1930, the number of females added to the population by excess of births over deaths exceeded the males by 17,021, or 11 per cent.

The respective increases from natural and migratory causes are shown in chapter "Population" of this Year Book.

Analyses of the natural and migratory increases in the population of the State since 1861 and of the various divisions of the State since 1891 are shown on pages 226 and 236 of the Year Book for 1922.

Since 1923 there has been a decrease in the rates of natural increase in all the Australian States, and the rates have declined in New Zealand since 1925, as will be seen from the table below. The rates are per 1,000 of population.

State.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
<i>New South Wales...</i>	<i>14.73</i>	<i>14.85</i>	<i>13.32</i>	<i>13.09</i>	<i>13.24</i>	<i>11.38</i>	<i>12.40</i>
Victoria ...	11.96	12.02	11.21	10.59	9.59	9.54	9.62
Queensland ...	14.99	14.96	13.09	13.18	12.99	11.01	12.21
South Australia ...	12.69	11.91	11.82	11.14	10.84	9.70	8.84
Western Australia	14.01	13.23	13.21	13.22	12.68	12.45	12.96
Tasmania ...	15.18	15.09	14.57	13.33	12.07	12.27	13.11
Commonwealth ..	13.77	13.69	12.60	12.22	11.88	10.76	11.34
New Zealand ...	13.28	12.88	12.31	11.84	11.07	10.26	10.24

DEATHS.

The deaths during 1930 numbered 21,252, equal to a rate of 8.54 per 1,000 of the mean population. Of the total, 12,140 were males and 9,112 females, the rate for the former being 9.59 and for the latter 7.45 per 1,000 living of each of the sexes. The average annual number of deaths from 1880, with the rate per 1,000 of population, in quinquennial periods, was as follows:—

Period.	Average Annual Number of Deaths.			Death-rate per 1,000 of Population.			Proportion per cent. of Male to Female Rate.
	Males.	Females.	Total.	Males.	Females.	Total.	
1880-84	7,286	5,124	12,410	16.55	14.14	15.46	117
1885-89	8,461	6,043	14,504	15.43	13.36	14.49	115
1890-94	8,877	6,344	15,221	14.06	11.77	13.01	119
1895-99	9,002	6,514	15,516	13.11	10.77	12.01	122
1900-04	9,195	6,733	15,928	12.65	10.17	11.47	124
1905-09	9,076	6,583	15,659	11.52	9.04	10.33	127
1910-14	10,598	7,555	18,153	11.59	9.11	10.41	128
1915-19	11,919	8,613	20,532	12.20	9.07	10.66	137
1920-24	11,696	8,713	20,409	10.67	8.27	9.49	129
1925-29	12,886	9,732	22,618	10.65	8.37	9.53	127
1927	12,978	9,792	22,770	10.81	8.41	9.59	127
1928	12,785	9,909	22,694	10.33	8.33	9.35	124
1929	14,039	10,576	24,615	11.18	8.75	9.99	128
1930	12,140	9,112	21,252	9.59	7.45	8.54	129

The death-rate has fallen continuously for both sexes, but faster for females than for males. As shown above, the rate during the five years 1880-84 was over 62 per cent. higher than that experienced during the five years 1925-29. Many causes are responsible for this improvement, such as the enforcement of Health Acts, the advance of science, and the better education of the people. The remarkable effect of these factors on the death-rates of the population in the early years of life is dealt with later in connection with deaths of children under 1 year and under 5 years.

A table of the death-rates per 1,000 of mean population in each of the Australian States and in New Zealand from 1924 to 1930 is shown below:—

State.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
<i>New South Wales</i> ...	9·34	9·15	9·56	9·59	9·35	9·99	8·54
Victoria ...	10·05	9·47	9·63	9·71	10·11	9·45	8·94
Queensland ...	8·88	8·86	9·39	9·06	8·77	8·98	7·93
South Australia ...	9·19	9·15	8·73	8·98	8·92	8·70	8·35
Western Australia ...	9·08	9·00	8·93	8·81	9·11	9·55	9·02
Tasmania ...	9·89	9·35	9·05	9·68	10·06	10·17	9·00
Commonwealth ...	9·47	9·20	9·42	9·45	9·45	9·55	8·59
New Zealand ...	8·29	8·29	8·74	8·45	8·49	8·75	8·56

The above comparison represents the respective crude death-rates of the States enumerated. The differences in the age and sex constitution of the individual populations have not been taken into account, therefore the rates are not strictly comparable with each other as showing the true incidence of mortality in the various States.

Such a comparison can be made by applying the rates of mortality in age and sex-groups to a standard population embodying a fixed distribution according to age and sex. The resultant rates constitute an index of mortality or weighted average death-rate which, in effect, shows what would have been the death-rate if the age and sex distribution of the population compared each year had been in accordance with the standard adopted. The standard used is identical with that provided by the International Statistical Institute in Part II, p. viii of the *Annuaire International de Statistique*, 1917.

The index of mortality so calculated for each of the Australian States is shown below:—

State.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
New South Wales	10·31	10·13	10·62	10·64	10·40	11·14	9·54
Victoria ...	10·31	9·74	9·91	10·02	10·46	9·78	9·31
Queensland ...	9·90	9·94	10·47	10·20	9·92	10·21	9·03
South Australia ...	9·50	9·43	9·02	9·36	9·21	8·97	8·69
West Australia ...	10·82	10·67	10·63	10·71	11·14	11·69	11·16
Tasmania ...	10·43	9·94	9·70	10·43	10·76	10·98	9·66
Commonwealth ...	10·20	9·93	10·20	10·43	10·44	10·39	9·38

It is necessary to emphasise that the above rates are hypothetical and are serviceable only for purposes of comparison *inter se* and with death-rates of other countries calculated on the same basis. The age and sex distribution in the standard population is supposititious, being based on an agglomeration of European populations.

Death-rates—Age and Sex.

The remarks already made regarding the limitations in the use of crude birth-rates apply also to the conclusions to be drawn from tables of crude death-rates published above. The age and sex distribution of a population are most important factors to be considered in comparing death-rates. In New South Wales usually more than half the deaths are of persons over 55 years of age, the rates of mortality below and above that age being roughly 5 and 45 per 1,000 respectively. It follows that any variation in the proportion of persons in the various age groups will have a considerable bearing on the death-rate of the whole population.

Again, as shown above, the death-rate of males during the same period was 29 per cent. more than that of females. Consequently an increase in the proportion of females will be reflected in a corresponding decrease in the general rate.

In the following table death-rates are given for each sex in the principal age-groups during the four decennial periods from 1881 to 1920:—

Age-Group, Years.	Deaths per 1,000 Living—All causes.				Reduction per cent., 1881-90 to 1901-10.
	1881-90.	1891-1900.	1901-10.	1911-20.	
Males.					
0-4	44.57	37.65	27.90	23.28	37
5-9	3.62	2.88	2.07	1.95	43
10-14	2.44	2.08	1.78	1.52	27
15-19	3.74	3.13	2.85	2.58	24
20-24	5.83	4.38	3.67	3.83	37
25-34	7.72	5.88	4.51	5.16	41
35-44	10.92	9.13	7.46	7.07	32
45-54	17.65	14.69	12.87	12.65	28
55-64	30.46	29.05	24.95	23.91	17
65-74	63.67	56.58	58.77	52.39	8
75 and over ...	149.36	148.98	142.43	147.36	4
All Ages ...	15.62	13.43	11.77	11.81	24
Females.					
0-4	40.47	32.98	24.21	19.61	40
5-9	3.29	2.77	1.88	1.79	43
10-14	2.18	1.77	1.58	1.25	28
15-19	3.52	2.80	2.53	1.94	30
20-24	5.40	4.12	3.59	3.20	33
25-34	7.44	5.70	4.71	4.52	26
35-44	9.95	8.04	6.82	5.61	32
45-54	13.83	10.86	9.50	8.65	32
55-64	23.12	21.16	18.24	16.43	21
65-74	52.73	43.48	45.91	40.67	10
75 and over ...	135.66	134.14	123.05	127.15	9
All Ages ..	13.47	11.02	9.47	8.96	30
Total.					
0-4	42.56	35.35	26.08	21.49	39
5-9	3.46	2.83	1.98	1.87	42
10-14	2.32	1.93	1.63	1.39	28
15-19	3.63	2.97	2.69	2.25	26
20-24	5.63	4.25	3.63	3.50	36
25-34	7.60	5.83	4.60	4.84	39
35-44	10.53	8.67	7.17	6.37	32
45-54	16.19	13.11	11.42	10.83	30
55-64	27.62	25.83	22.04	20.62	20
65-74	59.39	51.22	53.22	47.07	10
75 and over ...	144.15	142.68	133.72	137.81	7
All Ages ...	14.65	12.31	10.67	10.42	27

Because of the incidence of the epidemic of influenza in 1919, comparison is made between the rates of the periods 1881-1890 and 1901-1910.

The death-rates for females were reduced 30 per cent., as against 24 per cent. in the case of those for males. As regards age, the improvement was fairly constant under 55. Above that age improved conditions **naturally** had less effect. The ages at which death-rates are most favourable are between 10 and 14 years; and between the ages of 5 and 45 years they are generally considerably below the average.

Deaths—Metropolis and Remainder of the State.

It is not possible to show the exact difference between urban and rural mortality in New South Wales, but an approximate idea may be obtained from a comparison of the experience of the metropolis with that of the remainder of the State, which is, of course, not entirely rural, as a few large industrial towns are contained therein, notably Newcastle, Broken Hill and Lithgow. A summary of the average annual number of deaths and the rate per 1,000 in each of these divisions since 1880 is given in the following table:—

Period.	Metropolis.*		Remainder of the State.*		New South Wales.	
	Average Number of Deaths.	Ratio per 1,000 Living.	Average Number of Deaths.	Ratio per 1,000 Living.	Average Number of Deaths.	Ratio per 1,000 Living.
1880-84	5,033	20·60	7,377	13·21	12,410	15·49
1885-89	6,181	19·47	8,323	12·18	14,504	14·46
1890-94	5,979	14·83	9,242	12·05	15,221	13·01
1895-99	5,634	12·30	9,882	11·86	15,516	12·01
1900-04	5,845	11·54	10,083	11·42	15,928	11·47
1905-09	5,979	10·53	9,680	10·21	15,659	10·33
1910-14	7,312	10·59	10,841	10·30	18,153	10·41
1915-19	8,727	10·89	11,805	10·49	20,532	10·66
1920-24	9,034	9·60	11,375	9·41	20,409	9·49
1925	9,548	9·32	11,275	9·01	20,823	9·15
1926	10,220	9·70	11,968	9·43	22,188	9·56
1927	10,418*	9·62	12,352*	9·66	22,770	9·59
1928	10,408*	9·33	12,286*	9·37	22,694	9·35
1929	12,469*	10·15	12,146*	9·83	24,615	9·99
1930	10,854*	8·71	10,398*	8·36	21,252	8·54

* From 1st January, 1927, deaths were distributed according to usual residence of decedent, but previously according to place of registration of death. The area of the Metropolis was increased in 1929. See foot-note to Table on page 510.

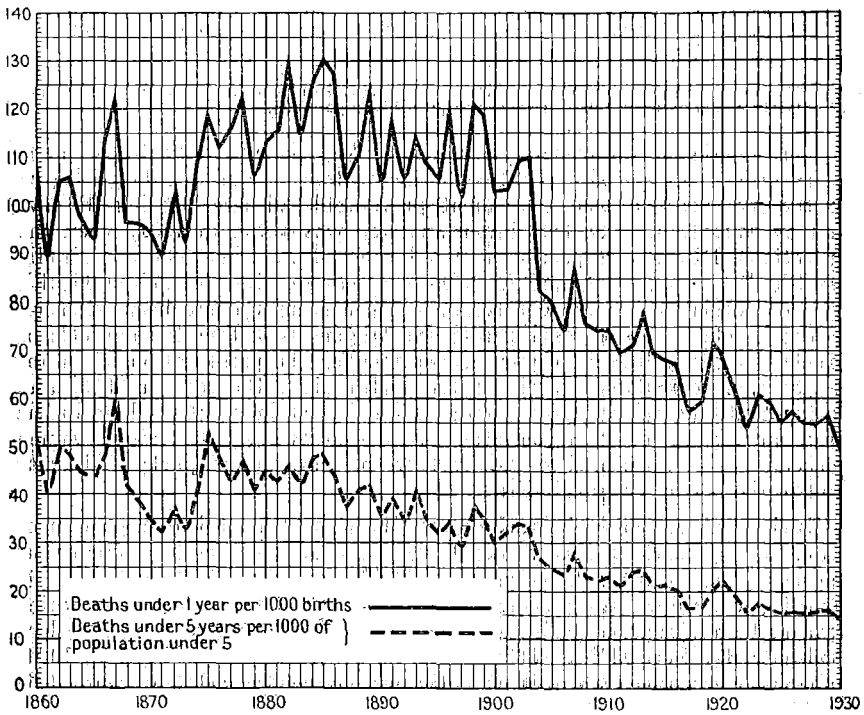
The death-rate has improved steadily both in the metropolis and in the remainder of the State, but notably so in the former, where it is now only slightly higher than in the latter, whereas in the period 1885-89 it was about 60 per cent. greater. The improvement dates from the quinquennium beginning with the year 1890, and is coincident with the installation of

the modern system of sewerage and the enforcement of the provisions of the Dairies Supervision Act of 1886. The marked decline in the crude rates for each division and for the State as a whole is evident from the fact that the metropolitan crude rate for the period 1880-84 was 20.6 per 1,000, and for the year 1930 it was 8.7, or an improvement of 58 per cent. For the same periods the crude rates for the remainder of the State were respectively 13.2 and 8.4, or a difference of nearly 37 per cent., and for the whole State, 15.5 and 8.5, or an improvement of nearly 45 per cent. Crude rates of death, however, must be taken rather as an indication of the general trend than of the exact extent of the movement.

THE MORTALITY OF INFANTS.

A further and more sensitive comparison of the rates of mortality in the metropolis and in the remainder of the State may be obtained by considering the death-rates of infants.

INFANTILE MORTALITY, 1880-1930.



Deaths of Children under 1 Year.

During the year 1930, the children who died before completing the first year of life numbered 2,597, equivalent to a rate of 49.8 per 1,000 births. This rate is 11 per cent. lower than the average for the previous five years.

The number of deaths of children under one year of age in the metropolis in 1930 was 1,095, or 49.9 per 1,000 births, and in the remainder of the State 1,502, or 49.7 per 1,000 births. The rate for the metropolis was 12 per cent. lower than the previous year.

The following table shows the average annual number of deaths of children under 1 year of age in the metropolis and in the remainder of the State, and the proportion per 1,000 births, in quinquennial periods since the year 1880:—

Period.	Metropolis.*		Remainder of State.*		New South Wales.	
	Deaths under 1.	Rate per 1,000 Births.	Deaths under 1.	Rate per 1,000 Births.	Deaths under 1.	Rate per 1,000 Births.
1880-84	1,707	174.0	1,956	94.9	3,663	120.4
1885-89	2,168	164.6	2,256	95.2	4,424	120.0
1890-94	1,908	138.8	2,471	95.8	4,379	110.7
1895-99	1,646	134.4	2,572	103.7	4,218	113.9
1900-04	1,416	111.2	2,399	96.9	3,815	101.7
1905-09	1,255	86.7	2,035	74.5	3,290	78.7
1910-14	1,437	75.2	2,211	71.1	3,648	72.7
1915-19	1,373	68.5	1,959	62.6	3,332	64.9
1920-24	1,404	63.3	1,932	60.1	3,336	61.4
1925	1,255	57.0	1,744	53.5	2,999	54.9
1926	1,315	61.2	1,745	55.2	3,060	57.6
1927	1,161*	56.4*	1,799*	54.1*	2,960	55.0
1928	1,042*	49.3*	1,962*	58.3*	3,004	54.8
1929	1,263*	56.5*	1,720*	56.7*	2,983	56.6
1930	1,095*	49.9*	1,502*	49.7*	2,597	49.8

* Classified according to place of usual residence of mother, from 1st January, 1927. The area of the Metropolis was increased in 1929. See foot-note to Table on page 503.

The remarkable improvement which has taken place in the infantile mortality rate in the period covered by the above table is due in a large degree to the measures adopted to combat preventable diseases by health laws and by education. The first important step was taken in 1881, when the Infectious Diseases Supervision Act became law. In 1896 the Public Health Act was passed, and in 1902 the acts relating to Public Health were consolidated. About this time a world-wide movement drew attention to the benefit of breast-feeding and the dangers attending the methods of artificial feeding then in vogue. A scheme for the preservation of infant health was formulated by the Sydney Municipal Council in 1903, and instructional pamphlets were circulated for the guidance of mothers in the care and feeding of young children. In the following year trained women inspectors were appointed to visit mothers in the populous parts of the city and in the surrounding suburbs.

During the year 1904 infantile mortality showed a marked improvement on the rates experienced for about thirty years. A reference to the principal causes of death during the years immediately prior to and after the year in question will show that a decrease was experienced in all causes in which care and knowledge could have effect. Thus the mortality from diarrhœa and enteritis dropped from 36.90 per 1,000 births in 1903 to 21.31 in 1904; tubercular diseases from 3.06 to 1.58; and congenital debility from 15.54 to 12.98.

Further efforts to reduce the rate of infantile mortality have been made since 1914 through the establishment in Sydney and in various country localities of baby health centres, and through the formation of a number of public bodies which are affiliated with the Royal Society for the Welfare of Mothers and Babies. Particulars relating to these institutions will be found in chapter "Social Condition" of this Year Book.

In 1926 the Senior Medical Officer of the Department of Public Health was appointed a Director of Maternal and Baby Welfare to supervise public activities relating to the health of women and children.

The decline in infantile mortality, especially in diarrhoeal diseases, is illustrated by the following table, which gives the mortality rate per 1,000 births since 1900 from diarrhoeal diseases, and from all other causes:—

Period.	Deaths under 1 year of age per 1,000 Births.			Year.	Deaths under 1 year of age per 1,000 Births.		
	Diarrhoeal Diseases.	All other Diseases.	All causes.		Diarrhoeal Diseases.	All other Diseases.	All causes.
1900-04	29·52	72·21	101·73	1925	7·71	47·20	54·91
1905-09	21·06	57·66	78·72	1926	11·76	45·84	57·60
1910-14	20·64	52·04	72·68	1927	7·32	47·64	54·96
1915-19	13·94	50·97	64·91	1928	10·95	43·87	54·82
1920-24	13·77	47·64	61·41	1929	6·95	49·68	56·63
1925-29	8·94	46·83	55·77	1930	7·98	41·83	49·81

The incidence of diarrhoeal diseases in recent years has tended to fluctuate irregularly with seasonal conditions, being relatively high in dry seasons and low in years of bountiful rainfall. In 1926, when the rainfall was below normal during several months, diarrhoeal diseases caused 20·5 per cent. of the deaths of infants under 1 year of age, as compared with 14 per cent. in 1925, and 13 per cent. in 1927, when there were abundant rains. In these years the mortality from diarrhoeal diseases outside the metropolis reached the remarkably low proportion of 6 per 1,000 births.

The experience of all States of the Commonwealth was similar to that of New South Wales, in that the reduction in infantile mortality rates which occurred in 1904 has been maintained through a large falling-off in the number of deaths from diarrhoeal diseases.

Infantile Mortality by Sex.

The death-rate is higher for male infants than for females, the rates in 1930 being 63·3 and 49·6 per 1,000 births respectively. The rates for each sex are shown in the following table in quinquennial periods since the year 1880.

Period.	Males.		Females.	
	Annual Average Deaths under 1.	Rate per 1,000 Births.	Annual Average Deaths under 1.	Rate per 1,000 Births.
1880-84	1,992	127·9	1,671	112·5
1885-89	2,405	127·2	2,019	112·3
1890-94	2,413	118·7	1,966	102·3
1895-99	2,304	121·4	1,914	105·9
1900-04	2,077	108·5	1,738	94·6
1905-09	1,832	85·6	1,458	71·5
1910-14	2,037	79·2	1,611	65·8
1915-19	1,892	71·9	1,440	57·6
1920-24	1,900	68·4	1,436	54·1
1925-29	1,678	60·7	1,319	50·4
1929	1,714	63·3	1,269	49·6
1930	1,505	56·5	1,092	42·8

During the period reviewed, the excess of the male infantile death-rates per 1,000 births fluctuated from 16·4 in the quinquennium 1890-94 and in the year 1922, to a minimum of 6·9 in 1927. In 1930 the difference was 13·7.

Infantile Mortality by Age.

Of the total number of deaths of infants under 1 year of age, about 40 per cent. occur within a week of birth; within the first month the proportion is over one-half, and within three months more than two-thirds. The following statement shows the number and proportion of deaths at various ages under one year in the metropolis and in the whole State.

Age at Death.	1929.				1930.			
	Metropolis.		State.		Metropolis.		State.	
	Number of Deaths.	Deaths per 1,000 Births.	Number of Deaths.	Deaths per 1,000 Births.	Number of Deaths.	Deaths per 1,000 Births.	Number of Deaths.	Deaths per 1,000 Births.
Under 1 week ...	519	23.2	1,253	23.8	504	23.0	1,191	22.9
1 week ...	78	3.5	190	3.6	50	2.3	127	2.4
2 weeks ...	32	1.4	93	1.8	37	1.7	89	1.7
3 " ...	49	2.2	106	2.0	31	1.4	78	1.5
Under 1 month, Total	678	30.3	1,642	31.2	622	28.4	1,485	28.5
1 month ...	88	3.9	193	3.6	45	2.1	148	2.8
2 months ...	76	3.4	149	2.8	56	2.6	123	2.4
3 " ...	58	2.6	137	2.6	60	2.7	123	2.4
4 " ...	59	2.7	120	2.2	40	1.8	98	1.9
5 " ...	47	2.1	113	2.1	38	1.7	94	1.8
6 " ...	52	2.4	125	2.4	42	1.9	91	1.7
7 " ...	43	1.9	100	1.9	39	1.8	92	1.7
8 " ...	34	1.5	99	1.9	53	2.4	99	1.9
9 " ...	46	2.1	97	1.9	40	1.8	88	1.7
10 " ...	41	1.8	101	1.9	20	.9	63	1.2
11 " ...	41	1.8	107	2.1	40	1.8	93	1.8
Under 1 year, Total	1,263	56.5	2,983	56.6	1,095	49.9	2,597	49.8

A similar table relating to the five years, 1919-23, was published in the Year Book for 1924 at page 120.

As stated above, more than half the deaths of children under one year of age occur in the first month of life, but in the second month the rate of mortality falls rapidly, and thereafter gradually. Until 1928 the rate of infantile mortality was generally higher in the metropolis than in the remainder of the State, but in 1928 and 1929 the metropolitan rate was the lower, and there was practically no difference in 1930.

A further dissection of the experience in regard to infantile mortality discloses the fact that, despite the marked decline in infantile mortality, the proportion of deaths of children under 1 week old has actually increased in the past thirty years, while at all other ages under one year there had been a sustained improvement.

This may be illustrated strikingly by the statement that, whereas the rate of mortality among children within one week of birth was 20.5 per 1,000 births in 1901 and 22.9 per 1,000 births in 1930, the corresponding rates among children over one week and under twelve months old were 83.2 per 1,000 in 1901, and 26.9 in 1930—a decline of 68 per cent. It is shown on a later page that the principal causes of death among children in their first week of life were premature birth, congenital debility, malformation and injury at birth, which in 1930 were responsible for 86 per cent. of the deaths of children during the first week of life, causing

19.5 deaths per 1,000 births out of the total rate of 22.9. These causes are not generally connected with post-natal care of children, and they tend, when considered as an integral part of the rate of mortality, to obscure the remarkable improvement which has been effected by the dissemination of knowledge and the promotion of health measures for the care of infants. Although more skilful attention after birth may decrease the number of infants who died from pre-natal causes, it is fully recognised that a general improvement in the rate of mortality among infants in the first week of life will not be attained except through increased pre-natal care, and considerable attention is being given to the care and instruction of expectant mothers.

The following table shows the rates of mortality among infants in age groups during the first year of life for each year since 1901:—

Year.	Rate of Mortality per 1,000 Births among Children aged—						
	Under 1 week.	1 week and under 1 month.	1 month and under 3 months.	Total under 3 months.	3 months and under 6.	6 months and under 12.	Total under 1 year.
1901	20.5	12.2	22.1	54.8	22.4	26.5	103.7
1902	21.3	12.3	22.2	55.8	24.8	29.1	109.7
1903	21.2	11.3	19.5	52.0	26.3	32.1	110.4
1904	21.8	9.7	14.9	46.4	15.8	20.2	82.4
1905	24.3	10.9	13.0	48.2	15.9	16.5	80.6
1906	21.8	9.0	11.8	42.6	14.3	17.6	74.5
1907	23.1	11.3	17.8	52.2	15.8	20.6	88.6
1908	21.5	9.5	11.9	42.9	15.9	17.0	75.8
1909	21.3	9.8	11.6	42.7	14.9	16.7	74.3
1910	21.1	9.2	13.4	43.7	14.3	16.6	74.6
1911	22.3	9.9	11.9	44.1	11.7	13.7	69.5
1912	21.5	8.4	10.6	40.5	13.1	17.7	71.3
1913	22.9	9.5	11.8	44.2	14.7	19.4	78.3
1914	23.5	8.8	10.1	42.4	11.6	15.7	69.7
1915	25.1	7.6	9.4	42.1	9.3	16.7	68.1
1916	23.5	8.3	10.3	42.1	10.0	15.7	67.8
1917	22.9	7.4	8.5	38.8	7.6	11.1	57.5
1918	25.1	7.8	8.0	40.9	7.9	10.4	59.2
1919	26.2	9.0	9.6	44.8	11.5	16.0	72.3
1920	23.9	8.4	10.8	43.1	11.5	15.2	69.8
1921	23.4	7.4	10.2	41.0	9.6	12.3	62.9
1922	22.2	7.6	7.5	37.3	6.7	10.0	54.0
1923	22.8	7.5	7.7	38.0	9.2	13.8	61.0
1924	23.2	7.4	8.5	39.1	8.4	12.0	59.5
1925	23.1	6.7	7.8	37.6	7.4	9.9	54.9
1926	24.3	6.5	6.6	37.4	7.8	12.4	57.6
1927	22.5	7.2	7.8	37.5	7.4	10.1	55.0
1928	23.2	6.1	5.9	35.2	7.1	12.5	54.8
1929	23.8	7.4	6.4	37.6	6.9	12.1	56.6
1930	22.9	5.6	7.6	36.1	5.4	8.3	49.8

Allowing for the operation of pre-natal causes upon the mortality in the first week of life, it is evident that pronounced improvement took place in the rates of infantile mortality immediately after the adoption of special educative measures in 1904 and 1914, and that, although special factors have operated to increase infantile mortality in certain years there has been a steady and sustained improvement. It is particularly noteworthy that the improvement is greatest among children aged one month and over. Up to that age the operation of pre-natal causes produces the majority of deaths. A sustained reduction in the rate is apparent since 1925. In 1930 the rate was below 50 deaths per 1,000 births for the first time on record. This rate is less than half the rate prevailing thirty years ago.

The following statement furnishes a comparison of the rates of infantile mortality in the Australian States, in New Zealand, and in various other countries. The rates indicate the deaths under 1 year per 1,000 births. As the rates quoted are for a single year only and fluctuate from year to year they do not show the permanent relativity between the rates prevailing in the countries named.

State.	Year.	Rate.	Country.	Year.	Rate.
New Zealand ...	1930	34·5	Netherlands ...	1928	52
Queensland ...	1930	40·0	Switzerland ...	1928	54
Victoria ...	1930	46·6	England and Wales..	1930	60
Western Australia ...	1930	46·7	Sweden ...	1928	62
Commonwealth ...	1930	47·2	*United States ...	1928	68
South Australia ...	1930	48·4	Irish Free State ...	1929	70
<i>New South Wales</i> ...	1930	49·8	†South Africa... ..	1928	71
Tasmania ...	1930	50·6	Northern Ireland ...	1928	78
			Scotland ...	1929	87
New Zealand ...	1929	34·1	Belgium ...	1928	87
South Australia ...	1929	41·0	Germany ...	1928	89
Queensland ...	1929	46·0	Prussia ...	1928	89
Victoria ...	1929	47·2	France ...	1928	91
Commonwealth ...	1929	51·1	Canada ...	1929	92
Tasmania ...	1929	53·2	Finland ...	1927	97
Western Australia ...	1929	56·2	Italy ...	1927	120
<i>New South Wales</i> ...	1929	56·6	Austria ...	1926	123
			Spain ...	1928	125
			Japan ...	1928	138
			Hungary ...	1928	177

* Registration Area.

† White people only.

The rate of infantile mortality in New Zealand is the lowest of the rates shown in the foregoing table, and the rates for Australasia generally are greatly superior to those prevailing in most other countries for which comparable records are available. Wide differences between climatological and economic conditions should be allowed for in considering the relationship between the rates shown for the various countries.

Causes of Infantile Mortality.

A table published on page 115 of the Statistical Register for 1919-20 and continued in consequent years shows the rates of infantile mortality for each of the principal causes in each year since 1895. This indicates that there has been a heavy decline in the mortality from diarrhoea, enteritis, and other digestive diseases, congenital debility, nervous diseases, tubercular

diseases, and bronchitis. A smaller decline has occurred in deaths from minor causes, such as meningitis, diseases of the stomach, accident, and general diseases. On the other hand, deaths from malformation, premature births, and diseases of early infancy have increased proportionately. The mortality from epidemic diseases fluctuates considerably with a tendency to decline.

The following table shows the incidence of mortality caused by the principal diseases among infants at various periods during the first year of life in 1930, showing the experience in the metropolis in comparison with that in the whole State:—

Cause of Death.	Deaths of Children under One Year of Age per 1,000 Births (1930).							
	Metropolis.*				State.			
	Under 1 week.	1 week and under 1 month.	1 month and under 1 year.	Total.	Under 1 week.	1 week and under 1 month.	1 month and under 1 year.	Total.
Epidemic Diseases ...	...	·27	3·19	3·46	...	·25	3·20	3·45
Tuberculosis ...	...	...	·41	·41	...	...	·36	·36
Syphilis ...	·14	...	·41	·55	·11	·04	·27	·42
Meningitis ...	...	...	·50	·50	...	·02	·38	·40
Convulsions ...	...	...	·18	·18	·06	·02	·21	·29
Bronchitis ...	·05	·04	·55	·64	·04	·21	·58	·83
Pneumonia ...	·18	·37	3·19	3·74	·19	·48	3·86	4·53
Diarrhoea and Enteritis ...	·05	·27	9·67	9·99	·04	·29	7·65	7·98
Malformation ...	1·78	·73	·82	3·33	2·23	·63	1·00	3·86
Congenital Debility ...	1·37	·73	·82	2·92	1·57	·69	1·13	3·39
Premature Birth ...	14·14	1·64	·32	16·10	13·35	2·07	·50	15·92
Injury at Birth ...	2·55	·37	...	2·92	2·40	·21	·04	2·65
Other Diseases of early Infancy ...	1·96	·55	·14	2·65	2·24	·40	·14	2·78
All Other Causes ...	·77	·41	1·37	2·55	·61	·33	2·01	2·95
Total ...	22·99	5·38	21·57	49·94	22·84	5·64	21·33	49·81

* See foot-note to Table on page 503.

In 1930 there was little difference between most of the rates of mortality in the metropolis and those for the whole State. The death rate from premature birth was slightly higher, and the rate from diarrhoea and enteritis was also higher in the metropolis than in the whole State. The deaths from these two causes combined represent 48 per cent. of the deaths of infants during 1930.

Approximately 86 per cent. of the deaths during the first week after birth and 53 per cent. of the deaths which occurred during the first year after birth were due to exclusively pre-natal causes or accident, viz., premature birth, congenital debility, malformation, injury at birth, or syphilis. Deaths from these causes during the first year of life represented 2·6 per cent. of the births during the year. The incidence of diarrhoea and enteritis was comparatively light among children under the age of one month.

Infantile Mortality in Divisions.

The following table shows the number of deaths of infants under 1 year of age from principal diseases per 1,000 births in the principal divisions of the State, based on the experience of the years 1915-24, being the first ten years for which the data are available. The variation shown in the mortality-rate is from 49.7 in the Northern Tableland to 103.4 in the Western Division.

Cause of Death.	Metropolis.	Balance of Cumberland.	North Coast.	Hunter and Manning.	South Coast.	Northern Tableland.	Central Tableland.	Southern Tableland.	North-Western Slope.	Central-Western Slope.	South-Western Slope.	North-Central Plain.	Central Plain.	Riverina.	Western Division.	Total Country.	Whole State.
Epidemic Diseases ..	3.5	3.3	2.3	3.1	2.7	4.2	4.2	5.2	3.2	3.4	3.1	3.2	2.4	3.2	6.8	3.4	3.5
Tubercular Diseases ..	4	5	3	3	3	3	4	2	5	2	3	3	3	6	3	3	4
Veneral Diseases ..	6	5	3	3	2	2	2	1	1	1	1	2	2	2	5	3	4
Meningitis ..	5	5	5	7	4	3	7	6	6	5	7	10	7	4	5	6	6
Convulsions ..	1.0	2.0	3.0	1.8	2.1	1.7	2.1	1.8	2.4	2.4	1.0	9	2.6	1.1	3.1	2.0	1.6
Bronchitis ..	1.1	1.2	3	1.9	2.5	2.4	2.6	2.1	2.2	1.4	2.9	1.6	1.3	1.9	1.8	1.6	1.6
Pneumonia and Pleurisy ..	5.7	4.6	4.6	4.6	5.1	4.0	5.6	4.4	4.7	3.8	4.1	4.1	5.7	5.6	4.5	4.7	5.1
Gastritis and Diarrhoea ..	16.4	10.6	7.8	16.1	9.8	9.0	13.9	14.1	10.9	12.7	10.4	13.5	12.1	10.5	30.0	13.0	14.3
Hernia ..	5	3	5	4	7	4	5	8	1.1	6	4	3	9	6	1.0	5	5
Congenital Malformations ..	4.4	3.7	3.9	3.3	3.0	4.0	4.4	2.8	4.1	2.6	3.7	2.5	2.4	2.6	4.5	3.6	3.9
Congenital Debility and Prematurity ..	24.5	20.6	19.5	25.8	22.2	19.3	25.5	36.8	25.0	23.3	20.8	24.1	29.0	17.7	32.0	23.2	23.7
Other Developmental Diseases ..	4.4	3.7	5.6	4.6	6.1	4.9	4.9	6.3	4.6	4.6	4.6	5.5	5.2	5.7	4.0	4.9	4.7
Accident ..	5	3	6	7	7	3	6	8	4	1.1	7	1.2	1.5	1.1	1.5	8	6
All other Diseases ..	2.3	1.8	2.4	2.1	2.7	2.5	2.6	2.9	1.7	3.1	2.5	1.6	3.1	2.7	2.7	2.4	2.3
Total ..	65.8	53.6	51.2	65.7	57.8	53.6	68.0	69.4	61.4	60.7	54.7	61.2	67.7	53.3	99.8	61.4	63.1

Medical opinion is that a favourable summer rainfall reduces the liability to infantile diarrhoea, that premature birth and congenital debility are more prevalent in industrial districts than elsewhere, and that rural districts are most favourable to the rearing of children.

These opinions are borne out in a general way by the experience in New South Wales, although the wide range of geographical conditions and the variability of the seasons intrude irregular factors affecting infantile mortality. The highest rate is that of the Western Division, the greater part of whose population lives in the mining district of Broken Hill, while the remainder is scattered over extensive plains which receive a low rainfall. The most favourable rates are those of the North Coast, Riverina, Northern Tablelands and South-western Slopes, where the population is engaged largely in rural pursuits. On the North Coast and Northern Tableland the rainfall is copious, especially during the summer. The rates of infantile mortality in the North Coast division present a striking contrast with those of the other coastal divisions, where large industrial and mining centres exist, and the rainfall is less favourable in the summer. The low rate for balance of Cumberland is probably due in a small measure to the removal of sick children to hospital or other accommodation in the metropolis, where an appreciable proportion of the deaths occur.

It is difficult to explain the high average rate of mortality in the Southern Tableland, which is due mainly to deaths from congenital debility, prematurity and other developmental diseases, gastritis and diarrhoea. Perhaps some part of the mortality may be attributable to the greater cold experienced in winter, the comparative lowness of the summer rainfall and the presence of a considerable proportion of the population in urban centres.

A further dissection of the proportion of deaths in 1930 from principal causes in geographical and industrial divisions gave the following interesting results.

Divisions.	Deaths of Children under 1 year of Age per 1,000 Births (1930).								
	Epidemic Diseases.	Bronchitis.	Pneumonia.	Diarrhoea and Enteritis.	Malformations.	Congenital Debility.	Premature Birth.	All Other Diseases.	All Diseases.
Metropolis* ...	3·46	·64	3·74	9·99	3·33	2·92	16·10	9·76	49·94
Country Municipalities	3·96	·79	5·47	9·22	4·97	4·11	17·29	10·95	56·76
Country Shires ...	3·00	1·10	4·78	4·23	3·61	3·43	14·52	9·06	43·73
New South Wales ...	3·45	·82	4·53	7·98	3·86	3·39	15·92	9·86	49·81
Industrial ...	3·46	·69	3·77	9·75	3·50	2·89	16·79	9·98	50·83
Non Industrial ...	3·44	·97	5·30	6·18	4·21	3·90	15·04	9·74	48·78

* See foot-note to Table on page 503.

Deaths of Ex-nuptial Children under 1 year.

During 1930 there were born 49,595 nuptial and 2,541 ex-nuptial children. During the same period the deaths of nuptial children under 1 year of age numbered 2,343 and of ex-nuptial children 254.

During the first year of life the death rate of ex-nuptial children was double the rate for nuptial children, partly owing to premature birth, infantile debility and inherited diseases, but to an equally great extent to causes arising from neglect.

How these combined causes operate to produce a comparatively high death rate among ex-nuptial children is shown in the following table which relates to the years 1929 and 1930.

Age at Death.	Deaths per 1,000 Births, 1929.				Deaths per 1,000 Births, 1930.			
	Nuptial.	Ex-nuptial.		Total.	Nuptial.	Ex-nuptial.		Total.
		Rate.	Per cent. of Legitimate Rate.			Rate.	Per cent. of Legitimate Rate.	
Under 1 week...	23·3	32·3	139	23·8	21·9	41·7	190	22·9
1 week ...	3·5	4·8	137	3·6	2·4	2·0	83	2·4
2 weeks ...	1·7	3·3	194	1·8	1·7	2·0	117	1·7
3 " ...	2·0	2·2	110	2·0	1·4	3·1	221	1·5
Total— under 1 month	30·5	42·6	140	31·2	27·4	48·8	178	28·5
1 month ...	3·3	10·3	312	3·6	2·6	6·7	258	2·8
2 months ...	2·5	8·8	352	2·8	2·2	5·9	268	2·4
3 " ...	2·5	5·1	204	2·6	2·1	7·9	376	2·4
4 " ...	2·0	6·6	330	2·2	1·7	6·3	371	1·9
5 " ...	1·9	7·7	405	2·1	1·6	5·1	319	1·8
6 " ...	2·2	5·1	232	2·4	1·6	5·5	344	1·7
7 " ...	1·9	1·8	95	1·9	1·6	3·9	244	1·7
8 " ...	1·8	3·3	183	1·9	1·9	2·4	126	1·9
9 " ...	1·8	2·9	161	1·9	1·6	2·4	150	1·7
10 " ...	1·9	1·5	79	1·9	1·1	3·1	282	1·2
11 " ...	1·9	4·3	226	2·1	1·8	2·0	111	1·8
Total— under 1 year...	54·2	100·0	184	56·6	47·2	100·0	212	49·8

The number of ex-nuptial children who die during one year is comparatively small, consequently the annual rates of mortality for such children in age groups under one year are unstable.

The largest proportional excess of deaths of ex-nuptial children over those of nuptial children is not immediately after birth, but usually one month or more later. During the year 1930, the mortality of ex-nuptial children exceeded that of other children by 90 per cent. during the first week of life, by 78 per cent. in the first month, and by 158 in the second, 168 in the third and 276 in the fourth, and in the three succeeding months well over three times the rate of nuptial children.

The following table shows the number of births and deaths and the rate per 1,000 births of ex-nuptial as compared with those of nuptial children in New South Wales during the years shown.

Year.	Total Births.		Deaths under 1 month.				Deaths under 1 year.			
			Nuptial.		Ex-Nuptial.		Nuptial.		Ex-Nuptial.	
	Nuptial.	Ex-Nuptial.	No.	Rate per 1,000 Births.	No.	Rate per 1,000 Births.	No.	Rate per 1,000 Births.	No.	Rate per 1,000 Births.
1901	35,163	2,712	*	*	*	*	3,213	91.37	716	264.01
1906	38,066	2,882	1,116	29.32	146	50.66	2,527	66.38	525	182.16
1911	44,728	2,949	1,396	31.21	138	46.80	2,877	64.32	436	147.85
1916	49,574	2,501	1,520	30.66	137	54.78	3,168	63.90	365	145.94
1921	51,961	2,673	1,567	30.16	115	43.02	3,134	60.31	302	113.07
1926	50,378	2,748	1,490	29.58	145	52.77	2,758	54.75	302	109.90
1927	51,165	2,693	1,471	28.75	128	47.53	2,678	52.34	282	104.72
1928	52,093	2,707	1,490	28.60	113	41.74	2,732	52.44	272	100.48
1929	49,952	2,720	1,526	30.55	116	42.61	2,711	54.27	272	100.00
1930	49,595	2,541	1,361	27.44	124	48.80	2,343	47.24	254	99.96

* Not available.

The table shows that whilst the ex-nuptial death rates are uniformly high compared with the nuptial rates, they have improved considerably in the period covered by the table. In 1901, one out of every four ex-nuptial children died within a year of birth; the rate in 1930 was one in ten.

Deaths of Children under 5 years.

The improvement in rates of mortality has not been confined to children under 1 year of age, as there has been a general improvement in the death-rate of all groups of children under 5 years of age.

The following table shows the mortality of children under 5 years of age:—

Period.	Metropolis.*		Remainder of State.		New South Wales.	
	Average Annual Number of Deaths.	Rate per 1,000 Living.	Average Annual Number of Deaths.	Rate per 1,000 Living.	Average Annual Number of Deaths.	Rate per 1,000 Living.
1890-94	2,674	48·5	3,546	32·1	6,220	37·5
1895-99	2,206	40·8	3,487	31·0	5,693	34·2
1900-04	1,846	35·2	3,210	29·6	5,056	31·4
1905-09	1,612	27·6	2,723	23·4	4,335	24·8
1910-14	1,895	26·1	2,936	21·5	4,881	23·1
1915-19	1,905	21·5	2,771	17·8	4,676	19·1
1920-24	1,887	20·3	2,631	17·2	4,518	18·4
1925	1,651	16·3	2,309	14·6	3,960	15·3
1926	1,783	17·7	2,336	14·7	4,119	15·8
1927	1,567	15·4	2,444	15·6	4,011	15·5
1928	1,461	14·2	2,641	17·0	4,102	15·9
1929	1,785	16·3	2,371	16·2	4,156	16·2
1930	1,499	13·9	2,039	14·5	3,588	14·2

* Area increased in 1929. See foot-note to Table on page 503.

At every period shown up to 1927 the metropolitan rate was higher than that of the remainder of the State. The excess was very small in 1924, when there was a marked improvement in the metropolitan rate. In 1925 the rates in both divisions were the lowest on record. In the following year the country rate remained low and the metropolitan rate increased by 8·6 per cent. and was 22 per cent. higher than the country rate. The comparison of the deaths and rates in the metropolis and the remainder of the State for the period 1927 to 1930 with previous years has been impaired on account of the distribution of deaths during these years to the usual place of permanent residence, and an alteration in the respective boundaries in 1929.

On the whole the improvement in the metropolis has been greater than in the remainder of the State, the rate having decreased since 1890 by 71 per cent. in the former, and in the latter by 55 per cent. Outside the metropolis the rate did not vary until 1904, when there was a marked decline, which has been continuous. The rate of mortality in 1930, compared with that of the quinquennium 1890-94, represents a saving of 4 lives in every 1,000 children under 5 years of age in the metropolis, and of 17 in the remainder of the State.

Children are more susceptible to the attacks of disease in the earliest years of life than later, and the death rate decreases steadily until the age of 10 years is reached. Since the rate for preventable diseases is high, there is no doubt that many children succumb through parental ignorance of the proper food or treatment required.

In the following statement the principal causes of death among children, and the rates under 1 year of age per 1,000 births and under 5 years of age

per 1,000 living, are shown for a period of five years, viz., 1919-1923, embracing the census year and two years on either side of it:—

Causes of Death.	Deaths of children under 1 year of age.				Deaths of children age 1 year and under 5.			
	Metropolis.		State.		Metropolis.		State.	
	Average Annual Number.	Per 1,000 Births.	Average Annual Number.	Per 1,000 Births.	Average Annual Number.	Per 1,000 Living.	Average Annual Number.	Per 1,000 Living.
Measles	6	·3	13	·2	28	·40	46	·24
Scarlet Fever .. .. .	..	..	..	..	2	·03	5	·02
Whooping-cough	43	2·0	110	2·1	34	·48	71	·37
Diphtheria and Croup	10	·5	20	·4	66	·79	147	·77
Influenza	13	·6	31	·6	24	·35	61	·27
Epidemic Corebro-Spinal Meningitis.	2	·1	3	·1	2	·03	6	·03
Tuberculosis—Meninges	5	·2	10	·2	18	·26	26	·13
" Abdominal .. .. .	..	..	2	·1	2	·03	5	·02
" Other Organs	2	·1	5	·1	7	·10	12	·06
Syphilis	13	·6	20	·4	1	·01	2	·01
Meningitis	12	·6	31	·6	14	·20	28	·15
Convulsions	18	·8	71	1·3	7	·09	24	·12
Bronchitis	23	1·1	72	1·3	4	·06	21	·11
Broncho-pneumonia	84	3·9	189	3·5	58	·76	116	·61
Pneumonia	33	1·8	87	1·6	38	·55	82	·43
Diarrhoea and Enteritis	381	17·7	786	14·8	121	1·72	326	1·70
Congenital Malformations	100	4·6	209	3·9	102	1·45	281	1·47
Infantile Debility	123	5·7	337	6·3				
Premature Birth	394	18·3	917	17·2				
All Others	181	8·4	486	9·1				
Total	1,448	67·3	3,399	63·8	513	7·31	1,249	6·51

The high mortality of infants, especially in the first week of life, during this period was largely due to the deaths of children who, either from immaturity or inherited debility, are born unfit for the struggle for existence. Of children under 1 year of age, the deaths from these causes during the period 1919-23 were equal to 27·4 per 1,000, or 43 per cent. of the total deaths of children under 1.

Among children under 1 year, diarrhoea and enteritis were responsible for 14·8 deaths per 1,000 births, and infectious diseases for 3·4, of which whooping-cough caused 2·1. Respiratory diseases are especially fatal to infants; among children under 1 year of age bronchitis caused 1·3, broncho-pneumonia 3·5, and pneumonia 1·6 deaths per 1,000 births. The death-rate from convulsions in the same group was 1·3, from tuberculous diseases 0·4, and meningitis (not tuberculous) 0·6 per 1,000 births.

The rate of mortality among children between 1 and 5 years of age is only about one-tenth of the rate among children under one year of age, but in both cases the largest individual cause of death among post-natal causes is diarrhoea and enteritis. Among the older group of children the next most prominent causes of death are epidemic diseases, notably diphtheria, croup, whooping-cough, influenza and measles, while diseases of the respiratory system, such as pneumonia and bronchitis, cause rather more than one-sixth of the deaths.

CAUSES OF DEATH.

The system of classification adopted in this section of vital statistics is in accordance with the International List of Causes of Death, based on the third decennial revision by the International Commission at Paris in 1920.

The complete list of causes of death grouped as arranged by the International Commission is published in the Statistical Register of New South Wales, which shows the number of deaths from each cause according to age, sex, and month of occurrence.

The table published below is a summary of the principal individual causes of death in 1930, compared with the average annual number in the period 1925-29, adjusted to the population of the year 1930.

Causes of Death.	Num- ber, 1930.	Adjusted Avera- ge, 1925-9.		Causes of Death.	Num- ber, 1930.	Adjusted Avera- ge, 1925-29.	
		Num- ber.	Propor- tion.			Num- ber.	Propor- tion.
Typhoid Fever ...	48	70	·30	Other Diseases of the Cir- culatory System ...	122	79	·33
Measles ...	100	77	·32	Bronchitis ...	363	463	1·95
Scarlet Fever ...	54	79	·33	Pneumonia ...	1,275	1,892	7·97
Whooping-cough ...	164	206	·87	Other Diseases of the Re- spiratory System ...	277	310	1·81
Diphtheria and Croup ...	176	175	·74	Diseases of the Stomach... Diarrhœa and Enteritis	109	159	·67
Influenza ...	129	310	1·81	(under 2 years) ...	557	649	2·73
Plague ...	...	...	...	Diarrhœa and Enteritis (2 years and over) ...	160	206	·87
Erysipelas ...	40	42	·18	Appendicitis ...	211	204	·86
Infantile Paralysis ...	6	9	·04	Hernia, Intestinal Obstruc- tion ...	199	215	·91
Lethargic Encephalitis ...	20	31	·13	Cirrhosis of the Liver ...	108	116	·49
Epidemic Cerebro-spinal Meningitis ...	12	16	·07	Other Diseases of the Di- gestive System ...	398	375	1·58
Other Epidemic Diseases	43	59	·25	Bright's Disease (Acute and Chronic) ...	1,300	1,255	5·29
Tuberculosis, Respiratory System ...	1,022	1,163	4·90	Other Genito-Urinary Di- seases ...	419	402	1·69
Tuberculosis Meninges and Nervous System ...	43	59	·25	Puerperal Septicæmia ...	80	92	·39
Other Tuberculous Di- seases ...	79	89	·38	Other Puerperal Diseases	224	235	·99
Cancer ...	2,290	2,330	9·82	Malformations ...	215	262	1·10
Diabetes ...	272	305	1·29	Congenital Debility ...	177	252	1·06
Leucæmia, Anæmia, Chlor- osis ...	182	207	·87	Premature Birth ...	881	905	3·81
Other General Diseases ...	564	564	2·38	Other Developmental Di- seases ...	283	319	1·34
Meningitis ...	100	173	·73	Senility ...	896	1,056	4·45
Cerebral Hæmorrhage and Apoplexy* ...	768	969	4·08	Suicide ...	361	297	1·25
Insanity ...	69	110	·46	Accident ...	1,226†	1,365	5·75
Convulsions of Infants ...	18	51	·21	All other Causes ...	332	402	1·69
Other Diseases of the Ner- vous System* ...	567	768	2·98	Total ...	21,252	23,734	100·00
Diseases of the Heart ...	3,421	3,795	15·99				
Diseases of the Arteries, Atheroma, &c.* ...	942	627	2·64				

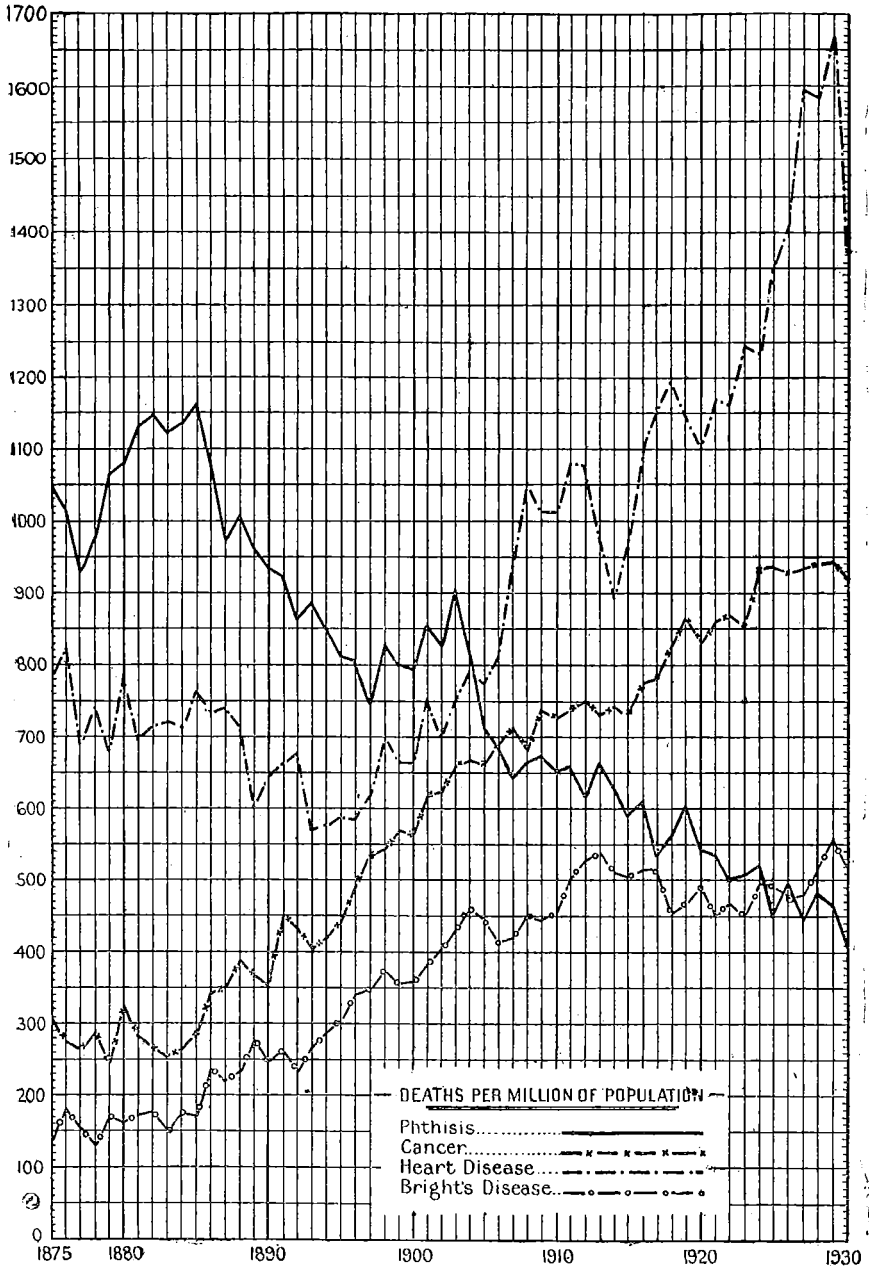
* See paragraph below, "Cerebral Hæmorrhage."

† Includes 431 from motor accidents.

Generally speaking, the mortality from tuberculosis of the respiratory system, bronchitis, diarrhœa and enteritis, diphtheria and typhoid fever is decreasing, while that from diseases of the heart, cancer, and accidents is increasing. The mortality from Bright's disease increased steadily until 1917, from 1918 to 1924 there appeared to have been a slight decline, but since that year there has been an appreciable increase. In the case of cerebral hæmorrhage and diseases of the arteries the figures for 1930 are not comparable with those of the previous quinquennium, because arterio sclerosis combined with any cerebral vascular lesion has been classified as a disease of the arteries since 1928, whereas it was included previously with deaths from cerebral hæmorrhage.

The figures in the above table cannot be compared as absolute numbers of the same relative importance because of the limitations of a system of classification depending upon a large number of independent observers with varying degrees of diagnostic equipment, and again because the age incidence is very different for the several diseases. Some diseases of the heart and diseases of the arteries, etc., affect persons of advanced years, and from the standpoint of rate of natural increase are relatively less important than are diseases like tuberculosis and pneumonia, which cause heavy mortality between ages 20 and 65. The heading senility is unsatisfactory, as it embraces mainly the deaths of aged persons in respect of whom the cause of death is not definitely stated in the returns. Many deaths of aged persons formerly attributed to senility are now ascribed to some form of heart disease, with the result that deaths from senility, so described, have shown a considerable decrease.

DEATH RATES—PRINCIPAL DISEASES—1875-1930.



Interesting features of the table are that 11.5 per cent. of all deaths in the quinquennium 1925-29 were due to the following diseases:—Diarrhoea and enteritis (under 2 years), malformations, diseases of infancy, whooping cough, convulsions of infants, measles, and infantile paralysis, whose incidence is entirely or almost entirely limited to early childhood. Of the remaining

deaths, more than half are due to a limited number of major causes, of which diseases of the heart, cancer, pneumonia, tuberculosis, and Bright's disease are most prominent.

In the pages which follow the experience in respect of a number of individual diseases is traced. Where the period covered is of considerable length, due allowance must be made for the effect of improvements in methods of diagnosis and classification and the general advance of medical knowledge. In some cases these factors have exercised a considerable influence upon the trend of the figures.

Reliable statistics are not available to show the number of cases of the various diseases occurring annually, but statistics have been collected of the occurrence of communicable diseases among school children since 1913. These show that epidemics of such diseases as measles, whooping-cough, scarlet fever, and diphtheria are of periodical recurrence, and, from time to time, assume large proportions. Although approximately 80 per cent. of the deaths from these diseases are among children under school age, it is observed that the rate of mortality from these diseases rises and falls with the recurrence of epidemics among school children. Statistics of the occurrence of infectious diseases among school children are collected quarterly, with the object of facilitating steps towards preventive and remedial measures.

Typhoid Fever.

Typhoid fever is a preventable disease, and does not obtain a foothold where a proper system of sanitation has been installed and ordinary health precautions have been taken; a great improvement has been attained in these respects during the last four decades, and the mortality from typhoid, which was formerly heavy, has been reduced to very small proportions. A steady improvement is still apparent.

The number of deaths from typhoid fever, and the equivalent annual rates of mortality since 1884, are stated below.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	1,356	5·12	1,115	5·13	2,471	5·13
1889-93	959	3·11	714	2·74	1,673	2·94
1894-98	1,107	3·27	731	2·46	1,838	2·89
1899-1903	1,054	2·93	733	2·25	1,787	2·61
1904-08	748	1·93	507	1·42	1,255	1·69
1909-13	773	1·75	464	1·15	1,237	1·47
1914-18	569	1·17	330	0·71	899	0·95
1919-23	353	0·66	241	0·47	594	0·56
1924-28	245	0·41	140	0·25	385	0·33
1927	47	0·39	21	0·18	68	0·29
1928	40	0·32	20	0·17	60	0·25
1929	23	0·18	22	0·18	45	0·18
1930	34	0·27	14	0·11	48	0·19

The rate of mortality from typhoid fever in 1930 represents only 19 persons per million living. This rate is 42 per cent. below that of the quinquennium 1924-28.

The decrease in the number and proportion of deaths due to this disease after 1888 was very marked, and may be traced to the operation of the Dairies Supervision Act, which became law in 1889. The rates show a further marked improvement as from 1903, and have dropped regularly, until that for 1930 was only 3·5 per cent. of the rate for the period 1884-88. The rate is considerably higher than that experienced in England and Wales, where during 1929 it was only 10 per million living.

Owing to a superior system of sewerage and to the greater attention given to sanitary inspection and garbage disposal, the rate of mortality from typhoid fever in the metropolis has almost invariably been very much lower than that of the remainder of the State, though it was higher during 1919, and only slightly lower in 1922. The following table provides a comparison of the experience in the metropolis and remainder of the State since 1894. Owing to the incidence of mild epidemics the rates of mortality fluctuate from year to year, and though both are improving, the improvement in recent years has been more marked in the metropolis.

Period.	Metropolis.*		Remainder of State.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1894-98	507	2.26	1,331	3.24
1899-1903	426	1.72	1,361	3.12
1904-08	334	1.21	921	1.97
1909-13	363	1.10	874	1.70
1914-18	319	0.81	580	1.04
1919-23	233	0.51	361	0.61
1924	22	0.22	75	0.61
1925	32	0.31	48	0.38
1926	23	0.22	57	0.44
1927	19	0.18	49	0.38
1928	15	0.13	45	0.34
1929	11	0.09	34	0.28
1930	13	0.10	35	0.28

* Area increased in 1929. See foot-note to Table on page 503.

Most deaths from typhoid fever occur during the summer and autumn. In 1930 there were 19 deaths during the summer months of December, January, and February, and 17 during the autumn months of March, April, and May; making a total of 36 out of 48 in the whole year.

Smallpox.

There has been no death from smallpox in New South Wales since the year 1915.

Vaccination is not compulsory in this State, and the precaution is rarely adopted unless epidemics threaten, as in the year 1913, when about 425,000 persons voluntarily submitted themselves to vaccination.

Measles.

Although measles is a common complaint, the resultant mortality is comparatively very small. The following statement shows the deaths from this cause, and the rate for each sex.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	166	0.63	165	0.76	331	0.69
1889-93	393	1.28	369	1.41	762	1.34
1894-98	338	1.00	324	1.09	662	1.04
1899-1903	160	0.44	219	0.67	379	0.55
1904-08	82	0.21	107	0.30	189	0.25
1909-13	309	0.70	267	0.66	576	0.68
1914-18	301	0.62	221	0.48	522	0.55
1919-23	207	0.39	183	0.35	390	0.37
1924-28	177	0.30	161	0.28	338	0.29
1928	88	0.71	74	0.62	162	0.67
1929	38	0.30	28	0.23	66	0.27
1930	60	0.47	40	0.33	100	0.40

The high rates during the second and third quinquennial periods were due to severe outbreaks in 1893 and 1898.

Measles is a disease chiefly affecting children, and is periodically epidemic. It was epidemic in 1898-9, when 719 deaths were recorded; in 1912, when there were 371 fatal cases; and in 1915, when there were 324. During the year 1930 deaths from measles among children under 1 year of age numbered 19, and among children under 5 years of age 82. The total number of deaths in this year was 100.

According to returns obtained by the Department of Education, there were extensive epidemics of measles among school children in 1918, 1920, and 1923, and although these epidemics (particularly that of 1923) were more widespread than the outbreak of 1915, the mortality recorded was very much less.

Scarlet Fever.

In 1930 the number of deaths from this disease was 54, equivalent to a rate of 0.22 per 10,000 of the population. In 1929 the corresponding number and rate were 78 and 0.32 respectively. Of the number of deaths in 1930 there occurred in the metropolis 32, and in the remainder of the State 22, showing rates of 0.26 and 0.18 per 10,000 for the respective divisions. The rate of mortality from this cause during 1930 was 31 per cent. below that of the previous year and the preceding quinquennium. Since 1884 the deaths from scarlet fever and the rates for each sex have been as follow:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	287	1.08	342	1.57	629	1.30
1889-93	185	0.60	236	0.90	421	0.74
1894-98	162	0.48	218	0.73	380	0.60
1899-1903	84	0.23	114	0.35	198	0.29
1904-08	88	0.23	91	0.26	179	0.24
1909-13	41	0.09	57	0.14	98	0.12
1914-18	112	0.23	161	0.35	273	0.29
1919-23	34	0.06	38	0.07	72	0.07
1924-28	142	0.24	185	0.32	327	0.28
1929	30	0.24	48	0.40	78	0.32
1930	29	0.23	25	0.20	54	0.22

Like measles, scarlet fever is an epidemic disease which mainly affects children, the rate generally being somewhat higher for females than for males. During 1930, 44 of the 54 deaths were of children under 10 years of age, and of these 25 were males and 19 females. Though not nearly so fatal as formerly, its sporadic recrudescence demands constant vigilance on the part of the authorities responsible for the health of the State. The death-rate from this cause of mortality has fluctuated since the year 1884, when it was very heavy, the rate per 10,000 inhabitants having ranged from 2.59 in that year to 0.04 in 1921.

Scarlet fever was epidemic among school children in 1915 and 1916, in which years 205 deaths were recorded in the State from this disease. Rather more extensive outbreaks occurred among school children in 1927 and 1928, and the total number of deaths from scarlet fever in these two years was 218.

Whooping-cough.

Whooping-cough is another disease which mainly affects children, and to which, like scarlet fever, females are more susceptible than males. The number of deaths and rates of mortality for each sex since 1884 are shown below.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	327	1·24	472	2·17	799	1·66
1889-93	495	1·61	666	2·55	1,161	2·04
1894-98	343	1·01	502	1·69	845	1·33
1899-1903	573	1·59	726	2·23	1,299	1·90
1904-08	369	0·95	445	1·25	814	1·10
1909-13	377	0·86	436	1·09	813	0·97
1914-18	335	0·69	382	0·82	717	0·75
1919-23	440	0·82	497	0·96	937	0·89
1924-28	390	0·66	462	0·81	852	0·73
1929	90	0·72	122	1·01	212	0·86
1930	69	0·54	95	0·78	164	0·66

Whooping-cough may justly be regarded as a permanent menace and a constantly recurring ailment of infancy and childhood, for the table shows that periods of decline have generally been followed by increases in the death-rate, which is maintained by epidemic outbreaks, one such occurring in 1907, when 594 cases proved fatal, and the death-rate was the highest since 1878. An examination of the table on a later page showing the seasonal prevalence of diseases indicates that whooping-cough is most fatal during the months of January, September, November, and December.

Epidemics of whooping-cough among school children are only second in magnitude to those of measles. The records show that, during the past sixteen years, this disease has affected large numbers of school children every year and that virulent epidemics occurred in 1913, 1920, 1921, and 1925. The total number of deaths from whooping-cough in these years was 344, 369, 257, and 323 respectively.

Diphtheria and Croup.

As causes of death these diseases decreased in importance between 1884 and 1904. During the next ten years there was a slight increase in mortality, but the years which have since elapsed have shown an appreciable decline.

Diphtheria and croup, under which heading membranous laryngitis is included, caused 176 deaths in 1930. Deaths from these diseases in the metropolitan area numbered 80, and those in the remainder of the State, 96, the respective rates per 10,000 living for each division being 0.64 and 0.77. The following table shows the number of deaths and the rates since 1884:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	1,069	4.04	980	4.51	2,049	4.25
1889-93	1,433	4.65	1,399	5.36	2,832	4.98
1894-98	712	2.10	710	2.39	1,422	2.24
1899-1903	310	3.86	299	0.92	609	0.89
1904-08	367	0.95	338	0.95	705	0.95
1909-13	604	1.37	640	1.59	1,244	1.48
1914-18	659	1.36	682	1.47	1,341	1.41
1919-23	583	1.09	509	0.99	1,092	1.04
1924-28	448	0.76	394	0.69	842	0.72
1929	103	0.82	112	0.92	215	0.87
1930	90	0.71	86	0.69	176	0.70

Mortality from diphtheria was heaviest during two lengthy periods, viz., from 1881 to 1898, and omitting the year 1919, from 1909 to 1921, although the rate was much lower in the latter period than in the former. During the past sixteen years diphtheria was most prevalent among school children in 1913 and 1921, but considerable numbers of cases were recorded in other years, the numbers fluctuating from year to year in close sympathy with those of whooping-cough.

The experience of the quinquennial period 1926-30 shows the disease to be most fatal during the months of April, May, and June. Ninety-four per cent. of the persons who died from diphtheria during 1930 were under 10 years of age, and 74 per cent. were under 5 years of age.

Since the year 1923 the Department of Public Health has investigated the Schick test for determining susceptibility to diphtheria. At 2 years of age, about 70 per cent. of children are liable to contract the disease, the susceptibility diminishing with age. Roughly, 30 per cent. of children tested between ages 5 and 15 were found to be susceptible. It is claimed that lasting immunity can be achieved by a simple and inexpensive inoculation, and that diphtheria can be eradicated by the properly enforced application of this provision. Although, as noted above, considerable improvement in the rate of mortality from diphtheria and croup has been effected since 1898, it still remains high.

Influenza.

During 1930 there were 129 deaths due to influenza, the rate of mortality being below the average of the previous quinquennium. Prior to 1891 the average annual number of deaths was 44, but during that year 988 deaths

occurred from this cause. From 1892 to 1917 the average number of deaths was 198, but in 1918 an outbreak resulted in 372 deaths. This was completely overshadowed by the disastrous epidemic in 1919, when 6,387 persons died from the disease. An examination of the experience of that year will be found in the 1920 issue of this Year Book.

In the following table the deaths at each outbreak are shown together with those in the intervening periods:—

Period.	Deaths.			Annual Rate per 10,000.
	Male.	Female.	Total.	
1875-1890	388	322	710	0·53
1891	549	439	988	8·65
1892-1917	2,799	2,397	5,196	1·27
1918	218	154	372	1·91
1919	3,851	2,536	6,387	31·93
1920	132	127	259	1·25
1921	204	195	399	1·89
1922	124	98	222	1·03
1923	268	243	511	2·33
1924	136	125	261	1·17
1925	76	67	143	0·63
1926	172	145	317	1·37
1927	126	105	231	0·97
1928	127	120	247	1·02
1929	293	248	541	2·20
1930	62	67	129	0·52

Prior to 1919 influenza was essentially a disease fatal to young children and persons past 45 years of age, but in the severe world-wide epidemic of that year the disease was most fatal to persons in the prime of life (25 to 44 years). Comparing the deaths since 1921 with those of 1918 and 1919 in age groups representing approximately the different stages of life, it will be seen that the character of the disease is reverting to the type experienced prior to 1919.

Age Group.	Deaths per cent. of Total.									
	1918.	1919.	1921.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
Under 10 ...	13	6	11	10	19	6	13	9	8	19
10-24 ...	8	12	6	5	9	8	6	8	6	7
25-44 ...	15	53	27	18	19	16	21	20	18	16
45-64 ...	17	22	27	25	24	24	28	30	26	27
65 and over ...	47	7	29	42	29	46	32	33	42	31
Total ...	100	100	100	100	100	100	100	100	100	100

Tuberculous Diseases.

The number of deaths ascribed to the several classified forms of tuberculous diseases during 1930 was 1,144, or 5·4 per cent. of the actual mortality in the State, and equal to 4·59 per 10,000 living—a rate slightly below the average for the preceding quinquennium.

A comparison of death-rates from tuberculous diseases in the Australian States and New Zealand for the last seven years is given below. The rates are stated per 1,000 of the total population, and do not take account of differences in the distribution of age and sex in the respective populations, which have a material influence on the rates.

State.	Death-rate from tuberculous diseases per 1,000 of Total Population.						
	1924.	1925.	1926.	1927.	1928.	1929.	1930.
New South Wales ...	0·56	0·51	0·55	0·50	0·54	0·53	0·46
Victoria ...	0·70	0·66	0·63	0·65	0·66	0·59	0·59
Queensland ...	0·42	0·42	0·45	0·42	0·41	0·37	0·41
South Australia ...	0·72	0·70	0·70	0·63	0·59	0·60	0·50
Western Australia ...	0·68	0·78	0·72	0·65	0·62	0·68	0·60
Tasmania ...	0·76	0·64	0·62	0·69	0·65	0·59	0·60
Commonwealth ...	0·61	0·58	0·59	0·56	0·56	0·54	0·51
New Zealand ...	0·57	0·51	0·51	0·49	0·50	0·46	0·46

Mortality from tuberculous diseases is usually lower in New South Wales than in any other Australian State except Queensland.

Tuberculosis of the Respiratory System.

Tuberculosis of the respiratory system, or phthisis, was the cause of 1,022 deaths, or 89·3 per cent. of the number due to tuberculosis during the year 1930, being fifth in the order of magnitude among the fatal diseases of the State. The mortality rate per 10,000 living was slightly lower than in the previous year. The male rate in 1930 was 4·85 and the female rate 3·33.

The following table shows the number of deaths from tuberculosis of the respiratory system and the rates for each sex since 1884. This cause of death was formerly designated tuberculosis of the lungs:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	3,132	11·83	2,022	9·30	5,154	10·69
1889-93	3,269	10·61	1,925	7·38	5,194	9·13
1894-98	3,191	9·43	1,933	6·68	5,174	8·15
1899-1903	3,322	9·24	2,304	7·08	5,626	8·21
1904-08	2,985	7·72	2,184	6·13	5,169	6·96
1909-13	3,220	7·31	2,286	5·69	5,506	6·54
1914-18	3,373	6·95	2,194	4·72	5,567	5·86
1919-23	3,484	6·50	2,173	4·21	5,657	5·38
1924-28	3,337	5·63	2,217	3·89	5,554	4·78
1929	684	5·47	467	3·86	1,151	4·67
1930	614	4·85	408	3·33	1,022	4·10

The general rate has decreased more than 50 per cent. in the period under review, that for females slightly more than that for males. The female rate ranges from 62 per cent. of the male rate in the year 1922 to 79 per cent. during the periods 1904-08 and 1884-88.

The improvement in the death-rate is due to many factors, such as the regulation of immigration, conditions of employment, etc., and the enforcement of the various Health Acts, but principally to the adoption of improved methods of medical treatment.

The table below shows the death-rates from tuberculosis of the respiratory system or phthisis according to age and sex in decennial periods since 1891.

Age Group. Years.	Deaths per 10,000 living—Phthisis.								
	Males.			Females.			Persons.		
	1891- 1900.	1901- 1910.	1911- 1920.	1891- 1900.	1901- 1910.	1911- 1920.	1891- 1900.	1901- 1910.	1911- 1920.
0-4	1·06	1·17	·68	·97	·97	·62	1·01	1·07	·66
5-9	·34	·31	·18	·57	·39	·25	·45	·35	·21
10-14 .. .	·54	·52	·28	1·08	1·07	·59	·81	·79	·43
15-19 .. .	3·57	2·86	2·24	4·71	5·30	3·25	4·14	4·07	2·75
20-24 .. .	10·69	7·97	6·67	9·64	8·94	6·83	10·17	8·45	6·78
25-34 .. .	15·63	11·35	9·85	13·75	11·16	8·61	14·81	11·26	9·23
35-44 .. .	18·28	14·79	12·08	13·39	11·90	7·70	16·22	13·48	10·00
45-54 .. .	19·04	16·66	14·34	10·84	9·76	6·94	15·67	13·63	10·97
55-64 .. .	21·98	17·44	14·75	11·17	10·15	6·71	17·60	14·23	11·21
65-74 .. .	17·09	17·02	13·00	7·62	9·07	6·85	12·97	13·59	10·21
75 and over ..	4·67	7·45	6·19	2·44	4·64	4·01	3·73	6·19	5·16
All ages..	9·63	8·06	7·00	6·77	6·43	4·81	8·30	7·31	5·94

The decrease shown in female rates is slightly greater than that in male rates. The rates according to age, however, show a remarkable difference when the sexes are compared. For males the rates increase steadily until age 60 is approached, after which a rapid decrease is shown.

For females the rates reach their highest point in the age group 25-34, and do not decline in after life in any marked degree.

The rates for the whole population, while negligible under the age of 15 years, increase from that age to 25 years, and then remain practically constant until 75 is reached, after which age the rate drops quickly.

Pulmonary tuberculosis was notifiable only within the metropolis, in the area controlled by the Hunter District Water Supply and Sewerage Board, and in the Katoomba Municipality and Blue Mountains Shire, until March, 1929, when it became notifiable throughout the State.

Other Tuberculous Diseases.

Of the 1,144 deaths during 1930 from tuberculosis, only 122 were from tuberculosis of organs other than the lungs. The corresponding figures for 1929 were 156 from a total of 1,307. For the year 1930, 39 deaths, equivalent to 32 per cent., were of children under 5 years of age. Taking the age group 0-4 years, and all ages, the following table shows the distinct improvement in the death-rates since the decennium 1891-1900:—

Period.	Deaths per 10,000 living—Tuberculosis other than Phthisis.					
	Ages 0 to 4 Years.			All Ages.		
	Males.	Females.	Total.	Males.	Females.	Total.
1891-1900	15·93	13·41	14·69	2·76	2·62	2·69
1901-1910	7·11	5·93	6·55	1·70	1·51	1·61
1911-1920	3·13	2·96	3·06	1·00	·86	·93
1921-1930	1·83	1·65	1·74	·63	·53	·58
1921	2·29	1·96	2·16	·83	·53	·71
1922	1·36	2·39	1·87	·72	·57	·65
1923	1·72	1·29	1·51	·67	·51	·59
1924	1·62	0·95	1·29	·39	·43	·41
1925	1·29	1·64	1·47	·55	·56	·56
1926	1·97	1·64	1·85	·67	·55	·61
1927	1·67	1·57	1·62	·65	·45	·55
1928	1·90	1·34	1·62	·64	·61	·62
1929	2·60	1·99	2·30	·68	·58	·63
1930	1·55	1·54	1·55	·54	·43	·49

Cancer.

In 1930 the deaths from cancer numbered 2,290, equal to a rate of 9.20 per 10,000 living. The average rate of mortality in the five years 1924-28 was much higher than in any preceding period, being 9.34 per 10,000 living as compared with 3.30 for a similar period forty years previously. The total for 1930 included 1,212 males and 1,078 females, the rates being 9.57 and 8.81 per 10,000 living of each sex respectively.

Classified according to the parts of the body affected and arranged in order of fatality, cancer caused the following deaths in 1930:—Stomach and liver, 800; peritoneum, intestines, and rectum, 410; female genital organs, 219; breast, 197; buccal cavity, 139; skin, 82; and other organs, 443.

The following table shows the deaths and rates of each sex since 1884:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	859	3.25	732	3.37	1,591	3.30
1889-93	1,262	4.10	1,038	3.98	2,300	4.04
1894-98	1,719	5.09	1,387	4.68	3,106	4.89
1899-1903	2,295	6.38	1,877	5.77	4,172	6.09
1904-08	2,671	6.91	2,418	6.78	5,089	6.85
1909-13	3,362	7.63	2,860	7.12	6,222	7.39
1914-18	3,886	8.00	3,458	7.44	7,344	7.73
1919-23	4,738	8.84	4,292	8.32	9,030	8.58
1924-28	5,790	9.77	5,068	8.89	10,858	9.34
1929	1,224	9.75	1,098	9.08	2,322	9.42
1930	1,212	9.57	1,078	8.81	2,290	9.20

In New South Wales the crude male rate is usually the higher, which is contrary to the experience of England and Wales, where the crude female rate is usually the higher. In the period 1911-1914 the standardised female rate in England was nearly 9 per cent. higher than the standardised male rate, but in 1922 and 1923 the standardised rates for both sexes were practically equal, and in 1924 the male rate was greater than the female rate for the first time on record. This change is attributed by the Registrar-General in his Annual Review to the operation of two factors which probably exercise some influence in New South Wales, viz.—(i) The success of operations upon the relatively more accessible cancers of females, and (ii) the better diagnosis of the less accessible cancers of females as a consequence of improved medical appliances and knowledge. In England and Wales, also, the combined crude rate is usually much higher, and is increasing more rapidly than in New South Wales. However, the standardised rate in England has shown only a slight increase since pre-war years.

The ages of the 2,290 persons who died from cancer in New South Wales during 1930 ranged from under 1 year to 98 years, but the disease is one of advanced age, 97 per cent. of the persons who died from cancer in 1930 being 35 years and over.

In the following table are shown the death-rates from cancer for each sex in age groups above 25 years, in decennial periods since 1891:—

Age Group. Years.	Deaths per 10,000 Living—Cancer.								
	Males.			Females.			Persons.		
	1891- 1900.	1901- 1910.	1911- 1920.	1891- 1900.	1901- 1910.	1911- 1920.	1891- 1900.	1901- 1910.	1911- 1920.
25-34	0.91	0.85	1.00	1.24	1.37	1.47	1.07	1.12	1.28
35-44	3.03	3.93	3.52	3.79	7.16	6.34	4.96	5.39	4.86
45-54	12.13	12.53	13.55	17.93	19.21	17.35	14.52	15.41	15.23
55-64	30.36	34.96	35.43	33.20	38.54	33.50	31.52	36.05	34.59
65-74	61.32	72.00	69.19	43.00	62.06	60.07	47.13	67.71	64.60
75 and over	63.78	86.36	105.94	62.95	79.98	93.55	63.43	83.49	100.08
All Ages	4.99	6.90	8.06	4.77	6.62	7.37	4.38	6.77	7.72

Prior to the 1911-20 decennium the female rates were consistently higher than the male up to and including the age group 55-64 years, after which the position was reversed. After 1910 the female rate was lower than the male in age group 55-64.

Cancer is probably the most feared of all diseases, inasmuch as no specific remedy is known, and in all countries for which records are kept the death-rate is increasing. Steps have been taken by the University of Sydney to organise research work in relation to the disease. Laboratories have been equipped within the University, and research workers have been engaged to conduct investigations locally and abroad. As a result of a public appeal for funds to aid cancer research and treatment the sum of £120,000 was collected in 1926.

In the following table the rates of mortality from cancer are given for the Australian States and New Zealand. The comparison is upon the crude basis of total population and is uncorrected for age and sex incidence.

State.	Cancer Death-rate per 1,000 of Total Population.							
	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.
New South Wales	0.86	0.93	0.94	0.93	0.93	0.94	0.94	0.92
Victoria	1.02	1.00	0.98	1.01	1.00	1.07	1.07	1.04
Queensland	0.83	0.79	0.81	0.88	0.82	0.85	0.87	0.79
South Australia	0.95	0.94	0.93	0.95	0.93	1.00	1.10	1.02
Western Australia	0.76	0.91	0.81	0.90	0.88	0.86	0.92	1.00
Tasmania	0.77	0.92	0.92	0.88	1.03	0.78	0.95	0.95
Commonwealth	0.89	0.93	0.92	0.94	0.93	0.96	0.97	0.95
New Zealand	0.88	0.96	0.91	0.99	0.96	0.99	1.04	1.02

Diabetes.

The proportion of deaths due to diabetes has been growing steadily during the past twenty years and now it ranks thirteenth in the list of individual causes arranged in order of number of deaths. Although the disease is responsible for little more than 1 per cent. of the annual number of deaths the rate of mortality from diabetes has increased, the average of the last five years being 40 per cent. higher than that for a similar period twenty years ago.

The deaths due to diabetes in 1930 numbered 272, equal to a rate of 1.09 per 10,000 living. The rate for males was 0.77 and for females 1.42 per 10,000 living of each sex. Most of the deaths occurred after middle life, 235 out of 272 deaths in 1930 or 86 per cent. being persons over 45 years of age.

Meningitis.

The diseases included under the above heading—encephalitis, simple meningitis, and non-epidemic cerebro-spinal meningitis—caused 100 deaths during 1930; the corresponding rate being 0.40 per 10,000 living. Of this number 62 were males and 38 females, equivalent to rates per 10,000 living of each sex of 0.49 and 0.31 respectively. The deaths in the metropolis and country were 50 and 50, with corresponding rates per 10,000 living of 0.40 and 0.40.

Of those who died during 1930, 38, or 38 per cent., were under 5 years of age.

Hæmorrhage of the Brain.

Mortality from this cause showed a slow but sustained increase for twenty years prior to the quinquennium 1909-13, then there was an appreciable decline until 1924. Since that year the figures are not strictly comparable owing to changes in the method of classification due to a revision in the classification of causes of death. In 1925 greater preference was given to cerebral hæmorrhage as a cause of death when found in combination with diseases of the arteries, atheroma, etc. In 1928, however, a further change was made, and all cases of arterio-sclerosis combined with any cerebral vascular lesion are now included with disease of the arteries.

The number of deaths due to cerebral hæmorrhage and apoplexy during the year 1930, under the new classification, was 768, of which 373 were those of males and 395 those of females. The rate was 3.08 per 10,000 living, or 2.95 for males and 3.23 for females.

The following table shows the number of deaths and the rates for both sexes from cerebral hæmorrhage and apoplexy since 1884, but the alterations in classification mentioned above rather vitiate the figures for the last five years:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	778	2.97	467	2.15	1,245	2.58
1889-93	796	2.58	618	2.37	1,414	2.48
1894-98	943	2.79	710	2.39	1,653	2.60
1899-1903	1,050	2.92	788	2.42	1,838	2.68
1904-08	1,803	3.31	1,039	2.91	2,342	3.15
1909-13	1,627	3.69	1,439	3.58	3,066	3.64
1914-18	1,693	3.49	1,431	3.08	3,124	3.29
1919-23	1,735	3.4	1,587	3.08	3,322	3.16
1924-28	2,225	3.75	2,210	3.88	4,435	3.81
1929	436	3.47	418	3.46	854	3.47
1930	373	2.95	395	3.23	768	3.08

Convulsions of Children.

Convulsions of children (under 5 years of age) caused 18 deaths during 1930, or 0.07 per 10,000 living at all ages, which is 65 per cent. below the rate for the previous quinquennium. The corresponding number of deaths in 1929 was 30.

The following table shows the number of deaths and the rates from convulsions of children for both sexes in periods since 1875:—

Year.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1875-9	1,538	8.93	1,291	8.94	2,829	8.93
1880-4	2,007	9.12	1,600	8.83	3,607	8.99
1885-9	1,916	6.99	1,615	7.14	3,531	7.06
1890-4	1,601	5.07	1,355	5.03	2,956	5.05
1895-9	1,281	3.73	1,119	3.70	2,400	3.72
1900-4	781	2.15	625	1.89	1,406	2.02
1905-9	550	1.40	480	1.32	1,030	1.36
1910-14	458	1.00	343	0.83	801	0.92
1915-19	404	0.83	291	0.61	695	0.72
1920-24	208	0.38	183	0.35	391	0.36
1925-29	145	0.24	98	0.17	243	0.20
1930	13	0.10	5	0.04	18	0.07

The rates of mortality show a remarkably steady decline. The disease, once of formidable importance, is now only a minor cause of death. Being limited to children under 5 years of age, the rates are better stated proportionately at that age-period. On this basis the death-rate in 1930 was 0.71, as compared with 1.88 of the previous quinquennium. Of the total deaths during 1930, 15 occurred during the first year of life, the equivalent rate being 0.29 per 1,000 births. The deaths of males and females during the first year of life were 10 and 5 respectively; for all children under 5 years of age, 13 males and 5 females. The continuous decline shown in this cause of infantile mortality is more apparent than real, being due largely to increasing skill in diagnosing the diseases of children. Numerous deaths having convulsions as their immediate cause are now ascribed to some other cause which led to convulsions.

Insanity.

Classed as a distinct disease of the nervous system, insanity causes death from general paralysis of the insane and from other forms of mental alienation. Practically all the persons in New South Wales coming within this classification are under treatment in the various mental hospitals. On the 30th June, 1930, there were 9,413 persons under official cognisance, including 36 patients from the Broken Hill district who were under treatment in South Australian hospitals. The proportion per 1,000 of the population was 3.78, or about 3.8 per cent. more than the average for the previous five years.

The number of deaths from this cause was 69—43 males and 26 females—in the year 1930. The death-rate per 10,000 living was 0.34 for males and 0.21 for females.

In England and Wales the corresponding figures in 1930 were 0.73 and 0.43.

In the year 1929-30 there were 564 deaths in mental hospitals, equivalent to 64.8 per 1,000 of the average number of patients in residence. This rate of mortality, however, is not comparable with that of the general population, because the proportion of mental patients under the age of 20 years is very small, due, doubtless, to the facts that many children mentally afflicted are cared for in their homes, and that mental alienation frequently does not become manifest until middle or advanced age is reached.

The following statement provides a comparison of the mortality of the adult patients in mental hospitals with that of the general population in age groups:—

Age Group. Years.	Deaths per 1,000 Living—Period 1911-1920.					
	Patients in Mental Hospitals.			General Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
20-29	39·4	38·3	38·9	4·4	4·0	4·2
30-39	57·0	41·7	50·8	5·7	4·8	5·2
40-49	71·9	53·0	63·8	9·5	6·5	8·1
50-59	93·0	67·3	82·5	17·2	11·3	14·5
60-69	134·4	117·2	128·5	30·2	22·9	28·3
70 and over	312·9	261·4	293·1	111·1	88·7	100·3
20 and over	90·8	70·6	82·7	14·3	10·5	12·1

The rates shown above are rendered somewhat abnormal by the inclusion of deaths due to influenza during the epidemic of 1919, but at all ages the rate of mortality among mental patients is very much higher than among the general population. In the earlier years the ratio of the disparity is nearly 10 to 1, but it diminishes as age increases, and after age 70 is passed it is about 3 to 1.

Diseases of the Heart.

For reasons stated below, statistics of mortality from this cause are of limited value, there being important factors connected with the mode of certification and classification which affect the numbers from year to year.

The ages of persons who died from diseases of the heart during 1930 ranged between 1 year and 106 years, and 91 per cent. of those who succumbed were 45 years or over.

The deaths and the death-rates of each sex since 1884 are shown below:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	2,149	8·12	1,390	6·39	3,539	7·34
1889-93	2,250	7·30	1,357	5·20	3,607	6·34
1894-98	2,434	7·19	1,478	4·98	3,912	6·16
1899-1903	2,917	8·11	1,932	5·94	4,849	7·08
1904-1908	3,791	9·81	2,727	7·65	6,518	8·77
1909-1913	5,054	11·47	3,633	9·04	8,687	10·31
1914-1918	5,950	12·26	4,168	8·97	10,118	10·65
1919-1923	6,901	12·87	5,384	10·44	12,285	11·68
1924-1928	9,360	15·79	7,377	12·94	16,737	14·39
1929	2,286	18·20	1,816	15·02	4,102	16·64
1930	1,934	15·27	1,487	12·15	3,421	13·74

The classified causes of the total number of deaths include pericarditis, endocarditis and acute myocarditis, angina pectoris and other diseases of the heart. The apparent increase in mortality due to diseases of the heart is probably the result more of specialised biological knowledge, and of the greater attention given to pathological diagnoses, than to any real cause. Many deaths formerly recorded as being caused by senile decay would now doubtless be assigned to some cardiac trouble. The marked increase that

has taken place in the number of deaths from diseases of the heart in the past five years is considered to be due largely to an increasing tendency on the part of medical practitioners to give prominence to myocarditis as a cause of death rather than to any real increase in the number of deaths due to this cause. Every care is taken in the compilation of statistics to ensure classification of certificates in accordance with the international list of causes of death. Doubtful cases and indefinite cases are investigated and necessary corrections made, but it is still apparent that medical practitioners do not follow the principles of the international list of causes of death in the certificates which they supply. In every case where myocarditis unqualified appears as a joint cause on the certificate, the medical practitioner certifying is asked for full particulars.

In the following table are shown the death-rates for each sex in the principal age groups in decennial periods since 1891.

Age Groups. Years.	Deaths per 10,000 living—Diseases of the Heart.								
	Males.			Females.			Persons		
	1891- 1900.	1901- 1910.	1911- 1920.	1891- 1900.	1901- 1910.	1911- 1920.	1891- 1900.	1901- 1910.	1911- 1920.
0-4	1.14	1.13	.35	.80	.97	.49	1.02	1.05	.42
5-9 .. ..	.99	1.10	.94	.98	1.16	.96	.99	1.13	.94
10-14 .. .	1.28	1.49	1.13	1.31	1.84	1.49	1.30	1.66	1.30
15-19 .. .	1.40	1.92	1.78	1.66	1.98	1.75	1.53	1.95	1.76
20-24 .. .	1.42	1.55	2.18	1.33	1.94	2.02	1.62	1.74	2.09
25-34 .. .	2.66	2.15	2.38	2.53	2.53	2.70	2.60	2.34	2.79
35-44 .. .	5.81	5.46	5.67	5.63	6.13	5.00	5.74	5.77	5.35
45-54 .. .	13.36	13.79	15.01	11.20	11.80	11.90	12.47	12.93	13.69
55-64 .. .	36.56	35.37	38.52	25.29	28.72	28.47	31.96	32.48	34.09
65-74 .. .	69.40	91.84	99.07	54.65	78.67	81.78	62.37	86.15	91.21
75 and over ..	104.74	178.88	237.73	89.54	141.23	201.76	98.30	161.94	220.73
All ages ..	7.31	9.60	12.03	5.20	7.51	9.09	6.33	8.60	10.60

Although the apparent rate for all ages has increased by nearly 70 per cent. during the period reviewed, the increase is practically confined to ages 55 and over, due to causes explained in the previous paragraph.

Under the age of 45 there is very little difference between the rates of males and of females, but thereafter the male rate is distinctly higher, the result, no doubt, of the more strenuous life of males than of females.

Bronchitis.

Bronchitis caused 363 deaths during 1930, equal to a rate of 1.46 per 10,000 living. Of the total, 197 were males and 166 females, the corresponding rates per 10,000 of each sex being 1.56 and 1.36. The rate for the State was 22 per cent. lower than that experienced during the previous five years. Deaths in the metropolis numbered 166, and there were 197 in other parts of the State. The corresponding rates were 1.33 and 1.58 per 10,000 living. Of the total deaths, 113 were caused by acute bronchitis, 171 cases were shown as being due to the disease in its chronic form, and 79 were unspecified. Of those persons who died of acute bronchitis, 43 per cent. were under 5 years of age, and 81 per cent. of those who succumbed to chronic bronchitis were 55 years of age and over. Experience shows the disease to be most prevalent during the months of June, July, August and September.

Pneumonia.

Pneumonia, including broncho-pneumonia, was the cause of 1,275 deaths during 1930, the equivalent rate per 10,000 living being 5.12, which was 33 per cent. below the average for the preceding quinquennium. Of the

total 705 were males and 570 females. The male and female rates per 10,000 living were 5.57 and 4.66 respectively. The deaths in the metropolis numbered 617, and those in the remainder of the State 658. The rate in the remainder of the State was 6.9 per cent. higher than that in the metropolis. An analysis of the deaths according to age shows that pneumonia is most destructive in its attacks on children under 5 years of age and adults who have passed the age of 55. The rate of mortality from pneumonia is lowest among children between 10 and 14 years of age, but from then on it increases with advancing age.

Of the persons who died from pneumonia during 1930, 30 per cent. were under 5 years of age and 47 per cent. 50 years of age and over. The following table gives deaths and rates, according to sex, since the year 1884:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	2,032	7.68	1,301	5.98	3,333	6.91
1889-93	2,158	7.00	1,373	5.26	3,531	6.21
1894-98	2,514	7.43	1,528	5.15	4,042	6.37
1899-1903	3,191	8.87	2,000	6.15	5,191	7.58
1904-1908	2,816	7.28	1,824	5.12	4,640	6.24
1909-1913	2,983	6.77	1,931	4.81	4,914	5.83
1914-1918	3,779	7.78	2,402	5.17	6,181	6.50
1919-1923	4,217	7.87	3,042	5.90	7,259	6.90
1924-1928	4,810	8.11	3,498	6.14	8,308	7.14
1929	1,273	10.13	943	7.80	2,216	8.99
1930	705	5.57	570	4.66	1,275	5.12

The greatest mortality from pneumonia occurs in the cold weather and early spring.

The following table shows the death-rates for each sex in the principal age groups, in decennial periods since 1891:—

Age Group. Years.	Deaths per 10,000 living—Pneumonia.								
	Males.			Females.			Persons.		
	1891-1900.	1901-1910.	1911-1920.	1891-1900.	1901-1910.	1911-1920.	1891-1900.	1901-1910.	1911-1920.
0-4	21.08	21.19	20.80	17.16	17.70	18.00	19.15	19.48	19.43
5-9	1.29	1.31	1.48	1.20	1.27	1.41	1.25	1.29	1.45
10-14 .. ..	.55	.95	.64	.93	1.10	.76	.74	1.02	.70
15-19	2.01	2.29	1.89	1.26	1.49	.88	1.64	1.90	1.28
20-24	3.08	3.00	2.90	1.50	1.54	1.44	2.50	2.23	2.13
25-34	3.91	3.67	3.55	2.60	2.30	2.09	3.32	3.01	2.82
35-44	6.60	6.06	5.01	3.97	3.92	2.72	5.65	5.09	3.92
45-54	9.61	9.47	8.76	5.33	4.78	4.19	7.85	7.45	6.68
55-64	16.08	16.15	12.58	10.78	10.19	8.13	13.92	13.56	10.62
65-74	28.21	28.47	23.99	13.66	22.98	19.19	23.89	26.10	21.81
75 and over ..	42.40	46.54	55.50	35.38	50.32	62.19	39.42	48.24	53.97
All ages ..	7.46	7.68	7.49	5.22	5.50	5.29	6.42	6.64	6.42

As in most diseases affecting adults, the death-rates are higher for males than for females. About 25 per cent. of deaths occur between the ages of 5 and 45 years. In the age group 0-4 years a slight increase is shown, but between the ages of 20 and 74 the rates have been slowly but steadily decreasing. The increase shown in the age group 75 and over is due probably to more information being now available as to cause of death.

Diseases of the Digestive System.

Diseases of the digestive system caused the deaths of 1,022 males and 720 females during 1930, the respective rates per 10,000 living being

8.07 and 5.88. The rate corresponding to the total deaths from these diseases in the State was 7.00 per 10,000 living, and was 9 per cent. lower than that experienced during the previous five years. Deaths resulting from diseases of the digestive system were caused in the main by diarrhœa and enterities, with appendicitis, hernia and intestinal obstruction, and cirrhosis of the liver next in order of fatality.

Diarrhœa and Enteritis.

The incidence of these diseases is mainly upon young children, and the pronounced effect of seasonal conditions upon the mortality from this cause is dealt with in discussing deaths of children under 1 year of age. The deaths of children under 1 year from these causes in 1930, totalled 416—241 males and 175 females. In 1930 there were 717 deaths from these causes at all ages, equivalent to a rate of 2.88 per 10,000 of the general population, the rate for males being 3.33 and for females 2.41. The combined rate was 16 per cent. below the average for the preceding quinquennium. The following table shows the number of deaths and the rates since 1884, distinguishing between the sexes:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	3,412	12.89	3,048	14.02	6,460	13.40
1889-93	3,451	11.20	2,851	10.92	6,302	11.07
1894-98	4,042	11.94	3,638	12.26	7,680	12.09
1899-1903	4,422	12.29	3,901	11.99	8,323	12.15
1904-1908	3,714	9.61	3,000	8.41	6,714	9.03
1909-1913	4,257	9.66	3,471	8.64	7,728	9.18
1914-1918	3,622	7.46	2,957	6.36	6,579	6.92
1919-1923	3,813	7.11	3,039	5.89	6,852	6.51
1924-1928	2,436	4.11	2,036	3.57	4,472	3.85
1929	363	2.89	278	2.30	641	2.60
1930	422	3.33	295	2.41	717	2.88

There was a considerable drop in the rate after 1888, due probably to the beneficial operations of the Dairies Supervision Act. During the next fifteen years there was a gradual increase, followed by a marked improvement in 1904, an improvement which was maintained consistently until the years 1919 and 1920, when an upward tendency was manifested, which, however, was not maintained, and during the last nine years the general trend has been downward, though the rate has fluctuated. The unusually low mortality in 1925 was probably due in a large measure to the bountiful rainfall.

Of the total deaths from diarrhoea and enteritis during 1930, 381 or 53 per cent., occurred in the months of January, February, and March; and 62, or 9 per cent., in the months of June, July, and August. As a rule, nearly 50 per cent. of the deaths occur in the months first mentioned.

Deaths from these diseases are classified into two groups, one including children under 2 years of age, and the other all persons 2 years of age and over. In the first group there were 557, or 78 per cent. of the total, and in the second, 160. Additional particulars are shown on page 517.

Since such a large proportion of the deaths is contained in this first group, it is interesting to consider the improvement in the rate shown by

the following table, in which the deaths of children under 2 years from diarrhœa and enteritis are related to the total number of children in that age group:—

Year.	No.	Rate per 1,000 Living.	Year.	No.	Rate per 1,000 Living.
1881	733	33·50	1926	801	7·67
1891	985	14·76	1927	513	4·93
1901	1,165	18·10	1928	775	7·43
1911	963	11·21	1929	474	4·50
1921	988	10·08	1930	557	5·50

Although the rate of mortality from these causes is still comparatively heavy, there has been a very marked improvement. The proportion of deaths in 1930 was one-sixth of the rate in 1881.

Appendicitis.

To this cause 211 deaths were ascribed in 1930, the rate being 0·85 per 10,000 living, which is 4 per cent. above the average of the preceding quinquennium. Appendicitis is more fatal to males than to females, the rate for the former in 1930 being 1·09, and for the latter 0·60 per 10,000 living. The number of deaths from appendicitis in 1929 was 216.

Cirrhosis of the Liver.

Information relating to mortality from cirrhosis of the liver is of interest in connection with alcoholism.

Deaths from cirrhosis of the liver in 1930 numbered 108—72 males and 36 females, the rate being 0·43 per 10,000 living—9 per cent. below the average for the previous quinquennial period. This disease is more prevalent among males than females—the rate for the former in 1930 being 0·57, and for the latter 0·29 per 10,000 living in each sex.

The number of deaths from this cause in 1929 was 111.

Bright's Disease or Nephritis.

Bright's disease or nephritis has grown in the past forty years from a relatively infrequent cause of death to a prominent position among the major causes, and now it ranks fourth in order of importance amongst those causes of death whose incidence falls upon the general population. From 1884 to 1913 the number of deaths due to the disease gradually increased, and the rate of mortality caused by it more than doubled. A check in the increase then set in, and was followed after 1918 by an appreciable decrease, and the average annual rate for the next five years fell to 456 per million inhabitants as against 501 in 1914-18. In 1924, 1925, 1928, and 1929, however, the rates exceeded 490, and reached a maximum figure of 555 in 1929.

During 1930 there were 1,719 deaths due to diseases of the genito-urinary system, of which 1,300 were caused by Bright's disease, acute and chronic. The rate was 5·22 per 10,000 living, and for males and females 5·90 and 4·52 respectively, the general rate being nearly 4 per cent. above that experienced during the previous quinquennium. The deaths due to these diseases in

the metropolis were 700, and in the rest of the State 600, the corresponding rates per 10,000 living being 5.62 and 4.82. Experience shows that the fatality of these diseases increases slightly during the winter months.

The number of deaths and the rates of mortality due to Bright's disease are shown below.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths	Rate per 10,000 Living.
1884-88	626	2.37	386	1.78	1,012	2.10
1889-93	907	2.94	570	2.18	1,477	2.60
1894-98	1,291	3.81	821	2.77	2,112	3.33
1899-1903	1,659	4.61	996	3.06	2,655	3.88
1904-1908	2,056	5.32	1,199	3.36	3,255	4.38
1909-1913	2,649	6.01	1,539	3.83	4,188	4.97
1914-1918	3,080	6.34	1,682	3.62	4,762	5.01
1919-1923	2,914	5.44	1,886	3.66	4,800	4.56
1924-1928	3,391	5.72	2,324	4.08	5,715	4.91
1929	769	6.12	598	4.95	1,367	5.55
1930	747	5.90	553	4.52	1,300	5.22

During the first thirty-five years of the period covered by the foregoing table the rate of mortality both for males and females has more than doubled, and has increased considerably during the last twenty years. The rate for males in 1930 was 31 per cent. higher than that for females. Comparatively few persons under 35 years of age die from nephritis, the proportion in 1930 being 9 per cent. of the total.

The following table shows the death-rates for each sex in the principal age groups in decennial periods since 1891:—

Age Group. Years.	Deaths per 10,000 living—Bright's Disease.								
	Males.			Females.			Persons.		
	1891-1900.	1901-1910.	1911-1920.	1891-1900.	1901-1910.	1911-1920.	1891-1900.	1901-1910.	1911-1920.
0-4 ..	1.31	1.52	.87	1.44	1.23	.81	1.37	1.38	.84
5-9 ..	.44	.48	.33	.44	.50	.27	.44	.49	.30
10-14 ..	.26	.49	.28	.38	.53	.48	.32	.51	.38
15-19 ..	.76	.72	.67	.61	.77	.60	.68	.74	.63
20-24 ..	1.01	1.04	1.23	1.26	1.07	1.29	1.13	1.05	1.31
25-34 ..	1.80	1.85	1.88	2.38	1.74	1.73	2.06	1.80	1.81
35-44 ..	4.48	4.36	3.54	4.52	4.12	3.32	4.50	4.25	3.43
45-54 ..	8.40	9.92	10.73	6.65	7.98	6.65	7.68	9.08	8.87
55-64 ..	15.39	20.17	22.91	10.47	12.83	12.92	13.39	16.98	18.61
65-74 ..	26.47	40.87	45.24	15.77	25.06	28.12	21.71	34.05	37.46
75 and over..	29.29	59.12	75.56	16.59	29.65	41.64	23.90	45.80	59.53
All ages ..	3.62	5.16	6.12	2.63	3.33	3.67	3.16	4.29	4.93

Although the total rates show a decided increase during the period reviewed, those for males under 45 and for females under 55 had decreased. The male rate at practically every age was higher than the female. For each sex the rate depends entirely upon the age; a slow increase is noted till the age of 45 is reached, after which the increase is rapid.

Deaths from Puerperal Causes.

The word "puerperal" is used in the broadest sense and includes all deaths due to pregnancy, parturition, or diseases of the breast during lactation.

Details of the deaths due to puerperal causes according to age, duration of marriage, previous issue, cause, locality and conjugal condition are shown in the Statistical Register. Of the 304 deaths due to puerperal causes, 280 were of married and 24 of single women. Of the married mothers 8, and of the single mothers 9 died before reaching the age of 21 years; the ages at death of the married women ranged from 18 years to 46 years, and of single women from 16 years to 39 years. The age at marriage of mothers who died ranged from 13 to 40 years. In one case the duration of marriage was 28 years, but 8 mothers died within a year of marriage. In 77 cases there was no previous issue and in 43 of these cases the death occurred within two years of marriage, while in one case 13 children survived the mother. In 87 cases of the 304 deaths from puerperal causes the child was still-born.

The incidence of deaths from puerperal causes falling only upon women of child-bearing ages, and mainly upon married women of these ages, the rates of mortality are not quoted as a proportion of general population, but are generally stated at per thousand births. Such rates showed a persistent though fluctuating decline in the three decades 1895-1924. During the period 1895-1904 the annual average number of deaths of mothers in childbirth was 268, equal to 7.1 deaths per 1,000 births. The corresponding number for the period 1905-1914 was 284, and the rate 6.2, compared with 289 and 5.2 respectively for the period 1915-1924. The decreased proportion of unmarried mothers has contributed slightly to this decline; but the rates quoted represent very closely the improvement that has occurred in mortality in childbirth among married mothers. A comparison of deaths in childbirth in this State with those of other countries must be made with caution. In the international list of causes of death criminal abortion is classified with homicide. In the table given below deaths from this cause are included to show the total deaths incidental to childbirth, but the totals are also shown excluding criminal abortion to enable comparison to be made with other countries where these deaths are not included.

Causes.	Deaths, 1925-29.		Deaths, 1930.	
	No.	Rate per 1,000 Births.	No.	Rate per 1,000 Births.
Accidents of Pregnancy	158	·59	33	·63
Puerperal Hæmorrhage	187	·69	36	·69
Puerperal Septicæmia	438	1·63	42	·81
Puerperal Septicæmia, following Abortion, Miscarriage.			38	·73
Albuminuria and Eclampsia	314	1·17	41	·79
Phlegmasia Alba Dolens, Embolus, Sudden Death.	121	·45	24	·46
Other Casualties of Child-birth	149	·55	46	·88
Total	1,367	5·08	260	4·99
Illegal Operations	191	71	44	·84
Total	1,558	5·79	304	5·83

The number of deaths of women resulting from various diseases and casualties due to puerperal causes was 304 in 1930, as compared with 278 in 1929, equivalent to a rate of 5.8 in 1930 and 5.3 in 1929 per 1,000 births. The causes of deaths in 1930 with the corresponding total for 1929 shown in

brackets were:—Puerperal septicaemia 80 (79) deaths, puerperal haemorrhage 36 (34), accidents of pregnancy 33 (29), albuminuria and eclampsia 41 (48), phlegmasia alba dolens, embolus, sudden death 24 (26). The experience of the five years 1926-30 shows that the average number of fatal cases per 1,000 births for married and for single women are 5.6 and 9.9 respectively. Plural births are reckoned as single confinements.

Cause of Death in Childbirth.	Number of Deaths, 1926-30.			Proportion per cent. due to each Cause.	
	Married.	Single.	Total.	Married.	Single.
Accidents of Pregnancy	156	11	167	11.10	8.33
Puerperal Haemorrhage	174	6	180	12.38	4.55
Puerperal Septicæmia	402	29	431	28.61	21.97
Albuminuria and Eclampsia	270	15	285	19.22	11.36
Phlegmasia Alba Dolens, Embolus, Sudden Death.	117	4	121	8.33	3.03
Other Casualties of Childbirth	153	5	158	10.89	3.79
Total, excluding Illegal Operations ...	1,272	70	1,342	90.53	53.03
Illegal Operations	133	62	195	9.47	46.97
Total	1,405	132	1,537	100.00	100.00

Illegal operations caused almost 47 per cent. of the puerperal deaths of single women.

More than any other cause of death during childbirth, puerperal septicaemia can be classed as a preventable disease. Over 25 per cent. of the deaths are due to this cause, but the proportion has declined appreciably in recent years. The annual rates of mortality of mothers in childbirth per 1,000 births in 1930 as compared with the preceding ten years were as follows:—

Year.	Deaths from Puerperal Septicæmia per 1,000 Births.			Total Deaths of Mothers in Child birth per 1,000 Births.		
	Metropolis.*	Remainder of State.	State.	Metropolis.	Remainder of State.	State.
1920	2.7	1.5	2.0	7.6	5.1	6.1
1921	1.9	1.4	1.6	5.8	4.7	5.1
1922	1.6	1.6	1.6	5.9	4.6	5.1
1923	1.6	1.2	1.4	6.7	4.2	5.2
1924	1.7	1.2	1.4	6.4	4.7	5.4
1925	1.6	1.6	1.6	7.2	5.1	6.0
1926	1.4	1.2	1.3	6.6	4.3	5.2
1927	2.0*	1.9*	1.9	7.9*	5.7*	6.5
1928	2.0*	1.8*	1.9	6.3*	5.8*	6.0
1929	2.0*	1.1*	1.5	6.1*	4.7*	5.3
1930	2.0*	1.2*	1.5	6.1*	5.7*	5.8

* Allocated according to usual residence of deceased mother.

The above table shows that the incidence of deaths of mothers in childbirth is considerably heavier in the metropolis than elsewhere in the State, despite the better hospital, medical and nursing facilities available in the city. The explanation of this apparent anomaly is suggested by the following table, which shows the incidence of deaths from childbirth on an industrial and geographical basis during the period 1915-24:—

Division.	Deaths from Puerperal Septicæmia per 1,000 Births.		Total Deaths of Mothers in Childbirth per 1,000 Births.	
	Married.	Single.	Married.	Single.
Metropolis	2·03	3·32	5·96	11·63
Country Municipalities	1·74	2·26	5·49	7·66
Shires	·95	1·32	3·55	6·08
New South Wales	1·68	2·71	5·25	9·62
Industrial Centres	2·02	3·26	5·91	11·16
Non-Industrial Centres	1·35	1·77	4·61	6·98

The metropolis includes a very large proportion of the industrial population, and embraces practically the whole of that proportion of the population living under the conditions of modern city life. Here the maternal mortality in childbirth is considerably higher than in any other part of the State. The country municipalities include only one large town—Newcastle—but they embrace considerable mining populations in the northern, southern, and western coal-fields and the silver-lead mines of Broken Hill. Although the shires embrace a number of coal mining towns, their population consists for the most part of the dwellers in small towns and on farms and, among these, deaths of mothers in childbirth are far less numerous than in industrial and urban districts.

Deaths from Violence.

This category includes deaths from accident, suicide, homicide, and other deaths not classified, in respect of which “open verdicts” were recorded at coroners’ inquests. The annual number of suicides has increased, but their proportion to the population has not shown any marked variation. Deaths from homicide and those classed as “open verdicts” have remained fairly constant in number, and their proportion to the population has, therefore, decreased.

Deaths from violence in 1930 numbered 1,651, or nearly 8 per cent. of the total deaths of the year. This number includes 361 suicides, 1,226 accidents, 43 homicides, and 21 classified as other external violence. The rate, 6.63 per 10,000 living, was 6 per cent. below the rate for the preceding quinquennium, which was 7.03. In the year 1930 the males numbered 1,307, or 10.32 per 10,000 living, and the females 344, or 2.81 per 10,000, or 27 per cent. of the male rate.

Deaths from Suicide.

The number of persons who took their own lives in 1930 was 361, or a rate of 1.45 per 10,000 living, and about 22 per cent. above the average for the preceding quinquennium. The number of male suicides was 298, or a rate of 2.35 per 10,000 living, and of female 63, or a rate of 0.51 per 10,000 living—the male rate thus being nearly four times that of the females.

The number of deaths from suicide and the rates since 1884 are shown in the following table:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	428	1.62	96	0.44	524	1.09
1889-93	519	1.68	110	0.42	629	1.11
1894-98	679	2.01	169	0.57	848	1.34
1899-1903	651	1.81	142	0.44	793	1.16
1904-1908	719	1.86	160	0.49	879	1.18
1909-1913	857	1.95	238	0.59	1,095	1.30
1914-1918	888	1.83	223	0.48	1,111	1.17
1919-1923	887	1.65	244	0.47	1,131	1.08
1924-1928	1,100	1.86	269	0.47	1,369	1.18
1929	239	1.90	62	0.51	301	1.22
1930	298	2.35	63	0.51	361	1.45

The means usually adopted for self-destruction by men are either shooting, poisoning, cutting, or hanging. Women, as a general rule, avoid weapons, and resort mostly to poison. Of every 100 cases of suicide during the five years 1926-30, 30 were by the agency of poison, 20 by shooting, 15 by cutting, 14 by hanging, 8 by gas and 7 by drowning. The proportion of suicides by shooting during the five years 1917-21 was 28 per cent., and the decrease since that period is probably the result of the introduction in 1921 of regulations regarding the possession of firearms. In 1930 there was a substantial increase in the number of suicides by gas.

Experience indicates that the suicidal tendency is probably influenced by the seasons. During the last ten years, 1921-1930, the proportion of male suicides per 1,000 was approximately as follows:—In spring 256, summer 271, autumn 231, and winter 242. The number of suicides is usually greater in January than in any other month.

Female suicides, being numerically small, give variable results as regards seasonal influence, and, contrary to the experience of males, no particular month showed any preponderance.

Deaths from Accident.

During the year 1930 the number of fatal accidents was 1,226, viz., 963 of males and 263 of females, or equal to rates of 7.61 and 2.15 per 10,000 living of each sex, and the general rate was 4.92 per 10,000 living. Accidental deaths have always been numerically greater in the extra-metropolitan area. Of those registered during 1930, deaths from accidents in the metropolis numbered 562, and in the remainder of the State 664. Prior to 1927, as a general rule, about two-thirds of the accidents occurred in the latter division, which contained about 55 per cent. of the total population.

The number of deaths from accident and the rates since 1884 are shown in the table below:—

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	3,550	13.41	944	4.34	4,494	9.32
1889-93	3,666	11.90	966	3.70	4,632	8.14
1894-98	3,498	10.33	1,095	3.69	4,593	5.23
1899-1903	3,432	9.54	1,103	3.39	4,535	6.62
1904-1908	3,143	8.13	1,055	2.96	4,198	5.65
1909-1913	3,891	8.83	1,114	2.77	5,005	5.94
1914-1918	3,814	7.86	1,075	2.31	4,889	5.14
1919-1923	3,656	6.82	1,080	2.09	4,736	4.50
1924-1928	4,816	8.12	1,331	2.34	6,147	5.29
1929	1,134	9.03	297	2.46	1,431	5.81
1930	963	7.61	263	2.15	1,226	4.92

Although the death-rate from accidents is still high compared with that of more closely settled countries, it has decreased, the lowest rate being in the year 1923. During the ten years ending 1929, there was a fairly steady increase, with the exception of 1928. In the years prior to 1894 certain causes not now classed as accidents were included.

The experience of the quinquennium ended 1930 shows that out of every 1,000 fatal accidents 347 are due to vehicles and horses, 138 to drowning, 141 to falls, 86 to burns or scalds, 75 to railways and tramways, 22 to mines and quarries, and 20 to weather, *i.e.*, excessive cold or heat, and lightning.

Out of 474 deaths caused by accidents with vehicles and horses, 431 were due to motor vehicle accidents, viz., 235 in the metropolitan area and 196 in other districts. Accidents of this class are increasing annually; there were 227 in 1925, 256 in 1926, 335 in 1927, 384 in 1928, and 478 in 1929. Of the 431 persons killed in 1930, 72 were under 15 years, 134 were between 15 and 30 years, and 62 were over 60 years of age.

THE SEASONAL PREVALENCE OF DISEASES.

The following table shows for each month of the year the proportion of deaths due to each of nine principal causes. The figures are based on the experience of the five years 1926-30, and in order to make the results of the computation comparable, adjustments have been made to correct the inequality of the number of days in each month:—

[illegible]

In interpreting the foregoing table comparison should be made vertically and not horizontally, the figures representing proportions per thousand and not absolute numbers.

The chief features of the foregoing table are exhibited in the contrast between the figures relating to typhoid fever, diarrhoea, and enteritis on the one hand, and to influenza, pneumonia, and bronchitis on the other. In the first group the influence of the hot weather is the controlling factor; in the second, the cold. The warmest months in the year are January, February, and December; the coldest, June, July, and August. The morbidity from phthisis varies little throughout the year, but the rates show that it is more fatal in the colder months. Bright's disease shows likewise a higher mortality during the cold weather.

FOOD AND PRICES.

FOOD. SUPPLY AND DISTRIBUTION.

New South Wales produces ample supplies of the food commodities which enter most largely into daily consumption, such as meat, bread, milk and butter. Local production of many other foods is augmented by importation from neighbouring States, and the only items which are imported in large quantities from oversea countries are tinned fish and tropical products, *e.g.*, tea, coffee, spices, etc. Rice, formerly imported, is grown on the Murrumbidgee Irrigation area in sufficient quantities to supply the whole of Australia.

Legislation, which gives the governing authorities power to supervise the conditions under which food is produced and distributed and to ensure a reasonable standard of quality, is contained in various enactments, the principal being the Pure Food Act of 1908, the Dairies Supervision and the Dairy Industry Acts, the Milk Act, the Local Government Act, and measures relating to the slaughtering of stock for food and to the marketing of primary products.

The administration of the food laws in incorporated areas is primarily the duty of the Board of Health, but the function may be left to the municipal and shire councils. If a council fails to fulfil the duty satisfactorily, the Board itself may exercise its powers in respect of these matters, or may take steps to compel the council to act.

The Board of Health drafts regulations under the Pure Food Act to prescribe standards for the composition, purity, and quality of foods and drugs upon the recommendation of an advisory committee, consisting of the president of the Board, medical men, and chemists, merchants, and others conversant with trade requirements. With a view to securing uniformity throughout Australia, the regulations have been standardised so far as the divergence of the laws of the various States will permit.

Under the Pure Food Act the sale or exhibition for sale of food which is adulterated or described falsely is prohibited, and packages must be labelled with the true description and weight of the contents and the name of the maker or vendor.

The Commonwealth Department of Trade and Customs exercises supervision in regard to the composition and labelling of food and of drugs imported into Australia.

The Weights and Measures Act is designed for the protection of the public from dishonesty in regard to the measurement of food in the course of distribution. It prescribes that traders' weighing and measuring appliances must be kept to a specified degree of accuracy and be submitted periodically to the Weights and Measures Office for verification, and that purchasers must receive full weight and measure.

The standard weights and measures of the United Kingdom have been adopted. It is a general rule that articles sold by weight must be sold by avoirdupois weight. The exceptions are as follows:—Precious metals, by troy weight; precious stones, by metric carat; drugs, retail, by apothecaries' weight. Sales by retail must be according to net weight or measure, and the practice of selling certain vegetables—*e.g.*, green peas in the pod—and other commodities by measure of capacity has been prohibited by regulation. The net weight or measure must be stamped on packages in which commodities are offered for sale. Special provision has been made to prevent fraud in respect of the weighing of coal and firewood.

Weights and Measures Offices have been established in Sydney, Newcastle, Goulburn, Orange and Wagga, and in these districts the law is administered by permanent officers. In other localities the duties of inspection are undertaken generally by the police.

The weight of bread is regulated under the provisions of the Bread Act of 1901. The standard loaves weigh 1 lb., 2 lb., and 4 lb. Operations under the Act are subject to limitation as the result of legal decisions that the existing law does not authorise the inspection of bread in the course of delivery, and that an inspector may enter a bakehouse between the hours of sunrise and sunset only.

Gas supplied by gas companies for cooking, heating and lighting was subject to regulation in terms of the Gas Act, 1912, and its amendments. Standards were prescribed in respect of power, purity and pressure, and the prices were regulated in relation to the dividends paid to shareholders. Standard prices were fixed for gas supplied to private consumers by meter, and they might be varied, after inquiry into changes in costs of production and distribution. If the standard price was charged the standard dividend might be paid; if it was exceeded there must be a corresponding reduction in dividend; and if a price lower than the standard price was charged a dividend proportionately higher than the standard dividend might be paid. Meters issued for use by a gas company must be tested and stamped by a Government examiner. The Gas Act and its amendments were repealed in March, 1932, by an Act which provided for the regulation of the supply of gas and electricity.

With the object of promoting efficient methods of marketing and distribution a conference of producers and consumers was convened by the Minister for Lands at Bathurst in September, 1926. Following this conference the Marketing of Primary Products Act was passed in 1927 to authorise the formation of marketing boards in respect of primary products as proclaimed under the Act upon the request of the producers. A marketing board for any product may not be formed unless a poll be taken of the producers thereof, at least two-fifths of the producers vote, and more than half of the votes are in favour of its constitution. At the end of the year 1931 boards had been appointed for marketing rice, eggs, and honey, and polls in respect of butter, wheat, certain varieties of canning fruit, and broom millet had proved unfavourable to this system of marketing. A State Marketing Bureau was established under the supervision of the Director of Marketing who administers the Marketing of Primary Products Act. The Bureau provides assistance to producers in regard to the marketing of their products, and collects and publishes information relating to market conditions, etc.

A second conference of producers and consumers was held at Bathurst in May, 1931.

The Farm Produce Agents Act, 1926-32, makes legal provision for the regulation of the practices of agents selling farm produce on commission. Agents must be licensed, and are required to furnish to the Registrar a bond from an approved insurance company. The amount of the bond is £2,000 for a company or firm; £300 where the agent sells by auction only and does not sell within a radius of 10 miles from the General Post Office, Sydney; and £1,000 in other cases. Agents may not purchase produce consigned to them for sale unless the owner gives his consent in writing, and they may not charge commission on such transactions, nor destroy produce without written authority.

In the matter of distribution of food supplies, the local governing authorities in the incorporated areas of New South Wales are authorised to establish public markets and to regulate the hawking and peddling of food commodities within the area of their jurisdiction.

The Municipal Council of Sydney has established large markets in the city for vegetables, farm produce, fish, and poultry, also cold storage works. The area and cost of the markets are as follows:—

Market.	Floor Space.	Cost of Market.	Market.	Floor Space.	Cost of Market.
	sq. ft.	£		sq. ft.	£
Vegetable ...	95,560	129,100	Fish ...	47,517	35,275
Produce ...	45,300	74,353	Poultry ...	12,200	32,919
Fruit ...	146,300	154,761			

The cold storage works have been constructed with chilling and freezing rooms for the storage of fruit, dairy and farm produce, mutton and rabbits, and their cost was £103,382. The total storage capacity is 252,687 cubic feet. Provision is made to supply power for an ice-making plant, also for an addition of cooling space as may become necessary.

Outside the city area the local governing bodies have made little use of their powers in relation to the establishment of markets.

CONSUMPTION OF FOOD.

It is difficult to determine accurately the quantity of commodities consumed within the State since 13th September, 1910, when the system of keeping records of interstate trade ceased. In view, however, of the special interest attached to the question of food consumption, particularly in relation to the cost of living, data has been obtained from other sources for the following estimates of the consumption of the more important articles of diet.

In order to show the changes of regimen, the information is shown as at intervals since 1911. In regard to 1911 it has been assumed that the consumption of all the commodities except meat was the same as the average of the three years, 1907-1909. The quotations for 1921, 1930, and 1931 relate to the twelve months ended 30th June :—

Commodity.	Unit.	Consumption per head per annum.				Commodity.	Unit.	Consumption per head per annum.			
		1911.	1921.	1930.	1931.			1911.	1921.	1930.	1931.
Meat—						Flour	lb.	228·4	211·2	205·0	186·4
Beef	lb.	150·9	94·0	99·6	90·2	Bread	2-lb. loaf.	102·0	99·0	100·0	100·0
Mutton	lb.	101·3	66·1	78·3	83·0	Rice	lb.	6·6	4·4	4·6	4·8
Pork	lb.	5·0	2·3	4·8	3·7	Sago, Tapioca ..	lb.	2·0	1·8	1·4	1·4
Bacon, Ham ..	lb.	10·7	8·1	12·3	11·6	Oatmeal	lb.	7·6	4·9	5·0	4·9
Total Meat..	lb.	267·9	170·8	194·8	158·5	Sugar	lb.	103·3	102·2	108·1	105·1
Fish—						Jam	lb.	15·7	11·4	11·4	10·3
Fresh, Smoked	lb.	6·4	10·9	11·7	8·6	Butter	lb.	26·1	27·8	34·5	33·5
Preserved ..	lb.	4·3	2·8	4·7	4·0	Cheese	lb.	3·5	3·4	4·0	3·8
Total Fish..	lb.	10·7	13·7	16·4	12·6	Milk—					
Potatoes	lb.	181·0	104·9	104·0	106·4	Fresh	gal.	17·4	19·6	20·5	20·0
						Preserved ..	lb.	4·4	5·9	6·8	6·2
						Tea	lb.	7·3	8·1	7·4	7·4
						Coffee and Chicory	oz.	11·0	10·9	11·2	9·8

The consumption of fresh fish, as estimated above, is exclusive of the catches of private fishermen, and of a proportion of the fish caught by licensed fishermen and sold to consumers in the immediate vicinity of the fishing grounds. In estimating the consumption of potatoes, the quantities produced on holdings which are less than one acre in extent, and in market gardens, have not been taken into account, as particulars relating to such quantities are not recorded. The potatoes and rice used for seed

are not included. The figures relating to the consumption of sugar include the sugar contents of golden syrup and treacle. The consumption of fresh milk is exclusive of the quantities recorded as being consumed in the form of sweet cream or used in the manufacture of ice-cream.

In regard to the principal food commodities the average consumption of meat, flour, and potatoes appears to have been much greater in 1911 than in 1931, and the consumption of sugar, butter, milk, and fish greater now than in 1911.

Meat.

The quantity of meat consumed is large, though it has declined. There is little doubt that its cheapness in the earlier years caused a wasteful consumption and that a shrinkage in supplies due to the depletion of herds and flocks during the drought of 1914-15 and a phenomenal rise in prices led to economy in its use and a consequent diminution in the average consumption per head. Approximately one-third of the meat sold for consumption is bone and waste. Therefore, the actual decline in consumption has been less than is indicated by the figures in the following statement, which show the average annual consumption per head of the various kinds of meat at intervals since 1901:—

Year.	Beef and Veal.	Mutton and Lamb.	Pork.	Bacon and Ham.	Total.
	lb.	lb.	lb.	lb.	lb.
1901	134.4	90.7	4.6	9.0	238.7
1906	140.5	89.8	4.2	9.2	243.7
1911	150.9	101.3	5.0	10.7	267.9
1915-16	97.5	72.2	2.0	7.9	179.6
1920-21	94.0	66.1	2.3	8.4	170.8
1925-26	125.4	64.1	3.8	12.9	206.2
1926-27	123.1	71.6	5.4	12.6	212.7
1927-28	111.4	77.5	3.8	13.0	205.7
1928-29	116.9	74.1	5.2	11.8	208.0
1929-30	99.3	78.3	4.6	12.3	194.8
1930-31	90.2	83.0	3.7	11.6	188.5

Between 1911 and 1920-21 the consumption per head decreased by 97 lb., or 36 per cent., then an increase of 42½ lb. occurred in 1921-22. During the six years ended June, 1930, the average annual consumption was about 198 lb. per head, and in 1930-31 it was 4 per cent. below that average.

The movement in the average retail prices of meat (including bacon and ham), and in the consumption per head of population is illustrated in the following table of index numbers, the average for the year 1901 being taken as 100 in each case.

Year.	Average Retail Price of meat.	Average Annual Consumption of meat.	Year.	Average Retail Price of meat.	Average Annual Consumption of meat.
1901	100	100	1926-27	204	89
1906	101	102	1927-28	228	86
1911	101	112	1928-29	229	87
1915-16	223	75	1929-30	234	82
1920-21	248	72	1930-31	206	79
1925-26	215	86			

It is noticeable in regard to the consumption of meat in New South Wales that there is a preference for beef, though it is usually dearer than mutton.

The following statement shows the average retail prices in Sydney of each kind of meat. The averages are based on the same data as to prices and weights as those used for the compilation of the index numbers of retail prices of food which are shown elsewhere in this chapter:—

Year.	Average Retail Prices per lb.			
	Beef.	Mutton.	Pork.	Bacon.
	d.	d.	d.	d.
1911	4·1	3·2	8·1	9·6
1915-16	10·1	7·3	12·1	15·2
1920-21	9·9	8·3	18·3	22·6
1925-26	7·8	8·3	14·0	18·0
1926-27	7·7	7·4	13·9	17·7
1927-28	9·2	8·1	14·7	17·6
1928-29	9·1	8·2	14·7	17·7
1929-30	9·9	8·0	14·8	17·3
1930-31	9·2	6·8	12·4	14·3
1931-32	7·8	5·6	10·8	12·9

In 1920-21 when the average price of beef was 9·9d. per lb., and of mutton 8·3d., the average consumption of beef was 94 lb. per head, and of mutton 66 lb. During later years beef was cheaper or only slightly dearer than mutton, and the average consumption was about twice the consumption of mutton. Following an increase of 1½d. per lb. in the price of beef in 1927-28, the consumption declined and that of mutton increased.

Average prices in the twelve months ended June, 1929, were practically the same as in the preceding year, then beef became dearer and mutton cheaper. In 1930-31 a decline of 35 per cent. in the average price of mutton brought it below the level of any year since 1922-23 and the consumption increased. Beef also was cheaper, but the reduction was not so marked and there was a decline of 9 per cent. in consumption. The downward trend in prices of meat continued during the latter half of the year 1931, when the average price of beef was 7·9d. per lb. and mutton 5·7d per lb.

The slaughter of stock and the sale of meat in the county of Cumberland, which contains the metropolitan area, are under the control of the Metropolitan Meat Industry Board, which consists of three members appointed by the Governor.

In the Newcastle district, i.e., within a radius of 14 miles from the Newcastle Post Office, slaughtering and inspection are controlled by the Newcastle District Abattoir Board. Outside the county of Cumberland and the Newcastle district, slaughtering is done at private abattoirs, which are subject to inspection by officers appointed by the local authorities and by the Board of Health.

The abattoirs controlled by the Metropolitan Meat Industry Board are situated at Homebush Bay in proximity to the stock saleyards. The carcase butchers purchase stock on the hoof, supply the labour for slaughtering and pay abattoir fees at fixed charges per head of stock treated. Meat for the metropolitan market is killed during the day and placed in a chill room until it is despatched to the city for distribution to the retail butchers. There is a distributing depot within the city area on the Darling Harbour railway line, and it has a capacity to accommodate 6,000 carcases of mutton and 600 carcases of beef.

The cost of slaughtering cattle, sheep and lambs at the abattoirs at Homebush Bay and of delivering the meat to retail shops as estimated by the Metropolitan Meat Industry Board is shown below; no amounts are included in respect of offal:—

	Cattle. per carcass.		Sheep and Lambs. per carcass.	
	s.	d.	s.	d.
Abattoir Costs:—				
Labour	6	0	0	9
Abattoir fee	6	0	0	4½
Delivery to Retail Shop	5	0	0	5
Total (if delivered direct to shop)...	17	0	1	6½
Additional Charges (if delivered through depot):—				
Freight	2	0	0	1½
Handling, etc.	3	0	0	1½
Depot fee	0	4	0	1
Total (if delivered through depot) ...	22	4	1	10

An estimate of the number of livestock (cattle, sheep, and pigs) used for food in New South Wales in various years since 1901 is shown in the following statement:—

Year.	Bullocks and Cows.	Calves.	Sheep and Lambs.	Pigs.
1901	297,200	18,500	2,717,400	264,900
1911	412,300	54,500	4,068,300	335,400
1915-16	331,200	30,300	3,358,500	234,600
1920-21	404,400	78,300	3,483,500	247,600
1925-26	575,000	168,800	3,320,600	485,800
1926-27	606,800	143,900	4,068,700	518,700
1927-28	531,400	140,800	4,275,300	469,100
1928-29	563,600	157,100	4,162,500	493,400
1929-30	476,100	154,500	5,025,000	505,500
1930-31	409,100	147,800	4,790,300	485,700

The figures differ from those published elsewhere in this volume showing the animals killed in slaughtering establishments, as the latter include animals slaughtered for export and those treated in boiling-down works. Moreover, the number of pigs shown in the table is larger than the number slaughtered in New South Wales in some years, when the production of bacon was not sufficient for local requirements.

Further particulars relating to meat are published in the chapter of this volume entitled "Pastoral Industry."

Fish.

The quantity of fish consumed in New South Wales in 1930 represented only 16.4 lb. per head, viz., fresh and smoked 11.7 lb. and preserved 4.7 lb. In 1931 the consumption of fresh fish was 8.6 lb. per head and of preserved fish about 4 lb.

The seaboard waters contain large supplies of edible fish, but owing to the climatic conditions it is difficult to distribute fresh fish to householders, and it is not probable that fish will become a popular food throughout the State until this difficulty has been overcome. Under existing conditions the bulk of the fresh fish is consumed in the metropolitan district, where facilities for marketing are available. The greater part of the supply has been obtained in the river estuaries and coastal lakes and inlets, and the balance by deep-sea trawling. The quantity of trawled fish was 14,220,000 lb. in 1930 and 11,423,000 lb. in 1931. Preserved fish has been supplied wholly by importation. Recently an establishment was opened in Sydney for the purpose of packing fish for the local market.

The Sydney Corporation (Fish Markets) Act, passed in November, 1922, prescribed that in a defined area, which embraces the metropolitan and extra-metropolitan districts, fish may not be sold by auction except in public markets under the control of the council of a municipality or shire, and no person, except the original owner, may sell fish by wholesale unless it has been sold previously in a municipal market. The effect of the Act was to centralise the marketing of fish in Sydney in the Municipal Market, where the sales are conducted by licensed agents.

Regulations under the Fisheries Act require that all fish sold in the fish market or by wholesale dealers must be sold by weight.

Bread, Flour, and Cereal Foods.

Such food commodities as bread and potatoes were of greater importance in the usual family dietary in early years than at the present time, when a variety of vegetables and other foods are obtainable readily.

The average consumption of bread is estimated at about 100 loaves (2 lb.) per head. In March, 1926, baking between the hours of 6 p.m. and 5.30 a.m. was prohibited, also baking on holidays, and, in the counties of Cumberland and Northumberland, on Sundays. The prohibition does not apply, however, when the day upon which the bread is to be delivered is a "double" or a "treble" delivery, *i.e.*, a day preceding one or two holidays.

Before the prohibition of night-baking practically all the bread was delivered at the consumers' houses, but the practice became less common when a large portion of the bread could not be delivered on the day of baking, and customers began to buy at the shops in order to obtain fresher and cheaper supplies.

The majority of the bakers are members of the Master Bakers' Association and the prices of bread in Sydney have been fixed periodically by this organisation with relation to the price of flour, which is fixed by an association of millers. The variations in the price of bread in Sydney as declared by the Master Bakers' Association since December, 1920, are shown below in conjunction with the price of flour at the time when the price of bread was altered. The prices in 1901 and 1911 are given also for the purpose of comparison. The prices stated are for delivery and weekly payments. In recent years the price has been $\frac{1}{4}$ d. per loaf less for cash over the counter. As a general rule the prices declared by the Association may be regarded as fairly representative of the actual prices as the declarations were observed by members and by bakers who were not associated. In the latter months of the year 1930, however, bread was sold in many suburban shops at much cheaper prices—in some cases as low as 3d. per 2 lb. loaf. The price of flour at that time was £8 per ton.

Date.	Price of 2-lb. Loaf.	Cost of Flour per ton.	Date.	Price of 2-lb. Loaf.	Cost of Flour per ton.
	d.	£ s. d.		d.	£ s. d.
1901... ..	2 $\frac{1}{2}$	6 15 0	1927—January ...	6	12 10 0
1911... ..	3 $\frac{1}{4}$	8 15 0	September ...	6 $\frac{1}{4}$	13 15 0
1920—December ...	6 $\frac{1}{2}$	19 12 6	1928—February ...	6	12 10 0
1921—September ...	6 $\frac{3}{4}$	20 17 6	1929—February ...	5 $\frac{3}{4}$	11 0 0
December ...	5	11 15 0	1930—July ...	5 $\frac{1}{2}$	10 5 0
1924—July ...	5 $\frac{1}{4}$	13 0 0	September ...	5 $\frac{1}{4}$	9 10 0
October ...	5 $\frac{1}{2}$	15 5 0	October ...	5	9 0 0
1925—January ...	5 $\frac{3}{4}$	15 15 0	1931—April ...	5 $\frac{1}{2}$	10 0 0
1926—May ...	6	15 0 0			
July ...	6 $\frac{1}{2}$	15 15 0			
December ...	6 $\frac{1}{4}$	13 10 0			

The consumption of flour is estimated at slightly less than 200 lb. per head, including 187,500 tons, or 150 lb. per head, used for bread. In factories

where biscuits are made for local consumption and for export, 12,875 tons of flour, or 10.3 lb. per head, were used during 1929-30 and 10,195 tons in 1930-31, but the quantity used by pastrycooks is not available. Exclusive of the quantity used for bread and biscuits, it is estimated that the average household consumption of flour by a family of five persons is about 4 lb. per week, or 42 lb. per head per annum.

The consumption of oatmeal declined between 1911 and 1921, probably on account of an increased consumption of other breakfast foods. In recent years the average has been about 5 lb. per head. The consumption of sago and tapioca is small, and the average fairly constant.

The average consumption of rice is about 5 lb. per head. Until 1925 the supply of rice was imported mainly from China and India, and dressed locally by a mechanical process. During recent years it has been grown on the Murrumbidgee Irrigation Area.

Butter, Cheese, and Milk.

Butter is an article of diet in general consumption throughout New South Wales, the local product being choice in quality and more than sufficient in quantity to supply the demand.

Regulations under the Pure Food Act prescribe that butter must contain not less than 80 per cent. of milk fat, not more than 16 per cent. of water, nor more than 4 per cent. of salt. It must not be mixed with any foreign fat or oil nor contain any foreign substance except salt.

The consumption of cheese is small, the average being less than 4 lb. per head per annum.

Milk is regarded as one of the most valuable articles of diet, and it is desirable that the supply should be of good quality, plentiful, and available at a low price to enable families to consume it in sufficient quantities. The quantity of fresh milk consumed is about 20 gallons per head per annum, or less than half-a-pint per day. During 1930-31 there appears to have been a decrease in the consumption of fresh milk in the metropolitan district and an increase in the country.

The conditions under which milk and other dairy products are produced and distributed for human consumption are subject to regulation under the Dairies Supervision Act of 1901—a consolidating measure which replaced a statute passed in 1886—and under the Pure Food Act of 1908, the Dairy Industry Act of 1915, and the Milk Act, 1931, which replaced the Metropolitan Milk Act, 1929.

There has been a marked improvement in the condition of dairies since they were brought under supervision and this has been an important factor in effecting a reduction in the death-rates from preventable diseases. All dairymen and milk vendors must be registered, and dairy premises are open to inspection at all times. The duties of registration and of inspection are vested in the local authorities, and in respect of the metropolitan milk supply, the Milk Board. The dairies are supervised by a staff of inspectors.

The standard for milk is fixed by regulation under the Pure Food Act, which prescribes that it must be clean and fresh, and taken from a healthy cow, properly fed and kept. It must contain not less than 8.5 per cent. of milk solids not fat, and 3.2 per cent. of milk fat. During the year 1930, inspectors collected 17,268 samples of milk, and 2.7 per cent. were found to be below standard. Prosecutions were instituted in 266 cases, and penalties in fines and costs amounting to £1,065 were imposed.

The Dairy Industry Act is applied generally to the manufacture of butter, etc., in factories, and its provisions are stated in the chapter relating to the dairying industry.

Metropolitan Milk Supply.

About a quarter of the milk supply of Sydney is derived from dairies within the metropolitan area and the balance from country districts, viz., the South Coast district between Wollongong and Nowra, the districts traversed by the Main Southern Railway between Liverpool and Moss Vale, the Penrith, Windsor, and Richmond Districts, the districts around Singleton and Branxton on the Northern Railway line, and those in the neighbourhood of Dungog and Taree on the North Coast line.

The milk from the metropolitan dairies is distributed directly to the consumers within a few hours of milking, but the supply from this source has decreased considerably, as the pressure of population and the demand for residential sites has caused the land used formerly for dairying to be diverted to other uses.

The milk from the country is handled for the most part by distributing companies. They take delivery from the producers on the farms in the districts near the metropolis if it is to be transported by motor vehicle or at country railway stations if it is to be carried by rail. The time occupied by the journey from the most distant stations is about ten hours, the average time between milking and arrival by rail in Sydney being between sixteen and twenty-four hours. About 21,000,000 gallons of country milk were distributed in the metropolitan district in 1929-1930, and 19,500,000 gallons in 1930-31.

The Metropolitan Milk Act was passed in 1929 for the regulation and control of the supply and distribution of milk within the metropolitan area. It was administered by a board of nine members, of whom five, including the chairman, were appointed by the Governor and four were elected by the producers. Two of the members appointed by the Governor acted in an advisory capacity, and were not entitled to vote on matters coming before the Board or any committee thereof.

The Board was charged with the duty of devising improved methods of distribution, establishing grades of milk, and fixing minimum prices to be paid to producers by milk vendors and the prices to be charged by vendors. In order to obtain moneys to defray the cost of administering the Act, a levy upon dairymen was imposed from 1st September, 1930, at the rate of $\frac{1}{4}$ d. per gallon of milk supplied for consumption or use in the metropolitan area. The levy ceased on 31st January, 1931, receipts by way of fees for registration, etc., being adequate to cover expenses.

The Metropolitan Milk Board was appointed in January, 1930, and remained in office for about two years. Its powers under the Act proved to be ineffective, especially in relation to the control of prices, and in December, 1931, the Act was repealed by the Milk Act, 1931, by which the board was dissolved and a board of three members was appointed to control the supply and distribution of milk in producing and distributing districts established under the new Act.

The metropolitan producing and distributing districts are defined by schedule, and other districts may be proclaimed subject to approval by Parliament. The metropolitan distributing district embraces the City of Sydney, and fifty-three other municipalities, the Shires of Sutherland and Warringah, parts of Baulkham Hills and Hornsby Shires, and the Port of Sydney.

The functions and powers of the Milk Board include the fixation of prices, regulation of methods and conditions of supply and treatment of milk in producing districts, and of distribution in distributing districts. By proclamation, milk supplied for consumption or use in a distributing district or part thereof (except milk produced and retailed directly by a dairyman

on his own behalf) may be vested in the Board for distribution, there-upon its supply, except to the Board, will be prohibited, and the Board may determine the quantity of milk to be supplied to the district by the various producing areas and may sell the milk to milk vendors or other persons. The Board is authorised to raise loans, with the Governor's approval, up to a limit of £500,000, and to acquire the business of persons engaged in the milk trade, paying the current market value for land and replacement value, plus 10 per cent. for plant, etc.

The wholesale price paid by the metropolitan distributing companies to the producers was 1s. 4½d. per gallon of milk throughout the year 1928, and it was reduced to 1s. 4d. in January, 1929, to 1s. 3d. in May and to 1s. 1d. in August.

In August, 1930, the Metropolitan Milk Board established four grades of milk—raw, pasteurised, special raw, and special pasteurised—and the prices were declared for the various grades. The minimum price to be paid to dairymen by vendors was fixed at 12½d. per gallon at dairy premises or 13d. at rail or country milk store or factory. For pasteurised milk or for raw milk produced outside the metropolitan area the prices to be charged by vendors were declared as follows:—At wholesale depots 1s. 7½d. per gallon; delivered elsewhere—10 gallons or less, 2s. per gallon, over 10 gallons 1s. 10d. per gallon; retail 2s. 10d. per gallon or 8½d. per quart. For raw milk produced in the metropolitan dairies the retail price was fixed at 3s. 2d. per gallon or 9½d. per quart; and for special raw or pasteurised milk 4s. per gallon or 1s. per quart.

In January, 1931, the Board announced a decision to reduce prices as follows:—Rates to be paid to dairymen 10d. per gallon at dairy premises and 10½d. at rail; retail prices 2s. 4d. per gallon or 7d. per quart for raw or pasteurised milk from dairies outside the metropolitan area; 2s. 8d. per gallon or 8d. per quart for raw milk from metropolitan dairies; and 3s. 4d. per gallon or 10d. per quart for special milk. These prices were not gazetted and in actual trading milk was sold at lower rates, intense competition having developed owing to an abundance of supplies and a shrinkage in demand which was a result of adverse economic conditions.

In March, 1932, the Milk Board fixed the minimum prices to be paid to dairymen for milk delivered at certain country factories at rates ranging from 10d. to 11½d. per gallon, the price being lowest where the cost of freight to Sydney, etc., is the highest. The minimum price for milk delivered at two factories in Sydney is 12½d. per gallon, and for milk delivered elsewhere 12¾d. per gallon. These prices were fixed so that the cost, including treatment, handling at country factory and freight would be about 13d. per gallon on rail Sydney. The maximum wholesale price to vendors was fixed at 1s. 5d. per gallon, and the maximum retail prices at 2s. 8d. per gallon or 8d. per quart for milk produced in metropolitan dairies and retailed by the producer, and 2s. 4d. per gallon or 7d. per quart for other milk.

The Board assumed control of the milk supplied for consumption in the metropolitan distributing district (except milk produced and retailed by suburban dairymen) and became responsible for payments to the producers. Existing distributing companies organised for handling milk on a large scale act as agents for the Board in the matter of distribution.

The following statement shows the wholesale price paid in various years since 1901 by the metropolitan distributing companies to the farmer for

milk delivered on trucks at country railway stations or factories, and the retail price charged in Sydney to the householder for country milk, and for fresh milk from the metropolitan dairies:—

Year.	Wholesale price to producers.	Retail.		Year.	Wholesale price to producers.	Retail.	
		Country.	Fresh.			Country.	Fresh.
	per gal.	per qt.	per qt.		per gal.	per qt.	per qt.
	d. d.	d.	d.		d. d.	d.	d.
1901	6 to 7	4	4-5	1927	14 to 16½	8½-9	9-9½
1911	6 „ 9	4-5	5	1928	16½d.	9	9-9½
1916	8 „ 12	5-5½	6	1929	13 to 16	8½-9	8½-9½
1921	13 „ 17	7½-8½	8½-10	1930	12½ „ 13	7½-8½†	8½-9†
1926	12 „ 16	7½-9	8½-9½	1931	9½d.*	7-8½†	8-8½†

* Annual average, 1930-31.

† Prices charged by regular vendors.

The average retail price for country milk supplied by regular morning and evening delivery to householders in Sydney and suburbs was between 7½d. and 8½d. per quart in 1930 and 1931. During these years it was sold at much lower prices for cash at the carts of vendors distributing throughout the day in some suburban areas.

Sugar and Jam.

The quantity of sugar consumed was about 108 lb. per head in 1929-30, and 105 lb. in 1930-31. These estimates include the quantities used in the manufacture of products such as jam and biscuits, of which a proportion is exported. The records of the manufacturing industry in 1929-30 show that 5,627 tons of sugar (5 lb. per head) were used for jam and canned fruit; 3,140 tons (2.8 lb. per head) for biscuits; 4,766 tons (4.3 lb. per head) in breweries; 3,602 tons (3.2 lb. per head) in aerated water factories; 9,290 tons (8.3 lb. per head) in making confectionery; 3,083 tons (2.8 lb. per head) by pastrycooks, and 5,993 tons (5.5 lb. per head), in making condiments, pickles and sauces, and condensed milk.

The average household consumption of sugar is estimated at 6 lb. per week for a family of five persons, or 62 lb. per head per annum.

In normal seasons sugar is produced in New South Wales and Queensland in sufficient quantity to supply local requirements. The retail price of sugar in the metropolitan shops is from 4½d. to 4¾d. per lb.

Jams and preserved fruit are manufactured in Australia in larger quantities than the local demand can absorb. During the war there was a great expansion in production for export, but increases in prices led to a shrinkage in the local consumption of the factory-made article, though it encouraged home production, of which records are not available.

Tea and Coffee.

Tea enters largely into consumption among all classes, the average annual consumption being 7½ lb. per head. Of coffee, on the other hand, the average is less than ¼ lb. per head.

The tea consumed in New South Wales is imported mainly from Netherlands East Indies and Ceylon. During the three years ended June, 1931, the Netherlands East Indies supplied about 49 per cent. of the total importations; 41 per cent. was imported from Ceylon, 7 per cent. from India and nearly 3 per cent. from China. The figures for the three pre-war years, 1911-13, were:—Netherlands East Indies, 13 per cent.; Ceylon, 58 per cent.; India, 20 per cent., and China, 9 per cent.

The great bulk of the coffee is imported from the Netherlands East Indies and India.

Vegetables and Fruit.

The potato is the chief article of diet in the vegetable group, but it is subject to great fluctuations in supplies and in prices, and the consumption varies accordingly. Local production is inadequate, and large quantities are imported from Victoria and Tasmania. Imported potatoes are sold by private treaty on the wharf shortly after arrival, the wholesale prices being fixed by arrangement between the sellers. Locally-grown potatoes are sold by auction in the railway yards. In 1911 the average retail price of potatoes in Sydney was 12½d. per 14 lb., and the consumption per head was 181 lb. Potatoes were very dear in 1929, but the price fell rapidly at the close of the year and again in the latter part of 1930. The average price in the twelve months ended June, 1930, was 2s. 9d. per 14 lb., and it is estimated that the average consumption was only 104 lb. In the year 1930-31, the price was 1s. 7d. per 14 lb., and the consumption increased to 106½ lb.

Onions are imported in large quantities from Victoria. Other vegetables are obtained chiefly from local sources, the Sydney supplies being marketed at the City Council's market, where the growers sell their produce by private treaty.

The fruit supply is derived mainly from the local orchards, and from Victoria, Tasmania, and Queensland. From November or December to February or March the supply is for the most part grown locally. From March to October the market for all fruits, except citrus, is supplied chiefly from the other States, and from May to December local supplies of citrus fruits are available. Prior to the war bananas were imported in large quantities from Fiji, but Queensland is now the chief source of supply, and small but increasing quantities are grown locally in the Tweed River district. The industry in Australia is protected by a duty of 1d. per lb. on imports.

In Sydney there are two fruit markets, viz., the Fruit Exchange, conducted by a private company, and the City Market, controlled by the City Council. Market sales are conducted generally by private treaty. The majority of the country and interstate distributors operate in the Fruit Exchange, which is exclusively a wholesale market. In the City Market, which has direct connection with the main railway system, a considerable amount of retail as well as wholesale trade is transacted, part of the space being reserved for the use of growers, and the remainder let to agents. The provisions of the Farm Produce Agents Act must be observed by agents who transact business in these markets.

WHOLESALE PRICES.

Information relating to wholesale prices in Sydney is published in detail in the "New South Wales Statistical Register." The average prices in each year from 1901 to 1920 are published in the issue for 1919-20, and the monthly averages in later years are shown in subsequent issues.

Index numbers of the wholesale prices in Sydney have been compiled from the prices of 100 commodities, which include the majority of items of importance in the economic life of the State. The commodities have been arranged in eight groups, and each commodity has been weighted according to the average annual consumption in New South Wales during the three years 1911-1913. The index numbers indicate approximately the general trend of the movement in wholesale prices, but it is not claimed that they give an exact measure of the variations which have occurred. Those for recent years especially should be used with caution in view of the fact that the list of commodities and the weights applied to the various items are based on the customs and usages of a period which ended more

than seventeen years ago. In view of the far-reaching changes which have taken place during the intervening years steps are being taken for the revision of the index numbers.

Details relating to the composition of the index numbers of wholesale prices are stated in the 1919 and 1920 issues of the Year Book, *e.g.*, the grade of the articles or commodities included, the source of information as to prices, and the weights applied. It is to be noted however, that an important amendment was introduced in January, 1930, when local prices of wool and cotton were substituted for the English prices used up to that month.

The index numbers of each group and of all groups combined in various years since 1901 are as follows. The numbers for each year from 1901 to 1921 are published in the 1921 issue of the Year Book. The prices in the year 1911 have been used as a base, and called 1,000. The indexes are not comparable between groups, except to illustrate the relative change in one group with the corresponding ratio in another.

Year.	I. Agricultural Produce.	II. Groceries	III. Wool, Cotton, Leather, Jute.	IV. Metals and Coal.	V. Building Materials	VI. Meat.	VII. Dairy Produce.	VIII. Chemicals.	All Commodities. *
1901	834	949	737	1001	745	1222	963	977	904
1906	929	960	937	996	806	1163	953	951	955
1911	1000	1000	1000	1000	1000	1000	1000	1000	1000
1913	1069	1033	1043	1039	1107	1379	1093	1003	1092
1916	1163	1245	1367	1725	1241	2896	1380	1617	1489
1920	2430	1914	3079	2602	2415	3113	2236	2301	2508
1921	1750	1941	1471	2511	2259	1921	2020	1863	1956
1926	1892	1683	1652	2161	1893	1802	1760	1447	1834
1927	1767	1682	1633	2197	1957	1971	1831	1483	1840
1928	1456	1674	1798	2176	1937	1985	1763	1492	1785
1929	1707	1661	1656	2164	1958	2391	1842	1457	1863
1930	1428	1664	1384†	2046	1941	2230	1571	1472	1705†
1931	1061	1758	1326	2038	1959	1538	1386	1633	1551

* Weighted average.

† Revised since previous issue of Year Book.

During the three years 1925 to 1927 there was little change in the index numbers of all commodities, though some groups showed material alteration. In 1928 there was a decline of 3 per cent., followed by an increase of 4.4 per cent. in 1929. This increase was due to dearer prices of meat which rose by 20 per cent., agricultural produce 17 per cent., and dairy produce 4½ per cent.. The group consisting of wool, cotton, leather, etc., declined by 8 per cent.

In 1930 there was a decline of 8 per cent. in the general level of wholesale prices, as compared with that of the previous year. The groups in which the decline was greatest were wool, cotton, etc., and agricultural produce 16 per cent., and dairy produce 15 per cent.

In 1931 meat declined by 31 per cent., agricultural produce by 26 per cent., dairy produce by 12 per cent., wool, etc., by 4 per cent., and there were increases in groceries—6 per cent.—and in chemicals and building materials. The average decline over all commodities was 9 per cent.

The movement month by month since January, 1930, may be gauged from the following table, the base being the year 1911 as in the preceding table:—

Month.	I. Agricultural Produce.	II. Groceries	III. Wool, Cotton, Leather, Jute. *	IV. Metals and Coal.	V. Building Materials	VI. Meat.	VII. Dairy Produce.	VIII. Chemicals.	All Commodities.*
1930.									
January ...	1694	1670	1437	2159	1976	2690	1652	1464	1844
February ...	1570	1653	1392	2156	1976	2433	1705	1464	1787
March ...	1515	1653	1367	2156	1975	2338	1705	1464	1762
April ...	1574	1649	1398	2152	1957	2109	1675	1464	1751
May ...	1583	1643	1433	2153	1952	2085	1754	1476	1761
June ...	1550	1635	1412	2020	1916	2244	1749	1476	1742
July ...	1488	1650	1400	1941	1916	2575	1636	1464	1739
August ...	1482	1669	1413	1941	1926	2537	1556	1514	1734
September ...	1267	1668	1395	1965	1930	2206	1450	1514	1646
October ...	1245	1665	1312	1965	1921	1826	1363	1452	1582
November ...	1144	1690	1334	1966	1924	1939	1303	1452	1573
December ...	1025	1726	1318	1980	1923	1777	1302	1455	1538
1931.									
January ...	1096	1728	1219	1980	1920	1687	1357	1486	1535
February ...	1037	1742	1320	1950	1931	1516	1473	1599	1536
March ...	997	1746	1402	2004	1933	1753	1465	1615	1566
April ...	1050	1751	1423	2009	1934	1699	1457	1580	1576
May ...	1054	1749	1392	2009	1934	1607	1446	1603	1563
June ...	1060	1749	1354	2008	1936	1531	1457	1603	1552
July ..	1025	1767	1326	2059	2010	1535	1330	1664	1553
August ...	1011	1775	1279	2107	2018	1410	1315	1682	1537
September ...	1046	1772	1278	2076	2013	1481	1308	1-83	1542
October ...	1082	1775	1305	2076	1960	1312	1333	1683	1534
November ...	1133	1773	1341	2076	1961	1433	1324	1683	1561
December ...	1145	1773	1279	2076	1961	1495	1284	1717	1557
1932.									
January ...	1134	1785	1283	2076†	1915	1465	1241	1717	1545
February ...	1176	1782	1271	2069†	1916	1398	1272	1643	1546
March ...	1100	1779	1237	2069†	1916	1414	1325	1643	1531
April ...	1113	1783	1200	2032†	1917	1543	1404	1643	1544
May† ...	1100	1758	1186	2025†	1941	1367	1374	1643	1517

* Index numbers for 1930 were revised since last issue of Year Book. † Subject to revision.

There was a fairly steady fall in the index numbers from October, 1929, to January, 1931. During the ensuing twelve months the general level was fairly stable and the index numbers of textiles, dairy produce and meat were much nearer to the base level than those relating to metals, building materials, groceries, etc. The index number of agricultural produce fell below that level in March, 1931.

In the following statement the movement for the price levels of Australian products is compared with the change in respect of imported goods. The list of commodities and the weights and prices are the same as those used for the index numbers shown above, therefore the index numbers of imported goods are not suitable for measuring the price levels of all imports into the State for which it would be necessary to include a wider range of commodities with a different system of weighting. It would be necessary

also to use actual import values instead of wholesale prices which cover costs of preparation for market and wholesale distribution, also customs duties and (since August, 1930) sales tax.

Year.	Wholesale Price Index Numbers.			Year.	Wholesale Price Index Numbers.		
	Australian Products.	Imported Goods.	All Commodities.		Australian Products.	Imported Goods.	All Commodities.
1911	1000	1000	1000	1926	1870	1747	1834
1920	2330	2919	2503	1927	1880	1742	1810
1921	1891	2111	1956	1928	1800	1750	1785
1922	1754	1911	1800	1929	1916	1726	1863
1923	1890	2007	1925	1930	1703*	1709*	1705*
1924	1815	2016	1874	1931	1439	1823	1551
1925	1848	1867	1854				

* Amended since last issue of Year Book.

The increase in the prices of imported goods between 1911 and 1920 was more pronounced, and the subsequent decline was greater than the movement in prices of local products. The prices of both classes of commodities reached the maximum in 1920, and between that year and 1926 the price level of imported goods fell by 40 per cent., while the index number of Australian goods declined by 20 per cent. During the years 1926 to 1929 the index of imported goods was fairly steady, then it declined by 4 per cent. A number of these commodities became dearer in 1930 as a result of higher duties, but this was offset by a fall in respect of such items as cotton and jute goods. In 1931 the index number of imported goods rose by 6½ per cent. The index number of Australian products was higher in 1929 than in any year since 1920; then there was a decline of 11 per cent. in 1930, and of 15½ per cent. in 1931.

The average wholesale prices of thirty-one commodities, which are representative of the various groups, are shown in the following statement. The quotations represent the mean of the monthly prices in Sydney except where stated.

Commodity.	1901.	1911.	1921.	1926.	1929.	1930.	1931.
Wheat, milling bush.	s. d. 2 8	s. d. 3 6	s. d. 8 7 9	s. d. 6 2	s. d. 4 10 6	s. d. 3 10 2	s. d. 2 5 4
Flour ton	126 5	169 9	336 7	297 6	230 11	201 1	191 3
Chaff, wheaten "	65 0	81 0	128 9	156 3	137 2	123 5	78 2
Hay, oaten "	76 0	94 5	151 11	166 4	150 4	141 9	119 0
Potatoes "	101 10	111 5	119 0	253 3	333 6	151 6	130 7
Sugar "	442 5	437 6	980 0	746 8	740 8	746 8	746 8
Tobacco, dark plug .. lb.	4 0	5 0	8 2	8 2	8 4	9 5	10 9
Tea "	1 1 5	1 1 5	2 1	2 2	2 2	2 2	2 4
Soap 40 lb.	14 6	18 4	28 9	27 0	24 0	23 2	22 11
Jam 20 ..	9 6	6 10	14 5	11 6	11 6	10 4	10 10
Kerosene 8½ gal.	6 3	7 3	20 7 8	12 6	13 4	12 8	13 0
Leather, sole lb.	0 9 9	1 1 7	1 11 2	1 11	1 9	1 6 4	1 6 8
Woolpacks each	1 11 6	2 4	3 8 6	5 1 4	3 10	3 9 5	4 1 2
Iron—Pig, local ton	81 7	78 4	182 6	120 10	120 0	117 9	115 0
Plate, girder "	269 2	233 4	666 8	382 6	390 0	380 0	410 3
Corrugated, gal. "	360 10	346 8	979 2	605 10	517 6	517 6	609 7
Copper, sheet lb.	1 2	0 10 5	2 1 5	1 6 6	1 9	1 9	1 9
Coal ton	11 9	13 10	30 4 9	32 2	*	30 8	27 9
Hardwood, local (3 x 2) 100 lin. ft.	6 0	8 6	18 0	14 3	16 4	17 2	16 3
Pine—Local (4 x 1) 100 sup. ft.	17 0	25 5	62 0	62 0	61 0	62 7	62 7
N.Z. (4 x 1) "	20 3	22 2	62 0	45 0	41 0	41 4	42 8
(region (2 x 2) "	12 6	15 7	47 1	20 0	29 4	30 3	36 1
Bricks 1,000	33 6	42 0	68 0	70 4	71 7	62 5	57 0
Beef—Fores lb.	0 2 4	0 1 7	0 2 2	0 2 3	0 4 3	0 4 5	0 2 4
Hinds "	0 3 4	0 2 7	0 5 6	0 5 1	0 6 9	0 7 0	0 5 9
Mutton "	0 2 2	0 2	0 4 2	0 4	0 4 4	0 3 6	0 2 7
Butter "	0 10 6	0 10 6	1 9 6	1 7 8	1 10 0	1 6 3	1 4 4
Eggs, new laid doz.	1 3 4	1 4	2 3 8	1 10 9	1 10 0	1 8 3	1 4 1
Green of tatar lb.	0 10 6	0 11 2	2 0	1 4 4	1 4	1 6 4	2 0
Cotton, raw lb	0 4 7	0 7	0 10 4	0 10	0 10 7	0 7 9	0 5 5
Wool, greasy "	0 5 6 ½	0 8 5 ½	1 0 5 ½	1 4 5	1 1 7	0 9 2	0 8 9

* Not available.

† Weighted average (season ended June).

‡ Prices in Liverpool (England).

A review of the average prices of the 100 commodities which are represented in the wholesale price index numbers shows that all the items classified as agricultural produce, meat and dairy produce were cheaper in 1931 than in the preceding year; also soap, rice, coffee, starch, mustard, macaroni, wool, cotton, leather (harness and kip), pig iron, barbed wire, coal, lead, hardwood, pine for shelving, bricks, tiles, lime, linseed oil, and superphosphates.

The average prices of sugar, cigars, currants, candles, and local pine-flooring boards were unchanged, and the following commodities were dearer:—Tobacco, cigarettes, tea, jam, kerosene, raisins, preserved fish, salt, cocoa, matches, sago, blue, sole leather, cornsacks, woolpacks, bran bags, iron (except pig iron and barbed wire), copper, tinned plates, zinc, imported pine flooring boards, weatherboard, oregon, cement, glass, whitelead, turpentine, slates, plaster of paris, and all items in the chemicals group, except superphosphates.

Comparison with Other Countries.

The following statement shows the wholesale price index numbers for various parts of the British Empire and for the United States of America, with 1918 as common base, and affords an interesting comparison of the manner in which wholesale prices have varied during recent years:—

Year.	New South Wales. (Sydney). [Bureau of Statistics.]	Victoria. (Melbourne). [Common- wealth Bureau of Census and Statistics.]	New Zealand. [Census and Statistics Office.]	Canada. [Dominion Bureau of Statistics.]	United Kingdom. [Board of Trade.]	United States of America. [Bureau of Labour.]
Number of Commodities.	100	92	180	238	160	550
1913	100	100	100	100	100	100
1920	229	228	207	243	307	221
1921	179	175	192	172	197	140
1923	168	168	153	156	148	143
1927	169	167	147	152	142	137
1928	163	165	147	151	140	140
1929	171	166	147	149	136	138
1930	157	147	143	136	120	124
1931	142	131	132	114	104	102

Prices had been increasing steadily in all countries for many years before the war, and the effect of the war on prices was less marked in the countries more remote from the centre of conflict. In every case there was a general increase in prices after the cessation of hostilities. The peak was reached during 1920, and there has since been a very marked decline.

In the United Kingdom, the index number was below pre-war level in August and September, 1931, and it rose by about 6 per cent. in October. In the United States the pre-war level was reached in September, 1931, and the decline has continued.

RETAIL PRICES.

The average retail prices in Sydney of various commodities, as shown in this chapter, are based on the prices charged in shops in the metropolitan district, and the annual averages represent the mean of the monthly prices during each year.

The following statement shows the averages for various years since 1901. The averages for each year from 1901 to 1920 are shown in the 1919-20 issue of the "Statistical Register of New South Wales."

The table is useful for comparative purposes in regard to the measurement of the general change in prices, but the figures do not disclose a most interesting feature in a history of prices, namely, the fluctuations during the year, which are considerable, especially in the case of perishable produce. For such information readers are referred to the "Statistical Registers," where the average monthly prices are shown.

Commodity.	1901.	1911.	1913.	1916.	1921.	1926.	1930.	1931.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Bread 2lb. loaf	0 2 5	0 3 5	0 3 5	0 4 0	0 6 2	0 5 9	0 5 5	0 5 4
Flour 25lb.	1 11 0	2 9 0	2 10 0	3 6 1	6 1 6	5 2 3	4 1 5	3 7 7
Tea lb.	1 3 0	1 3 5	1 3 8	1 6 1	1 10 7	2 3 2	2 1 2	2 3 7
Coffee and Chicory "	1 5 0	1 5 0	1 5 5	1 6 0	1 11 6	2 2 4	2 1 8	1 11 5
Sugar "	0 2 3	0 2 7	0 2 7	0 3 5	0 5 7	0 4 6	0 4 6	0 4 6
Rice "	0 2 5	0 2 7	0 3 0	0 3 2	0 4 9	0 3 4	0 3 6	0 3 5
Sago "	0 2 5	0 2 7	0 2 7	0 3 2	0 3 6	0 3 6	0 3 3	0 3 3
Jam (Australian) "	0 4 0	0 4 4	0 5 0	0 6 0	0 10 0	0 8 1	0 6 7	0 6 5
Oatmeal 5lb	0 11 3	1 0 5	1 2 3	1 2 6	1 3 0	1 8 6	1 7 8	1 3 6
Raisins lb.	0 6 2	0 6 2	0 6 4	0 7 7	0 11 5	0 8 7	0 8 9	0 8 3
Currants "	0 6 9	0 7 0	0 7 2	0 9 1	0 11 1	0 8 7	0 8 8	0 8 3
Starch "	0 4 0	0 5 5	0 5 4	0 6 4	0 9 7	0 9 9	0 9 4	0 9 4
Blue 12 squares	0 9 0	0 9 0	0 9 0	0 9 2	1 4 7	1 3 0	1 1 7	1 2 2
Candles lb.	0 5 5	0 6 5	0 6 5	0 8 0	1 1 0	0 11 7	0 10 5	0 10 7
Soap "	0 2 5	0 3 0	0 3 3	0 3 4	0 5 0	0 5 4	0 5 5	0 5 2
Potatoes 14lb.	0 11 3	1 0 2	1 0 8	1 6 5	1 4 5	3 1 4	1 10 1	1 6 7
Onions lb.	0 1 4	0 0 7	0 1 3	0 1 1	0 1 5	0 4 1	0 2 2	0 1 7
Kerosene gal.	0 10 1	0 11 1	1 0 2	1 6 7	2 10 9	1 11 5	1 10 5	1 9 4
Milk quart	0 4 0	0 4 4	0 5 2	0 5 8	0 8 1	0 8 6	0 8 4	0 7 1
Butter lb.	1 0 2	1 1 7	1 1 5	1 5 3	2 0 7	2 0 1	1 9 4	1 7 0
Cheese "	0 7 5	0 8 7	0 3 5	1 0 1	1 3 0	1 4 1	1 2 5	0 11 9
Eggs, Fresh doz.	1 3 0	1 3 5	1 5 1	1 6 4	2 6 5	2 2 1	1 11 7	1 7 3
Bacon, Middle Cut lb.	0 9 0	0 10 5	1 0 7	1 4 5	1 10 9	1 7 6	1 6 2	1 2 2
Shoulder "	0 6 5	0 7 0	0 8 7	1 0 4	1 4 5	1 0 4	0 11 5	0 9 6
Ham "	0 11 0	1 1 0	1 2 0	1 5 5	2 0 9	2 0 0	1 9 7	1 5 7
Beef, Sirloin "	0 4 5	0 4 5	0 5 0	0 11 1	0 9 1	0 9 3	0 11 3	0 9 3
Ribs "	0 3 8	0 3 8	0 4 5	0 9 5	0 6 7	0 6 8	0 8 6	0 7 2
Gravy "	0 3 0	0 3 0	0 3 5	0 7 6	0 4 8	0 4 1	0 6 4	0 5 8
Steak, Rump "	0 7 0	0 7 0	0 7 9	1 1 8	1 2 0	1 1 8	1 4 3	1 1 6
Shoulder "	0 3 5	0 3 5	0 3 5	0 8 5	0 6 9	0 6 1	0 8 7	0 7 7
Beef, Corned Round "	0 4 0	0 4 0	0 4 4	0 9 6	0 8 1	0 7 1	0 9 0	0 7 8
Mutton, Leg "	0 3 2	0 3 0	0 3 3	0 7 8	0 6 9	0 7 6	0 7 6	0 6 2
Shoulder "	0 2 8	0 2 5	0 3 1	0 6 7	0 5 2	0 6 0	0 5 8	0 4 7
Loin "	0 3 8	0 3 8	0 4 0	0 7 9	0 7 6	0 8 9	0 9 0	0 7 6
Neck "	0 3 2	0 3 0	0 3 5	0 7 0	0 5 4	0 6 0	0 4 3	0 3 4
Chops, Loin "	0 4 2	0 4 0	0 4 7	0 9 0	0 8 6	0 9 9	0 10 3	0 7 9
Leg "	0 3 8	0 3 8	0 4 7	0 8 6	0 8 1	0 9 2	0 9 2	0 7 4
Neck "	0 3 2	0 3 0	0 4 0	0 7 3	0 6 4	0 7 2	0 7 3	0 5 8
Pork, Leg "	0 6 2	0 7 8	0 8 5	1 0 1	1 3 4	1 1 1	1 2 1	0 11 1
Chops "	0 6 8	0 8 5	0 9 0	1 0 1	1 5 8	1 2 2	1 2 3	0 11 2

In 1931 there was a general decline in the prices of the commodities included in the foregoing list, tea, which is supplied wholly by importation, being the only important item which became dearer.

HOUSE RENTS.

Rents vary considerably according to locality. Position, class of building, proximity and means of speedy transport to the city are important factors also in respect of rents in the suburbs. The average rent of various types of houses in Sydney and suburbs in 1901 and later years is shown below. The figures have been compiled by the Commonwealth Statistician to represent the average predominant rent per week for each class of houses up to the year 1925 inclusive, and those for later periods are actual averages.

Year.	Under Four Rooms.	Four Rooms.	Five Rooms.	Six Rooms.	Seven Rooms.	Over Seven Rooms.	Weighted Average.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1901	9 0	11 1	13 7	15 4	19 1	22 2	13 5
1906	9 2	11 7	14 0	16 9	19 1	22 6	13 11
1911	11 4	14 5	17 1	20 2	23 3	26 10	17 0
1916	12 3	14 8	17 11	20 6	24 6	29 8	18 11
1921	14 2	18 5	21 7	25 2	29 7	35 9	23 0
1926	15 4	21 0	25 6	33 6	36 9	47 6	28 4
1927	15 3	20 9	25 3	32 7	37 4	49 5	28 3
1928	15 3	21 2	26 9	32 2	36 5	53 6	29 0
1929	15 10	21 4	26 11	32 8	37 0	52 10	29 3
1930	15 10	21 11	28 0	31 7	36 9	46 6	28 9
1931	15 3	19 5	23 6	27 10	33 7	43 8	25 7
1932 (Mar. qr.)	13 8	17 6	20 10	25 8	31 1	42 8	23 6

Note.—Kitchen is included as a room.

During the post-war period there was an active demand for houses, and the supply being inadequate, the average rental in Sydney increased steadily. In 1921 it was 4s. 1d. higher than in 1916, and the average for 1925 showed a further addition of 4s. per week. The rentals shown for 1926 and later periods, being actual averages, are not strictly comparable with those for earlier years, which are the average predominant rents.

The general level of rents did not vary greatly from 1926 until the latter part of the year 1930. The weighted average in the two quarters January to June of that year was about 29s. 6d. Then it commenced to fall, and in December quarter 1931 it was 23s. 8d. or 20 per cent. lower.

Fair Rents Act.

In view of a continuous rise in the rents of private dwellings which had persisted for some years prior to the war, the Fair Rents Act was passed in 1915 to provide a measure of regulation with the object of preventing undue increases in this important item of family expenditure. It is administered by Fair Rents Courts, each consisting of a stipendiary or police magistrate,

and application for the review of the rental of a dwelling may be made by the lessor or by the lessee. The Act was amended in 1920, in 1926, and in 1928. It is to cease to have effect on 1st July, 1933.

The principal Act provided for the determination of rents for dwellings leased at a rent not exceeding £3 per week. The amending Act of 1926 extended its provisions to rents of retail shops and of buildings, which were partly shops and partly dwellings, let at a rental not exceeding £6 per week. The amendment of 1928 limited future operations under the Act to dwellings erected at the date it was passed, viz., 9th November, 1928, and exempted from the jurisdiction of the Court all shops, premises of which part is used as a shop, boarding-houses, flats, and residential chambers, premises of farms, orchards, grazing areas, etc., also dwelling-houses occupied with more than half an acre of land. The Act does not apply to premises licensed for the sale of spirituous liquors nor to houses ordinarily leased for summer residence.

Until November, 1928, the powers of the Court were limited by a provision of the Act which prescribed that, excepting where circumstances were proved which rendered an increase equitable, the fair rent might not exceed the rent which was charged for the dwelling on 1st January, 1915, and in respect of dwellings leased at that date the Court allowed only such increases as were necessary to cover increases in respect of rates, repairs, etc. This provision of the Act was applied also to any building, which was partly shop and partly dwelling, let to one tenant, if it was so leased on 1st January, 1915, but other shops were exempt from its operation.

Until November, 1928, also, the fair rent was fixed on the basis of the capital value at a rate not lower, nor more than $2\frac{1}{2}$ per cent. higher, than the rates charged on overdrafts by the Commonwealth Bank of Australia, plus rates, repairs, maintenance, insurance, and depreciation. The capital value was the unimproved capital value of the land plus the estimated cost of erection as at the date of the application, less a fair sum for depreciation.

When the Act was amended in 1928 it provided that the basis of valuation be the market value of the house and land therewith as at the date of the application, and a rate at least $1\frac{1}{2}$ per cent. above the Commonwealth Bank rate for overdrafts.

It had been the practice of the Court to use a rate of $6\frac{1}{2}$ per cent. of the capital value in determining the fair rent, until the beginning of the year 1925, when the rate was increased to $7\frac{1}{2}$ per cent. From 1st July, 1925, to 9th November, 1928, the rate of 7 per cent. was used in nearly all the cases. From November, 1928, to July, 1931, the rate was 8 per cent. of the market value, and since 1st July, 1931, it has been 7 per cent.

The determinations of the Court remain in force for a period of twelve months notwithstanding change of ownership or tenancy. During the pendency of an application or while the determination is in force the lessor may not terminate the lease without reasonable cause if the lessee has performed the conditions of his lease.

Fair Rents Court.

The first sitting of the Fair Rents Court in Sydney was held on the 13th March, 1916, and the provisions of the Act were extended to country districts on 16th August, 1920. The records show interesting particulars relating to dwellings and rentals, but for several reasons the information

cannot be regarded as a satisfactory basis for conclusions as to the effect of the Fair Rents Act upon house rents. For instance, in cases where the tenant applied promptly upon receiving notice of the landlord's intention to increase the rent, the "fair rent" as determined by the Court might be recorded as an increase on the rent at date of application, whereas it was a reduction in comparison with the proposed increased rental against which the action was directed.

The applications dealt with in the Metropolitan district from the inception of the Court to 31st March, 1931, numbered 12,050, of which 4,898 were withdrawn or struck out, and in 7,152 cases the rentals were fixed. In the country districts the number of cases has been comparatively small. Only 565 were concluded between August, 1920, and 31st December, 1931. Of these 276 were withdrawn or dismissed, and in 50 cases the rent was fixed as at date of application, in 126 it was reduced, in 113 it was increased.

A brief review of the decisions of the Metropolitan Fair Rents Court in each year since its inception in March, 1916, is shown below:—

Year ended March.	Rentals fixed by Court.				Aggregate weekly rents (as at date of application)	Net Reduction:	
	As at date of applica- tion.	Increased.	Reduced.	Total.		Amount per week.	Per cent.
1917	137	7	294	438	£ 419	£ 34	8.1
1918	49	19	102	170	161	8	5.0
1919	36	132	65	233	233	+9	+3.9
1920	47	254	141	442	464	+13	+2.8
1921	52	256	187	495	572	+9	+1.6
1922	75	237	245	557	704	22	3.1
1923	64	150	233	447	560	30	5.4
1924	75	132	288	501	641	65	10.1
1925	63	185	317	565	725	60	8.2
1926	62	105	412	579	869	148	17.1
1927	56	154	1,020	1,232	1,973	379	19.2
1928	115	212	578	905	1,357	207	15.3
1929	93	229	158	480	660	16	2.4
1930	10	51	34	95	124	+3	+2.5
1931	1	...	12	13	13	1	9.5
Total ...	937	2,129	4,086	7,152	9,475	936	9.9

+ Denotes net increase.

The average of the rentals of 7,152 premises determined by the Metropolitan Court was 26s. 6d. per week, and the net result of its decisions to 31st March, 1931, was an average reduction of 2s. 7d. per house. Further details relating to rentals and the extent of reductions and increases were published in previous issues of the Year Book.

The activity of the Court diminished after its scope was restricted by the amendment of 1928. Then adverse economic conditions developed and in many cases landlords had to reduce rents below the "fair rent" defined by the Act owing to the financial incapacity of their tenants. In view of these circumstances very few applications were made to the Court during the last three years. During the year ended 31st March, 1932, there were

only nine applications to the Metropolitan Court. Six were withdrawn and the court fixed the rental of one dwelling as at date of application, viz., 35s. per week, reduced one from 20s. to 17s. 6d. and another from 26s. to 24s.

Reduction of Rents Act, 1931.

At a conference of Commonwealth and State Ministers in August, 1931, a resolution was passed that, as part of a plan for the restoration of prosperity in Australia, legislative action should be taken by all the States to enable leaseholders to obtain a certain measure of relief. As an outcome of this decision the Reduction of Rents Act was passed in New South Wales in October, 1931, to prescribe that a general reduction of 22½ per cent. be made in rents (except those payable to the Crown) unless the lessor obtains an order of a court of petty sessions permitting rent to be charged at a higher rate. If the rent of a dwelling had been reduced by the lessor or by a fair rents court after 30th June, 1930, the amount of such reduction is taken into account in calculating the reduction to be effected, but a lessor may not charge a higher rent than was charged at the commencement of the Act. The law is a temporary measure to expire on 31st December, 1932, and it does not apply to premises which were not leased on 30th June, 1930, unless a lease was entered into prior to 9th July, 1931, i.e., three months before the Act commenced.

In addition to measures for the regulation of rents, amendments have been made in the tenancy laws for the purpose of mitigating hardship in cases where tenants are unable to pay rent on account of unemployment. Thus distraint for rent, as provided by the Landlords and Tenants Act, 1899, was abolished as from 10th December, 1930, and in August, 1931, the right to eject tenants from dwellings leased at rents not exceeding £3 a week became subject to orders of a competent court. The court may postpone eviction for a period of at least three months if the occupiers are in impoverished circumstances owing to inability to obtain employment, and postponement may be made subject to a condition that the occupier pay to the owner such sum in such instalments and at such times as the court orders. An order for postponement may not be granted if it would cause the owner to suffer undue hardship, nor if the occupier or other person residing in the dwelling has been guilty of acts of waste depreciating its value.

RETAIL PRICE INDEX NUMBERS—FOOD AND RENT.

The retail price index numbers of food and groceries are based upon the retail prices of forty commodities in every-day use, which are shown in the table on page 565, the prices being weighted according to the average annual consumption in the years 1906-10. The index numbers of rent refer to the weighted average rental of all houses as shown on page 566.

These index numbers should not be used as a complete measure of variations in the cost of living. They were compiled with the primary object of showing the general movement of the retail prices of food and of rent, and do not cover other items of family expenditure. Moreover, they are only approximations indicating the general movement and not an exact scale of price-levels. As was noted in reference to wholesale prices, there is a probability that the rise or fall of the index numbers (especially those for recent years) may differ in an appreciable degree from the actual increase or decrease in the expenditure on food and groceries. This is due to the fact that the weights have been constant throughout the period covered by the index numbers and they refer to a regimen in vogue over twenty

years ago. Steps are being taken to revise the regimen. A comparison of the cost of food in 1914 and in 1930 calculated according to the average consumption in each year, is shown on page 573.

The retail price index numbers of food and rent in Sydney in each year from 1864 to 1911 were published in the 1920 issue of the Year Book. The following table shows the index numbers of food and groceries, and of rent, and of food and groceries and rent combined in various years since 1901, and in each quarter of the last two years. It should be read subject to the remarks above.

Year.	Index Numbers (1911=1000).			Amount required in each period to purchase the same quantities of Food and Housing as would have cost, on the average, 20s. in 1911.
	Food and Groceries.	Rent.	Food and Groceries and Rent Combined.	
1901	896	789	848	s. d. 17 0
1906	967	819	901	18 0
1911	1000	1000	1000	20 0
1916	1536	1111	1351	27 0
1920	2171	1297	1791	35 10
1921	1919	1351	1672	33 5
1922	1721	1409	1586	31 9
1923	1840	1483	1685	33 8
1924	1751	1546	1662	33 3
1925	1804	1586	1709	34 2
1926	1886	1664	1790	35 10
1927	1865	1659	1776	35 6
1928	1845	1703	1783	35 8
1929	1969	1715	1859	37 2
1930	1777	1687	1738	34 9
1931	1583	1501	1548	30 11
1930—March quarter...	1843	1732	1795	35 11
June „ ..	1827	1729	1781	35 8
Sept. „ ..	1766	1669	1724	34 6
Dec. „ ..	1674	1625	1653	33 1
1931—March quarter...	1625	1591	1610	32 2
June „ ..	1604	1532	1573	31 6
Sept. „ ..	1549	1493	1525	30 6
Dec. „ ..	1555	1390	1483	29 8
1932—March quarter..	1571	1380	1488	29 9

The great bulk of the food commodities is produced in the Commonwealth and prices are affected largely by seasonal conditions. The index number of Sydney prices of food was higher in 1929 than in any year since 1920. In 1930 the index number was nearly 10 per cent. lower than in the preceding year, and it declined by 11 per cent. in 1931, the average for the year being the lowest since 1918.

Rents increased slowly after 1920, and reached the highest level in March quarter, 1930. It is probable, however, that an increase of 5 per cent. recorded in 1926 was a result of a change in the method of collecting data as to rents which was made by the Commonwealth Statistician at the beginning of that year. Agents supplying quarterly returns were asked to quote the actual average rent of the houses of each class instead of the average predominant rental as in former years. The index number in 1931 showed a decline of 11 per cent.

From 1922 to 1929 the general trend of the index number of food and rent combined was upward. In 1926 the combined index number was practically the same as in 1920, 79 per cent. higher than in 1911, and 53 per cent. higher than in 1914. In 1927 and 1928 it did not vary greatly. In 1929 there was an increase of 4 per cent., and in the last quarter the index number was almost as high as in September, 1920. In 1930 and 1931 the index numbers were lower by $6\frac{1}{2}$ per cent. and 17 per cent., respectively, than in 1929, the level in 1931 being only 1.3 per cent. higher than in 1919.

Comparison with other Countries.

The following statement shows the increases since July, 1914, in the retail prices of the principal articles of food in other countries. The figures for the oversea countries have been taken from the "London Labour Gazette" and other official sources; those relating to France and to Sweden include fuel and lighting. The particulars for the Australian States relate to the capital cities:—

Country.	Percentage Increases in Retail Food Prices since July, 1914.						
	July, 1926.	July, 1927.	July, 1928.	July, 1929.	July, 1930.	July, 1931.	Dec., 1931.
New South Wales	62	53	58	66	54	34	33
Victoria	62	57	51	62	50	24	25
Queensland	71	55	57	58	43	28	30
South Australia	51	48	44	54	34	9	10
Western Australia	42	33	46	45	32	9	6
Tasmania	55	48	42	50	42	16	17
Australia	60	53	53	61	48	25	25
New Zealand	49	44	46	46	43	18	18
South Africa	16	19	16	16	9	4	0
United States	54	50	50	55	41	17	12
Canada	49	49	47	50	49	10	7
United Kingdom	61	59	65	49	41	30	32
Denmark	59	53	53	49	37	19	17
Sweden	56	51	57	51	40	30	29
Norway	98	75	73	57	51	38	36
Italy (Milan)	554	424	416	453	407	342	344
France (Paris) ... ..	...	...	...	522	503	517	464

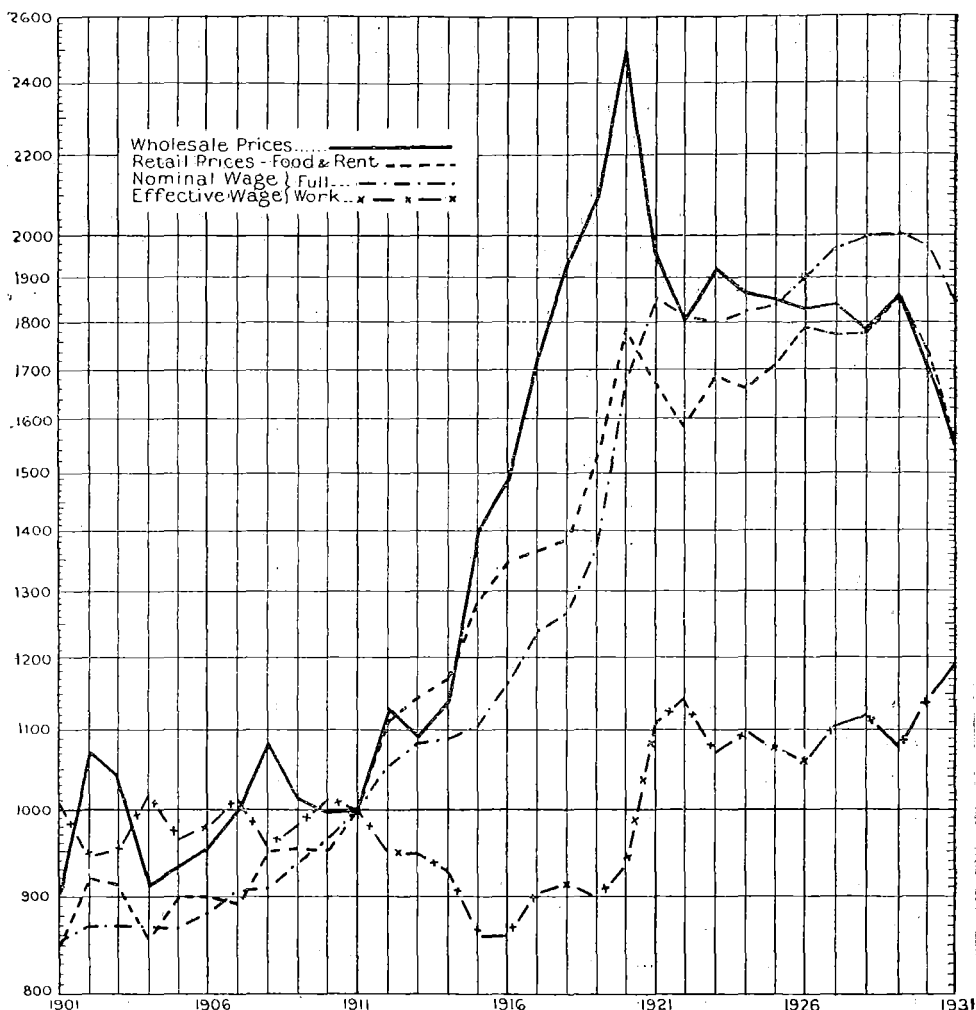
The price level of food commodities in New South Wales in recent years has been higher in comparison with July, 1914, than in the other Australian States. The index numbers shown above may not be used for exact comparisons between the various countries owing to differences in the scope of the data, and in methods of compilation.

WHOLESALE AND RETAIL PRICES—INDEX NUMBERS COMPARED.

A comparison of the index numbers of wholesale and retail prices as published in this chapter shows that after 1914 the wholesale price index numbers rose to a level far above that of the retail price index numbers

of food, groceries, and rent. Thus wholesale prices in the peak year, 1920, were 120 per cent. dearer than in 1914, food and groceries (retail) were 86 per cent. dearer, and rents were only 10 per cent. higher.

INDEX NUMBERS—PRICES AND WAGES—SYDNEY—YEAR 1911=1000
GRAPH.



The numbers at the side of the graph are the index numbers with the year 1911 as base=1,000.

The diagram is a ratio graph. The vertical scale is logarithmic, and each curve rises and falls according to the percentage of increase or decrease.

COST OF LIVING.

For the purpose of measuring the extent of variations in the cost of living it is usual to distribute the expenditure of a family into five main classes, viz., food and groceries, rent, fuel and light, clothing, and miscellaneous items, and, having ascertained the rise or fall in respect of each class, to weight the variation in each group for the purpose of calculating the increase or decrease in the general cost of living.

Cost of Food—Change in Regimen.

The index numbers on page 570 show the movement in the retail prices of food on the basis of a fixed regimen. It is recognised however that variations in the actual cost of food depend also upon changes in dietary, which is adjusted to meet changes in prices and in supplies. The combined effect upon the food bill of a family of five persons of changes in prices and in the consumption of the principal food commodities is illustrated in the following table. In calculating the cost, the average consumption per member of the family in 1930 is assumed to have been equivalent to the general average per head of population as shown on page 551, and corresponding figures have been used for the year 1914. An exception has been made in regard to flour and sugar, of which the quantities have been reduced to make allowance for the quantities included in bread, jam, etc.

Fruit and vegetables, except potatoes, have been excluded on account of the impossibility of obtaining prices which would be properly comparable, principally owing to seasonal variations and to the difficulty of estimating the consumption.

Article.	Unit of Quantity.	1914.			1930.		
		Weekly Consumption.	Average Price.	Weekly Cost.	Weekly Consumption.	Average Price.	Weekly Cost.
			d.	s. d.		d.	s. d.
Beef	lb.	12·8	5·3	5 7·8	9·6	9·8	7 10·1
Mutton	lb.	8·1	4·8	3 2·9	7·5	7·5	4 8·3
Pork	lb.	·3	10·3	3·1	·4	14·0	5·6
Bacon and Ham ...	lb.	·9	11·0	9·9	1·2	16·2	1 7·4
Fish—Fresh, etc. ...	lb.	·8	9·5	7·6	1·1	13·5	1 2·9
„ Preserved	lb.	·4	10·5	4·2	·5	18·0	9·0
Potatoes	lb.	14·4	·9	1 1·0	10·0	1·6	1 4·0
Flour	lb.	4·0	1·4	5·6	4·0	2·0	8·0
Bread	2lb. loaf	10·0	3·5	2 11·0	9·6	5·5	4 4·8
Rice	lb.	·6	3·0	1·8	·4	3·6	1·4
Sago and Tapioca ...	lb.	·2	2·7	·5	·1	3·3	·3
Oatmeal	lb.	·5	2·6	1·3	·5	4·0	2·0
Sugar	lb.	6·0	2·7	1 4·2	6·0	4·6	2 3·6
Jam	lb.	1·6	5·0	8·0	1·1	6·7	7·4
Butter	lb.	2·9	14·2	3 5·2	3·3	21·4	5 10·6
Cheese	lb.	·3	10·6	3·2	·4	14·5	5·8
Milk—Fresh	qt.	7·7	5·3	3 4·8	7·9	8·4	5 6·4
Tea	lb.	·7	15·8	11·1	·7	25·2	1 5·6
Coffee	oz.	1·3	1·1	1·4	1·1	1·6	1·8
Total ... ..		...	...	25 10·6	...	...	39 9·0

The weekly cost of the commodities enumerated was 25s. 10½d. in 1914 and 39s. 9d. or 53·5 per cent. greater in 1930. The weekly bill for meat was 9s. 11½d. in 1914 and 14s. 7½d. for smaller quantities in 1930. The average expenditure on milk and butter was 6s. 10d. and 11s. 5d. in the respective years, the increase being due to increases in quantities as well as in prices.

Taking rent into consideration—the average being 20s. in 1914 and 28s. 9d. in 1930—the total weekly expenditure was approximately 46s. as compared with 68s. 6d., and the increase per week during the period amounted to 22s. 6d., which represents 47 per cent.

In 1931 the average cost per week of the regimen shown above was about 34s. or 14·5 per cent. lower than in 1930 and 31·4 per cent. higher than in 1914.

An interesting comparison may be made between the increase in the household expenditure on food calculated on the basis of the average consumption

of the various commodities in each year, and the increase in the prices of food as indicated by the index numbers which are computed on the basis of a fixed regimen, as those shown in the table on page 570. In 1920—the year in which prices reached the peak—the average consumption of the commodities enumerated above decreased and the average expenditure was only 65 per cent. greater than in 1914, though the general level of food prices was 86 per cent. higher. In 1930, on the other hand, the increase in the average expenditure on food was 53.3 per cent. over that of 1914, and the increase in the retail price index number for food and groceries was 52 per cent.

Cost of Clothing.

The measurement of changes in the cost of clothing presents such great difficulty that this item is frequently omitted from official investigations and it is often assumed that variations in the general cost of living may be determined with a reasonable degree of accuracy by the measurement of the groups, food and housing. The chief difficulty in regard to the clothing group lies in the determination of standards owing to the vast range of articles of clothing, numerous grades of quality, and rapid changes in fashion and design. The group is, however, of such importance that in 1921 arrangements were made with a number of large retail firms in Sydney to supply particulars showing the movement of the prices of clothing since the beginning of the war period. It was not considered practicable to attempt to collect data concerning articles of the same quality nor even of the same material, and the firms were asked to quote the price as in January and in July of each year of the quality usually purchased by persons of moderate means.

In order to form a price-index to indicate the general trend of the cost of clothing, budgets were prepared from the price lists to represent the annual replacements for a man, a woman, and three children, the replacements of the various articles being approximate to those in the indicator list used by the Australian Basic Wage Commission in 1920.

The method of compiling a price index on the basis of the predominant price paid at various dates by a certain section of the people, viz., those with moderate incomes, does not preserve an identity of standard but involves to some extent changes in quality. In normal times the standard of clothing used by any section of the community, e.g., unskilled workers, changes very slowly and would not vary appreciably within a decade. The period under review, however, was characterised by violent changes, social and economic, which were reflected in every phase of national life. In the earlier years of the war prices of food rose much more rapidly than wages, thus necessitating economy, which would naturally be reflected in the matter of clothing more readily than in the food group. Subsequently as wages increased it is reasonable to suppose that a higher standard of clothing became general amongst the majority of the population.

Cost of Fuel and Miscellaneous Expenses.

The cost of fuel and light forms the smallest of the groups of family expenditure, but substantial increases which have occurred since 1914 have had an appreciable effect upon the cost of living.

The index numbers of this group are based on the prices of gas, coal and firewood. Kerosene is included in the list of food and groceries, and the average retail prices are shown on page 565.

The price of gas for household use in Sydney was increased from 5s. 4d. per 1,000 cubic feet to 5s. 7d. on 19th January, 1926, to 5s. 8d. on 17th July, 1926, and to 5s. 9d. on 6th August, 1927. It was reduced to 5s. 6d. per 1,000 cubic feet as from 1st November, 1931. There were substantial reductions in prices of coal and firewood during 1930-31.

Almost all the items of miscellaneous expenditure have become dearer; for instance, fares by train, tram, and ferry, which are an important factor. General increases amounting to about 66 per cent. were made in railway fares between July, 1914, and November, 1920. A reduction was made in May, 1924, when the decreases in second-class suburban fares up to 34 miles ranged from 3 to 11 per cent. and at the end of 1927 there was a general increase of about 7 per cent.

Tram fares were charged at the rate of 1d. per section up to 31st March, 1914. On 6th November, 1920, the fares were fixed at the following rates:—One section 2d., two sections 3d., three sections 4d., four sections 5d., five and six sections 6d. In December, 1927, the fares for two, three and four sections were raised by 1d. Since December, 1930, lower fares have been charged for journeys of more than one section between the hours 10 a.m. and 4 p.m., viz., two sections 3d., three sections and over 4d.

Increases have been made also in the fares on the majority of Sydney Harbour ferry routes. For instance, the monthly season ticket rate from Circular Quay to Milson's Point, which was 4s. 9d. in July, 1914, was increased to 8s. in 1928.

The prices of the daily newspapers which had been raised during 1919 and 1920 reverted to the former charge of 1d. per copy at the beginning of July, 1922, and were increased again to 1½d. on 4th August, 1930. For postage the rate for letters, 1d per ½ oz. in 1914 and 1½d. per oz. in 1926, was raised to 2d. per oz. in August, 1930. Fees for telephone calls were increased during the period from ½d. to 1½d. per call made by a subscriber, and from 1d. to 2d. per call on public telephones. Increases ranging up to 50 per cent. were made in the charges for telegrams.

Contributions to friendly societies amounted on an average to about 1s. 3d. per week in 1914 and to 1s. 7½d. in 1929. Subscriptions to trade unions, which range from 6d. to 1s. per week, have remained constant.

The retail price of tobacco has increased by 75 per cent. between 1914 and 1929. The average price of plug tobacco of popular brand was about 13s. per lb. in 1931 as compared with 6s. in 1914.

Changes in the Cost of Living.

A fair indication of the changes in the total cost of living may be obtained by summarising the index numbers of the cost of the various items discussed above, assigning to each group a weight in accordance with the ratio its cost bears to the total family expenditure.

The ratio varies in accordance with the amount of income, the expenditure on the primal necessities of food and shelter being proportionately greater when the income is small. As, however, the question of the cost of living is studied largely in relation to wages and the standard of living in respect of persons of moderate means, it is customary to consider the ratio of the component groups of expenditure on a basis of the wage of an unskilled worker.

In New South Wales a standard distribution on this basis may be obtained from the living wage determinations of the industrial tribunals which are described in the chapter of this volume relating to wages.

A living wage determination made by the Board of Trade of New South Wales in 1919 showed the following proportions, viz., food and groceries, 41 per cent.; rent, 20 per cent.; fuel and light, 4 per cent.; clothing, 18 per cent.; and miscellaneous, 17 per cent. The standard adopted by the Commonwealth Basic Wage Commission in 1920 was somewhat similar, viz., food and groceries, 40 per cent.; rent, 19 per cent.; fuel and light, 4 per cent.; clothing, 23 per cent.; miscellaneous, 14 per cent. By taking an approximate mean of these two sets of ratios the following weights have been deduced for use in assessing the changes in the general cost of living since 1914 as shown in the table below:—Food and groceries 41, rent 20, clothing 20, fuel and light 4, miscellaneous items 15. The results are not an exact measure of the changes, and they are put forward only as indicating approximately the movement in the general cost of living.

Year.	Food and Groceries.	Rent.	Clothing.	Fuel and Light.	Miscellaneous Items.	General Increase in Cost of Living since 1914.
1914	100	100	100	100	100	
1926	161	142	160	170	135	about 55 per cent.
1927	160	141	160	175	135	" 55 "
1928	158	145	165	180	135	" 55 "
1929	169	146	165	175	135	" 60 "
1930	152	144	155	170	145	" 50 "
1931	136	123	140	145	155	" 40 "

The cost of living rose by about 30 per cent. during the war period, then increased to a greater extent during the two years 1919 and 1920, after the armistice was declared. In each of the two following years there was a decline, then it remained fairly constant until 1926, when increases in food, rent, and fuel caused it to rise again. The high prices of certain food commodities caused a further rise in 1929, but in 1930 and 1931 there were reductions in all the groups except miscellaneous items.

EMPLOYMENT AND PRODUCTION.

EMPLOYMENT.

Information regarding the occupations of the people is obtained only at the census, and statistics relating to the periods between the census dates are restricted mainly to certain classes of employment in the primary industries and in manufacturing establishments.

Owing to the postponement of the census due in 1931, the latest records refer to the census of April, 1921. At that date, out of a total population of 2,100,371, the breadwinners numbered 884,104, of whom 713,169, or 81 per cent., were males. Particulars regarding their occupations were published in the 1928-29 issue of the "Year Book."

Returns relating to the number of persons employed in the principal rural industries of the State are collected annually, but the information is not comparable with the census figures, because it relates only to persons engaged regularly on rural holdings of one acre or over. Occupiers and managers are included in the returns, also members of their families, who work constantly on a holding, but temporary hands and contract workers engaged for harvesting, shearing, etc., are omitted. Moreover, the census figures relate to a specific date, and the workers are distributed amongst the several branches of rural industry according to the work on which they were engaged at the time. On the other hand, the annual records show the average number employed during the period, and those engaged on each of the numerous holdings where more than one class of rural production is undertaken are distributed according to the main purpose for which the holding was used.

In regard to the number of females employed in rural industries, considerable difficulty is experienced in obtaining satisfactory statistics, owing to the fact that a large number of women and girls, especially on dairy farms, are employed only partly in rural production in conjunction with their domestic duties. Usually they do not receive wages, and at a census they are classified as dependants. In the annual returns there is a tendency to include them as rural workers, consequently a wide discrepancy arises between the census and the annual records, the latter being overstated.

The following statement shows the number of persons engaged in the various branches of rural industry in various years since 1911:—

Year.	Agriculture, Poultry, Pig, and Bee-farming.		Dairying.		Pastoral.		Total, Rural Industries.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Total.
1911	58,299	1,141	27,488	11,293	43,387	770	129,174	13,204	142,378
1920-21	50,162	1,509	26,648	13,176	43,766	1,022	120,576	15,707	136,283
1925-26	44,991	841	30,351	15,027	45,652	420	120,994	16,288	137,282
1926-27	43,268	866	29,106	12,525	47,546	854	119,920	14,245	134,165
1927-28	43,953	713	29,845	12,378	46,882	453	120,680	13,544	134,224
1928-29	40,058	606	30,997	9,765	46,808	306	117,863	10,677	128,540
1929-30	39,860	472	32,494	9,105	44,069	271	116,423	9,848	126,271
1930-31	40,163	518	33,977	8,735	40,849	290	114,989	9,543	124,532

The number of workers engaged in cultivating, etc., has declined since 1911, though the area under cultivation has increased, the greater use of machinery and the substitution of motor for horse drawn vehicles having lessened the need for workers in agriculture. It is probable also that the

decrease in the labour engaged permanently has been offset, to some extent, by the employment of contract workers. Details regarding the labour engaged in relation to machinery used in cultivating are shown in the chapter relating to agriculture.

The number of male dairy workers has increased appreciably since 1911. In the pastoral industry the number of permanent employees does not usually vary greatly from year to year, except in very dry seasons, when additional labour is required to tend the flocks and herds under severe drought conditions. On the whole, the number of men engaged permanently on rural holdings in 1930-31 was 10 per cent. less than the average of the three years prior to the war.

The figures in the table indicate that there has been a marked decrease in the number of women engaged in rural work, and this may be attributed mainly to the exclusion from the returns in recent years of women whose chief occupation is domestic rather than rural. The majority of the women are relatives not receiving wages, and the number so classified in the returns decreased from 13,841 in 1925-26 to 7,940 in 1930-31, while the number of women classified as working proprietors or paid employees was reduced from 2,447 to 1,603.

The total number of rural workers in 1930-31 included 66,297 men and 902 women, who were classed as working proprietors, *i.e.*, owners, lessees, or share-farmers working on the holdings; 20,743 men and 7,940 women were classed as relatives employed constantly, but not receiving wages. There were 27,949 men and 701 women, including managers and relatives, in receipt of wages. The amount of wages paid to these employees in 1930-31 was £3,395,833 to men and 37,202 to women, excluding the value of board, etc., assessed at £1,137,645 for men and £25,222 for women. In addition, wages amounting to £1,928,336 were paid to casual workers, excluding £265,310 the value of board, etc. Particulars regarding rural labour and wages in the preceding decennium are shown on page 321 of this Year Book.

Annual returns relating to employment are collected also in respect of mining and other primary industries and the manufacturing industries, and the figures for various years since 1911 are summarised in the following statement. The particulars for 1920-21 and subsequent years relate to the twelve months ended 30th June, except those showing the employment in mines, which are for the calendar years ended six months later. In regard to the manufacturing industries, employees in establishments with fewer than four persons have not been included unless machinery was used in the factory:—

Year	Rural Industries.	Forests, Fisheries, and Trapping.	Mining.*	Manufacturing.			Total.		
	Total.			Males.	Females.	Total.	Males.*	Females.	Total.
1911	142,378	6,000	33,367	82,083	26,541	108,624	250,624	39,745	290,369
1920-21	136,283	6,700	25,612	112,187	32,824	145,011	265,075	48,531	313,606
1925-26	137,282	7,900	29,186	132,239	41,862	174,101	290,319	58,150	348,469
1926-27	134,165	8,500	29,373	138,309	44,884	183,193	296,102	59,129	355,231
1927-28	134,224	8,000	25,551	137,936	44,724	182,660	292,167	58,268	350,435
1928-29	128,540	7,700	26,562	139,104	46,038	185,142	291,229	56,715	347,944
1929-30	126,271	6,300	25,010	125,769	41,921	167,690	273,502	51,769	325,271
1930-31	124,523	5,600	18,305†	98,349	35,015	133,364	237,243†	44,553	281,801†

* Amended since last issue by exclusion of "fossickers."

† Preliminary—subject to revision.

Employees engaged in treating minerals at the place of production are included in the returns of the manufacturing industries, and not with the mining employees, viz., those engaged in the manufacture of coke at coke works, in the manufacture of lime, cement, etc., at limestone quarries, and in the treatment of ores at mines. The number of miners, as stated for the 1920-21 and later years, is exclusive of fossickers, who numbered 1,121 in 1929, and 4,744 in 1930. In view of the small output which they obtained, it is probable they were not employed in fossicking throughout the whole year.

In the coal and shale mines employment increased from 17,247 in 1911 to 18,534 in 1914, and a decline of about 2,000 occurred during the war period, when the export trade was restricted. Between 1921 and 1927 there was a steady increase in the number of coal-miners, 24,483 being employed in 1927. In the following year the number dropped to 21,743. Subsequent returns for 1929 show an increase to 22,470 in 1929, and a decline to 21,343 in 1930, but these figures are over-stated on account of duplication in respect of miners who moved from the northern to the southern and western coal-fields when the northern mines were closed during a protracted industrial dislocation. In 1931 the number was 15,531.

In other mines employees increased from 4,639 in 1921 to 5,061 in 1926, and have since declined to about 2,774.

The number of factory workers did not vary greatly between 1926-27 and 1928-29, but a decrease of 28 per cent. occurred during the last two years. The majority of female factory workers are engaged in the clothing trades, and fluctuations in the number of female employees reflect generally the condition of that group of industries.

Government Employees.

In New South Wales a large number of persons are employed by the State and Commonwealth Governments. In addition to services such as education, police, justice, health, lands administration, and the construction of public works, etc., the State owns railways, tramways, and wharves, and engages in various industrial enterprises, *e.g.*, abattoirs, dock-yards, quarries, brick and pipe works. The Commonwealth services include posts, telegraphs and telephones, customs, taxation, and defence.

The following statement shows the number of Government employees, as at 30th June, 1921, 1926, and subsequent years. The figures include persons engaged in the various States and Federal departments and those under the jurisdiction of statutory bodies which administer the railway and tramway services, harbour works, water supply and sewerage systems, etc., and the staffs of the State Savings Bank and of the Commonwealth Bank in New South Wales. Data regarding certain employees attached to various

State departments, but not under the jurisdiction of the Public Service Board, were collected for the first time in 1928, and have been included since that date.

Services.	1921.	1926.	1927.	1928.	1929.	1930.	1931.		
							Males.	Females.	Total.
State.									
Public Service Board—									
Teachers (including In-									
spectors)	8,150	9,682	10,040	10,430	10,807	11,180	5,150	6,321	11,471
Hospitals, etc.—General									
Staffs	1,854	2,237	2,308	2,485	2,514	2,576	1,149	1,437	2,586
Other	9,325	8,403	8,781	9,183	9,284	9,168	7,275	2,036	9,311
Total, Public Service Board.	19,329	20,322	21,129	22,098	22,605	22,924	13,574	9,794	23,368
Railways	49,029	57,474	58,909	58,181	58,011	52,737	41,561	1,350	42,911
Tramways							8,242	21	8,263
Sydney Harbour Trust ...	1,326	1,422	1,166	1,272	1,232	999	705	22	727
Metropolitan and Hunter Dis-									
trict Water and Sewerage									
Boards	2,688	4,688	5,078	5,103	6,257	4,242	2,070	94	2,164
Water Conservation and Irri-									
gation Commission ...	1,712	1,134	1,133	1,239	1,548	1,142	1,000	58	1,058
Main Roads Board		1,300†	3,508	3,658	3,695	2,208	1,283	60	1,343
Government Dockyard ...	1,000	983	1,230	2,096	1,561	730	488	2	490
Metropolitan Meat Industry									
Board	548	648	746	718	674	654	681	23	704
Police	2,788	2,978	3,067	3,313	3,569	3,750	3,705	12	3,717
Fire Commissioners	458	528	595	787	828	847	802	31	833
Government Savings Bank ..	860	1,367	1,490	1,563	1,704	1,734	1,402	288	1,690
Other—Departmental not									
under Public Service									
Board	*	*	*	2,306	2,707	2,679	1,682	888	2,570
Miscellaneous	5,269	5,037	5,026	5,723	5,766	5,272	4,653	123	4,776
Total, State	85,907*	97,881*	103,077*	108,057	110,157	99,918	81,848	12,766	94,614
Commonwealth.									
Public Service Commission ..	10,934	13,627	13,438	13,344	14,824	13,941	10,013	1,544	11,557
Defence, Repatriation and									
War Service Homes	2,329	2,060	2,086	2,017	1,902	1,966	1,320	192	1,512
Other	589†	1,703	1,838	1,934	1,159	1,339	1,173	249	1,422
Total Commonwealth									
in N.S.W.	13,852†	17,390	17,362	17,295	17,885	17,246	12,506	1,985	14,491
Total, Government									
Employees in									
N.S.W.	99,759**	115,271*	120,439*	125,352	128,042	117,164	94,354	14,751	109,105

* Excluding Departmental employees not under jurisdiction of Public Service Board. † July, approximate.
 ‡ Commonwealth Bank Staff not included. ** See notes * and ‡.

The total number of persons employed by the Government of New South Wales as at 30th June, 1931, was about 94,600. The railway and tramway employees represented more than 54 per cent., teachers 12 per cent., general staffs of State hospitals, etc., the police and firemen 7.5 per cent., employees under jurisdiction of the Public Service Board (other than teachers and hospital staffs) 10 per cent.

Excluding 2,570 departmental employees not under the jurisdiction of the Public Service Board, of whom returns were not collected in the earlier year, the figures in the foregoing table show an increase of 6,137 in the number of State Government employees during the decennium 1921-1931. The largest increases were in the following groups, viz., teachers and hospital staffs 4,053, railway and tramway employees 1,245, police 989, and the Main Roads Board, which was not in existence in 1921, gave employment to 1,343 persons in 1931. On the other hand, there were decreases amounting to 2,287 in the numbers employed by statutory bodies administering the water conservation, irrigation, sewerage, and drainage works, the Sydney Harbour Trust, and the dockyard.

The number of persons in the service of the Commonwealth in New South Wales at 30th June, 1931, was nearly 14,500, having decreased by 640 in 1929-30, and by 2,755 in 1930-31.

UNEMPLOYMENT.

Particulars relating to unemployment are collected at the census, persons being returned as unemployed who had been out of work for more than a week at the date of collection. In April, 1921, when the last census was taken, unemployment resulting from post-war disorganisation was probably at a maximum, and the number of persons unemployed was 61,640, or 9.5 per cent. of the group embracing salary and wage earners and the unemployed combined. The males numbered 54,028, or 10.6 per cent., and the females 7,612, or 5.5 per cent.

Owing to the lapse of time since the last census it is not practicable to arrive at a satisfactory estimate of the extent of unemployment during recent years. Information regarding the condition of employment amongst certain classes of trade unionists is collected by the Commonwealth Statistician from the union secretaries and is published at quarterly intervals. It has been stated that the figures give a good index of unemployment in normal times and even in the present abnormal times probably give a fair measure of how unemployment is increasing. The returns, however, do not cover unions of persons in employment which is usually regarded as permanent such as railway and tramway employees, nor those whose employment is casual such as wharf-labourers. The data are deficient also in regard to groups of unions included in the survey because many secretaries are not able to supply accurate information owing to lack of records, and others do not send their returns regularly.

The following statement shows, in respect of trades-unions for which returns were supplied to the Commonwealth Statistician, the proportion of their members who were unemployed in each quarter of 1921 and of the last six years:—

Period.	Proportion of Unemployed Members in Trade Unions for which Returns are available.						
	1921.	1926.	1927.	1928.	1929.	1930.	1931.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
March quarter ...	13.7	8.4	7.0	11.8	9.7	16.3	20.2
June quarter ...	13.5	7.5	6.8	10.9	10.0	21.0	30.7
September quarter ...	12.3	7.4	5.3	11.9	12.4	23.3	31.6
December quarter ...	11.9	6.2	9.1	10.6	13.8	26.3	31.5

The returns as to unemployment on which the foregoing percentages were based, covered a membership of 181,500 in 1929, 189,569 in 1930, and 186,800 in 1931. These represented probably less than one-fourth of the people who would be classified at a census as salary and wage earners. The percentage in March quarter, 1932, was 31.8.

Relief of Unemployment.

A few of the trade unions provide for the payment of out-of-work benefits to their members, but otherwise there is little insurance against unemployment. The State has not instituted any fund for the purpose, and there have not been any operations under a section of the Industrial Arbitration Act which authorises the Government to subsidise from public revenue unemployment insurance funds created by contributions of employers and employees.

Measures for the relief of unemployment undertaken by the State have been directed mainly towards the organisation of the supply of labour, by means of labour exchanges, and the assistance of destitute persons in need of sustenance while seeking employment.

Substantial grants were made from the State revenues for relief works and for sustenance in necessitous cases during the year 1929, and as the volume of unemployment still expanded it became necessary to devise further means for relief. For this purpose the Prevention and Relief of Unemployment Act was passed in June, 1930, establishing a council to formulate schemes to absorb unemployed persons in public works and private enterprises, to investigate schemes for their relief and for the training of persons for whom work cannot be found in their former occupations, and to make recommendations regarding the expenditure of moneys available for the purposes of relief.

In order to provide the requisite funds a special levy—the Unemployment Relief Tax—was imposed on salaries, wages and other income from employment derived during the year commencing on 1st July, 1930, and on income from other sources derived during the year ended on 30th June, 1930.

Income from employment was exempt while the employee was paid at a rate of less than 30s. per week or the equivalent daily or hourly rate, and the rate of tax was 3d. in the £, during the six months July to December, 1930. Then the exemption was raised so as to exclude wages, etc., at rates under 40s. per week, and the rate was increased to 12d. in the £.

The tax on income from other sources derived during the year 1929-30 is levied at the rate of 7½d. in the £—which is equal to the average rate on wages, etc., over the period of twelve months ended 30th June, 1931. Resident taxpayers are exempt where the total income from all sources does not exceed £100 per annum.

In June, 1931, the Unemployment Relief Tax was imposed for a further period of twelve months, at the rate of 12d. in the £ on all classes of income. The tax on income from employment is payable, as a general rule, by means of stamps affixed by employers upon records of payments made to employees. In other cases the Commissioner of Taxation issues an annual assessment.

The proceeds of Unemployment Relief Tax are expended on relief works and on food relief. The moneys are allocated by the Unemployment Relief Council, the expenditures being made through the various Government departments.

Relief Works.

The public works on which the funds are expended must be declared by notification published in the *Government Gazette* to be works for the relief of unemployment, the principal works proclaimed being roads, public build-

ings (such as schools and hospitals) and water supply, sewerage, and drainage works. The labour employed upon these works is engaged at the State labour exchanges and agencies where unemployed persons are registered. They are numbered in order of registration, and when work is available in a district they are called by press advertisement in order of priority of registration, to report for employment. Wages on relief works are paid at award rates on an hourly basis, and the hours of work are restricted to 35 per week.

Moneys have been granted to councils of municipalities and shires for approved works on the understanding that unemployed persons be engaged through the State labour exchanges and agencies. Advances have been made to the councils for reproductive works, the rate of interest being 3 per cent. with repayments spread over long periods. Advances and loans have been made also to statutory bodies, to prospectors seeking gold, and to settlers for improvements which tend to promote greater production.

Food Relief for Unemployed Persons.

Food relief for unemployed persons is organised in two sections. One is administered by the Department of Labour and Industry in the metropolitan district, and in Newcastle, Maitland, Wollongong, and Broken Hill. In other districts relief orders are issued by the police, where they are satisfied that the applicant or the bread-winner of a family has made reasonable efforts to secure work and that none is available.

The applicant for food relief through the Department of Labour and Industry must be registered at a State labour exchange or agency for at least a fortnight before he is eligible for relief. He is required to sign a declaration that his income is below a certain amount, which varies according to the size of the family to be provided for. The orders for relief are in the form of coupons on which are printed the various scales of rations. They are accepted by the storekeepers who supply the goods under agreement with the Government.

The scale of limits of income and the approximate value in the metropolitan district of the food relief orders for the various family units are shown below. Food relief is not granted to an applicant when the family income during the fortnight preceding application exceeds the limit shown in the table:—

Family Unit.	Limit of Income per Fort- night.	Value of Food Relief per week.	Family Unit.	Limit of Income per Fort- night.	Value of Food Relief per week.
Single man or woman ...	s. 20	s. d. 5 10	Married couple, 6 children ...	s. 80	} 27 6
Married couple ...	40	9 5	" " 7 children ...	90	
" " 1 child ...	40	14 8	" " 8 children ...	100	} 37 1
" " 2 or 3 children ...	50	19 8	" " 9 children ...	110	
" " 4 or 5 children ...	60	23 4			

The scale of rations was increased by about 25 per cent. in June, 1931, and the values shown above represent the approximate cost in the metropolitan district in that month of the rations on the increased scale.

Infants under twelve months are not included in the family unit, and special foods are provided for them upon a certificate from a nurse in charge of a baby health centre, or, where there is no centre, from a medical practitioner.

Unemployment Relief Fund—Receipts and Expenditure.

The receipts and expenditure of the Unemployment Relief Fund during the year ended 30th June, 1931, and the six months July to December, 1931, were as follows:—

Receipts.	Year Ended June, 1931.	Six Months July-Dec., 1931.	Expenditure.	Year Ended June 1931.	Six Months, July-Dec., 1931.
	£	£		£	£
Sale of stamps and deductions from earnings	2,720,887	2,010,657	Capital Expenditure—Works and Grants—		
Assessments on income	1,654,916	549,035	Governmental	346,830	560,240
Treasury advances (to be repaid)	500,000	...	Business and Industrial	17,899	
Repayment of Advances ... ..	...	220,980	Repayable Advances	609,723	
Other	2,032	...	Revenue Expenditure—Works and Grants—		
			Repairs and Maintenance of Public Works and Services	302,257	2,461,214
			Improvement of Crown Lands	115,624	
			Grants to Local Bodies, &c.	980,697	
			Food Relief	1,837,886	67,238
			Charitable Relief—Child Welfare Department	101,858	17,296
			Costs of Administration	44,310	
Total... ..	4,877,835	2,780,672	Total... ..	4,857,084	3,105,997

As a general rule, assessments on income on which tax has not been paid by means of stamps are not issued before the latter half of the financial year, so that the receipts from this source up to 31st December, 1931, refer to income derived during 1929-30, taxable at the rate of 7½d. in the £.

Intermittency of Employment.

A considerable loss of working-time occurs in many industries even in normal periods on account of intermittency arising from various causes and under adverse conditions which have been affecting business activity, the practice of "rationing" the available work amongst employees has led to intermittency in many occupations not usually affected by it. Information regarding the extent of intermittency is not available except in respect of the principal coal mines, of which records have been collected by the Department of Labour and Industry.

Particulars obtained from these records show that during the period of seventeen years—1915-31—the average number of work-days was 272 per annum, after making allowances for Sundays, pay Saturdays, and regular public holidays. The days on which operations were suspended numbered, on an average, 84 per annum, or 31 per cent. of the total work-days; 27 days, or 10 per cent., were lost through industrial disputes, and 57 days, or 21 per cent., through other causes.

The total loss of working time involved by the interruptions to work in coal mines during the five years 1927-31 is shown below. The figures have been obtained by multiplying the number of days on which the collieries were idle by the number of employees affected, and by classifying the working-days lost according to the causes of the dislocations.

Causes.	Days Lost.						1927-1931.	
	1927.	1928.	1929.	1930.	1931.		Average per Annum.	Per cent. of Total.
Industrial disputes..	683,389	369,778	2,476,536	1,363,360	56,087	990,010	37.8	
Truck shortage ...	102,392	33,652	20,552	106,393	154,803	83,558	3.2	
Slackness of trade...	780,285	1,918,075	477,734	1,535,046	2,106,330	1,363,474	52.0	
Mine disabilities, etc.	154,348	120,017	88,054	135,829	107,137	121,097	4.6	
Deaths of employees	17,477	12,240	5,762	3,956	4,493	8,786	.3	
Meetings, extra holidays ...	11,500	5,655	15,579	5,822	2,936	8,298	.3	
Other causes ...	121,309	48,126	20,080	43,114	3,287	47,183	1.8	
Not stated....	111,058	199,735	124,104	159,482	269,182	172,712	...	
Total ...	1,981,758	2,707,278	3,228,401	3,353,002	2,705,155	2,795,118	100.0	

The average number of days lost on account of dislocations in this industry during the period of five years was 2,795,118 days per annum. Fifty-two per cent. of the loss was attributed to lack of trade or of shipping and 38 per cent. to industrial disputes.

The loss through industrial disputes, as stated in the table, represents the working days lost in each year through disputes which commenced in that year, or at an earlier date. It is calculated according to the method stated on page 597, and is a gross figure based on the assumption that the employees concerned would have been working full time if the disputes had not occurred. Further details relating to the disputes are shown on a later page.

The number of employees in the coal mines exceeds 15,000, and as it is a fundamental industry, intermittency in mining operations has a far-reaching effect on other industries and commercial enterprises.

State Labour Exchanges.

The State labour exchanges have been administered in conjunction with the office dealing with assisted immigration. The exchanges are situated in the main industrial centres, Sydney, Newcastle, and Broken Hill, and there are agencies in the principal country towns. The expenses are borne by the State, fees are not charged, and advances by way of loan may be made to enable persons to avail themselves of employment offered.

The normal functions of the exchanges are to bring together intending employers and persons seeking employment, to encourage industrial training in skilled trades, to provide suitable training for vagrant and other persons unsuited for ordinary employment, and to co-operate for these purposes with private employment agencies.

The operations of the State labour exchanges during 1920-21 and later years are shown below:—

Year ended 30th June.	Males.			Females.		
	Registered for Employment.	Sought by Employers.	Sent to Employment.	Registered for Employment.	Sought by Employers.	Sent to Employment.
1921	39,450	31,757	29,104	6,438	10,324	7,073
1926	50,694	33,690	32,204	4,534	9,310	6,204
1927	48,777	28,257	27,548	5,148	9,371	6,424
1928	66,706	31,451	30,658	5,637	9,090	7,180
1929	71,236	33,208	32,262	5,471	8,727	6,533
1930	106,561	52,159	52,108	7,967	6,821	5,801
1931	325,230	107,650	125,362	20,454	5,792	4,771

Private Employment Agencies.

Private employment agencies are subject to supervision by the State authorities in terms of the Industrial Arbitration Act. Such agencies may be conducted by licensed persons only, and they are required to keep registers of persons applying for labour or employment, and of engagements made. The scale of fees chargeable is fixed by regulation, and if an applicant does not obtain labour or employment within fourteen days, the fee must be repaid, less out-of-pocket expenses. Licensees are prohibited from sharing fees with employers, and from keeping as lodgers persons seeking employment.

At 31st December, 1931, there were 66 private agencies on the register, viz., 38 in Sydney, 17 in the suburbs, and 11 in other districts.

TRADE UNIONS.

Until 1881 trade unions in New South Wales were subject to Imperial legislation, by which the right to combine was recognised, but actions done in restraint of trade were penalised, and the unions lacked the power to safeguard their funds. The first legislation passed in New South Wales (the Trade Union Act of 1881) is still in operation, though it was amended in some important particulars in 1918 by the Industrial Arbitration Act.

Provision is made for the registration of trade unions, the appointment of trustees, in whom the union property is vested, and for the constitution of rules. The use of union funds for political purposes is subject to the provisions of the Industrial Arbitration (Amendment) Act of 1918, and such payments must be made from a separate fund, to which contribution by members is optional.

There are two classes of trade unions, viz., unions of employers and unions of employees. The latter constitute the bulk of the registered organisations, and a brief account of their development was published in the 1921 issue of the Year Book at page 553.

The organisation of employees in trade unions increased with the development of industrial arbitration, as unions formed for the purposes of arbitration must be registered under the Trade Union Act, as well as the Industrial Arbitration Act. Moreover, a wider recognition of the principle of preference to unionists led to an increase in membership.

After the introduction of the Commonwealth system of industrial arbitration in 1904 some of the unions previously on the State registry became merged into federal associations, but unless a union elects to be regulated exclusively under federal arbitration and conciliation the branch in New South Wales retains its registration under the Trade Union Act of 1881.

Statistics relating to the trade unions of employees in the State are shown in the following statement for various years since 1911. The figures are not quite complete, as in every year some of the unions fail to supply returns to the Registrar:—

Year.	Unions of Employees	Members.			Receipts.	Expenditure.	Funds at end of Year.
		Males.	Females.	Total.			
					£	£	£
1911	179	145,784	4,743	150,527	157,202	146,757	112,494
1916	202	218,609	12,941	231,550	241,644	249,691	202,950
1921	197	234,898	23,965	258,863	363,067	345,854	194,360
1926	170	286,245	33,354	319,599	494,341	494,079	322,912
1927	170	306,380	38,689	345,069	487,723	454,190	257,588
1928	165	302,282	38,661	340,943	504,640	498,020	362,118
1929	172	287,573	40,025	327,598	633,918	631,517	372,728
1930	167	265,487	36,831	302,318	488,348	527,847	320,262

At the end of the year 1930 there were 167 registered trade unions of employees. The membership, especially amongst women, increased rapidly between 1911 and 1921 as a result of organisation for the purposes of industrial arbitration and conciliation. The expansion continued until 1927, then the total membership commenced to decline owing to a diminution in employment.

The largest decreases in membership during 1930 were in the pastoral unions, viz., from 26,127 to 16,830, building trades from 31,861 to 28,529; governmental workers (including transport) from 29,156 to 26,599. The number of women in trade unions declined by 3,194, the principal reduction being in the membership of unions connected with the manufacture of food, drink, etc., which declined from 12,935 to 10,412.

The receipts during 1930 amounted to £488,348, including contributions, £436,989. Of the total expenditure, payments in respect of benefits amounted to £156,937, and management and other expenses, including legal charges in connection with industrial awards, etc., to £370,910. The total receipts and expenditure are liable to fluctuate under the influence of prevailing industrial conditions, the amounts being inflated in some years by the inclusion of donations for relief from one union to another. The funds include cash and freehold property and assets such as shares in Trades Halls and newspapers.

The following statement shows the receipts, expenditure, accumulated funds, and membership of trade unions of employees, according to industrial classification, in the year 1930:—

Industrial Classification.	Membership at end of year.			Receipts.	Expendi- ture.	Funds at end of year.	Funds per member.
	Males.	Females.	Total.				
	No.	No.	No.	£	£	£	s. d.
Engineering and Metal Working	38,048	118	38,166	98,410	108,494	51,373	26 11
Food, Drink, and Narcotics ...	22,372	10,412	32,784	24,530	26,228	13,931	8 6
Clothing	5,191	9,656	14,847	6,521	7,787	13,943	18 9
Printing, Bookbinding, etc. ...	6,357	1,227	7,584	27,499	27,763	26,364	69 6
Manufacturing, n.e.i.	16,470	1,531	18,001	17,544	20,936	23,629	26 3
Building	28,529	25	28,554	20,164	21,117	19,879	13 11
Mining and Smelting	15,964	...	15,964	132,910	148,996	40,734	51 0
Railways and Tramways	39,415	841	40,256	36,665	37,263	17,341	8 7
Other Land Transport	3,995	...	3,995	5,815	6,177	4,936	24 9
Shipping and Sea Transport ...	10,926	23	10,949	15,616	17,127	8,785	16 1
Pastoral, etc.	16,830	518	17,348	22,881	29,006	11,723	13 6
Governmental, n.e.i.	26,599	5,269	31,868	37,655	33,398	53,392	33 6
Miscellaneous Industries	34,791	7,211	42,002	38,655	39,863	34,015	16 2
Labour Council and Eight-hour Committees ... ..	...	...	...	3,449	3,632	9,217	...
Total Unions of Employees...	265,487	36,831	302,318	488,348	527,847	329,262	21 9

The average membership per union, excluding the labour council and eight-hour committee, is approximately 2,000; but the majority of the unions are small. In 1930 there were 23 with less than 100 members; 69 with 100 to 1,000 members; 52 with 1,000 to 5,000 members; 14 with 5,000 to 10,000; and 4 unions had more than 10,000 members.

Unions of Employers.

The records of the Registry of Trade Unions show that few unions of employers seek registration under the Trade Union Act of 1881, so that the available information concerning them is scanty and does not afford any indication of the extent of organisation amongst employers.

The unions of employers registered under the Trade Union Act in 1930 numbered 23. The membership at the end of the year was 13,522, and the funds at the end of the year amounted to £46,434. The receipts during 1930 amounted to £41,672, and the expenditure to £61,527.

Any employer or group of employers with at least 50 employees may register as an industrial union under the Industrial Arbitration Act.

INDUSTRIAL ARBITRATION.

The term "Industrial Arbitration" is used here in a broad sense to embrace all provision made by legislation for the adjustment of industrial relations between employers and employees, by arbitration, by conciliation, or by co-operation of employers and employees.

In New South Wales there are two systems of industrial arbitration: one under State law, its operation being confined to the area of the State; and the Commonwealth system, which applies to industrial disputes extending beyond the limits of one State.

A brief account of the development of the State system was published in the Year Book for 1925-26. The federal system of industrial arbitration was inaugurated in 1904. Provision is made under both State and federal systems for collective bargaining and the registration and enforcement of industrial agreements.

The industrial conditions of employment in the public service of the Commonwealth are determined by an arbitrator appointed in terms of the Arbitration (Public Service) Act, 1920-1929.

Relation between State and Commonwealth Systems.

The relation between the State and Commonwealth systems in respect of industrial awards and orders rests upon the provision of the Commonwealth Constitution Act that if a State law is inconsistent with a federal law, the latter prevails and the former becomes inoperative so far as it is inconsistent. There is, however, no organic connection between the industrial systems. The industrial authorities have adopted generally the same broad principles for the promotion of industrial peace and the maintenance of standard conditions. Nevertheless fundamental differences in legislation and in the extent of their constitutional authority have prevented them from co-ordinating their methods and practices and from blending their determinations into an industrial code for the guidance of employees and employers in all branches of industry throughout the Commonwealth. Thus differences have arisen in regard to wage determinations, disturbing the distinctions in grade, as expressed by wages, which had been recognised for many years amongst skilled workers, and the overlapping of jurisdiction has caused confusion, especially where members of a number of craft unions work in the same industry under different awards or agreements.

It is prescribed in the Commonwealth law that a federal tribunal may order a State industrial authority to cease dealing with any matter covered by a federal award, or the subject of proceedings before a federal tribunal, and State laws, awards, etc., are declared to be invalid insofar as they are inconsistent with, or deal with any matter dealt with in, a federal award, etc. Judges of the Commonwealth Court may confer with State industrial authorities in relation to any industrial matter with a view to securing co-ordination between awards and orders of the federal and State authorities.

STATE SYSTEM OF INDUSTRIAL ARBITRATION.

Industrial Unions.

For the purpose of bringing an industry under the review of the State industrial tribunals, the employees must be organised as a trade union under the Trade Union Act of 1881, and must obtain registration as an industrial union under the Industrial Arbitration Act. Registration for the purpose has been effected by practically all classes of employees throughout the State, but employees in rural industries were removed from the operation of the State industrial system in December, 1929.

Registration as a union of employers may be granted to any person or group of persons employing not less than fifty employees, and prior registration under the Trade Union Act is not prescribed, as in the case of unions of employees.

State Industrial Tribunals.

The principal tribunal is the Industrial Commission, first constituted in terms of the Industrial Arbitration (Amendment) Act, which commenced to operate in April, 1926.

The Commission is constituted as a superior court of record, by a president and two other members, all having the same status as puisne judges of the Supreme Court. It may delegate its powers in any particular matter to one member, his decision being subject to appeal to the full Commission.

The Commission is authorised to determine any industrial matter referred to it by the Minister, to determine, not more frequently than once in every six months, a standard of living and to fix the living wages, to hear appeals, to confer with persons and unions in regard to anything affecting the settlement of industrial matters, and to summon conferences.

There is also a Deputy Commissioner who exercises the powers of the Commission in matters which it refers to him, and from his determinations appeal lies to the Commission.

An industrial board consisting of nominees of employers and employees, and a chairman may be constituted by the Minister on the recommendation of the Industrial Commission for any industry or group of industries. In terms of an amending Act passed in 1916 the boards ceased to function. Nevertheless, the constitution of a board is a condition precedent to the review of an industry by the industrial tribunals, and for this reason the boards are still appointed.

A conciliation committee consisting of an equal number of representatives of employers and employees, and a chairman may be appointed for any industry or calling for which an industrial board has been constituted. The Minister appoints a number of persons to act as chairmen of the committees, the maximum number under existing regulations being twelve. The Industrial Commission allots one of the chairmen for each committee, and in this way the committees for allied industries may be grouped under the same chairman. The chairman may not vote at meetings of the committee, except when the other members are equally divided in opinion as to any question, and they agree to accept his decision.

Appeal from the determinations of a committee lies to the Industrial Commission, and the members of the committee, except the chairman, may sit with the Commission as assessors without vote to hear appeals.

The conciliation committees exercising the powers of the industrial boards may make awards fixing minimum rates of wages and salaries, minimum prices for piecework, overtime rates, number of apprentices, and hours and times to be worked to entitle employees to the wages fixed. Awards may prescribe that preference of employment shall be given to unionists, under conditions described on page 595.

The maximum rate of wages or salary which may be fixed by award is £15 per week or £750 per annum. An award or an agreement may not be made for a wage lower than the living wage declared by the Industrial Commission, and if a declaration is varied during the currency of an award the rates of wages prescribed by the award may be varied accordingly. Permits to work for less than the minimum wages prescribed by award may be granted to aged, infirm or slow workers.

Awards as to wages, overtime, and hours of work are subject to the provisions of the Industrial Arbitration (Eight Hours) Act, which is discussed on a later page.

Proceedings before an industrial tribunal are initiated usually upon the application of employers of not less than twenty employees in any industry or calling, or by an industrial union of employees. Matters may be referred also by the Minister for Labour and Industry, and where the public interests are likely to be affected the Crown may intervene in any proceedings before a tribunal or may appeal from an award.

Awards are binding on all persons engaged in the industries or callings, and within the locality covered, for a period not exceeding three years specified therein, and after such period until varied or rescinded.

Industrial Agreements.

Industrial unions and trade unions are empowered to make with employers written agreements, which become binding between the parties when filed in the prescribed manner.

The maximum term for which an agreement may be made is five years, but it continues in force after the expiration of the specified term until varied or rescinded, or terminated after notice by a party thereto. An industrial agreement may not provide for wages lower than the living wages declared by the Commission.

Number of Industrial Awards and Agreements.

During the year 1931 conciliation committees made 40 principal awards and 269 subsidiary awards, and the Industrial Commission 6 principal and 35 subsidiary awards. At 31st December, 1931, there were 184 Conciliation Committees.

The number of awards and agreements made by the State industrial tribunals during each of the last five years is shown below:—

Year.	Awards Made.		Agreements Filed.	In Force at end of Year.	
	Principal.	Subsidiary.		Awards.	Agreements.
1927	152	475	34	400	190
1928	85	231	39	447	166
1929	47	127	30	457	113
1930	31	510	19	469	117
1931	46	304	40	477	134

Complaints regarding breaches of award and industrial agreements are investigated by officers of the Labour and Industry Department, who may direct prosecutions. Proceedings may be taken also by employers and by the secretaries of industrial unions, and the cases are dealt with by the Industrial Registrar or the industrial magistrates.

THE COMMONWEALTH SYSTEM OF INDUSTRIAL ARBITRATION.

Under the Commonwealth law, registration is a necessary qualification to entitle unions to submit disputes to the Court, or to be represented in proceedings relating to disputes, and industrial organisations of employers and of employees, representing at least 100 employees, may be registered on compliance with prescribed conditions.

The Court of Conciliation and Arbitration consists of a Chief Judge and other judges appointed by the Governor-General, with life tenure. Each judge is charged with the duty of endeavouring to reconcile the parties in industrial disputes, and for the purpose he may convene compulsory conferences. Conciliation commissioners, not more than three in number, may be appointed by the Governor-General for a term of five years with authority to intervene in industrial disputes and to summon conferences.

The Court or the conciliation commissioners endeavour to induce the settlement of disputes by amicable agreement, or, failing an agreement, may determine the disputes by award. Industrial agreements, when certified by a judge of the Court or a conciliation commissioner and filed in the office of the Registrar, are binding on the parties thereto. The awards and agreements are made for a specified period up to a maximum of five years, and after the expiration of the definite period an award continues until a new award is made, unless the Court or conciliation commissioner orders otherwise. Agreements continue unless rescinded, or terminated by notice.

The powers conferred upon the Court include the power to determine rates of wages, hours, and other conditions of employment, and to grant preference to members of organisations. Similar authority may be exercised by a conciliation commissioner in so far as it may be exercised by a single judge. Awards or interpretations or variations thereof which would result in the alteration of standard hours or of the basic wage or the principles on which it is computed are determined by the Chief Judge and not less than two other judges. In such cases the Attorney-General, by public notification, may authorise any person, union, or organisation interested in the matter to apply to the Court for liberty to be heard and to examine and cross-examine witnesses.

An amending Act in 1930 made provision for the appointment of conciliation committees consisting of members representing in equal numbers the employers and organisations of employees and a chairman. These provisions were rendered practically inoperative by a decision of the High Court in regard to the validity of certain sections of the amending Act.

Special tribunals may be appointed under the Industrial Peace Acts of 1920 consisting of an equal number of representatives of employers and employees, and a chairman, to exercise, in respect of the industry concerned, similar jurisdiction to that of the Court of Conciliation and Arbitration. An award or order of a special tribunal, or an agreement made at a conference and filed with the Industrial Registrar, is binding on the parties, and may be enforced as an award of the Court.

The large enterprises subject to federal awards and agreements include coalmining, shipping, pastoral industries, shipbuilding, timber trades, clothing factories, breweries, glass works, and rubber works, and large sections of the metal and printing trades and of the railway and tramway employees.

At 31st December, 1930, there were 82 awards of the Commonwealth Court in force in New South Wales, also 42 agreements filed under the provisions of the Commonwealth Act.

CROWN EMPLOYEES AND ARBITRATION.

Under the State Arbitration system, employees of the State Government and of governmental agencies, with the exception of the police, have access to the ordinary industrial tribunals for the settlement of disputes and the regulation of the conditions of their employment. It is prescribed moreover that conditions or wages fixed by award for employees of the Crown may not be less favourable than those for other employees doing substantially the same class of work, and the fact that employment is permanent and additional privileges are allowed to Government employees may not of itself be regarded as a substantial difference.

The police are excluded from the jurisdiction of the industrial tribunals, and are controlled by the Commissioner of Police. An appeal tribunal has been constituted to determine appeals against his decisions in regard to promotions and punishments. The tribunal is constituted by a Judge of the District Court, with or without assessors.

The rates of pay and terms and conditions of employment in the public services of the Commonwealth are regulated by a special tribunal constituted by an arbitrator appointed by the Governor-General to deal exclusively with the public service. There is no appeal against the decisions of the arbitrator, but they do not come into operation until they have been laid before both Houses of the Commonwealth Parliament, and they may be disallowed by a resolution of either House.

It has been decided by the High Court of Australia that the Commonwealth Court of Conciliation and Arbitration may make awards in respect of State employees, and it has been the practice of the Court to make an award in such cases unless the rates paid and the conditions of work conform with the usual rules and conditions laid down by the Court.

During the years 1930 and 1931 the salaries of Crown employees in the State and Federal services were subject to special reductions prescribed by the legislature for purposes of economy. A general reduction at the rate of 8½ per cent. was made in respect of salaries in the State service during the year ended June, 1931. The reduction at this rate is being continued during the current year 1931-32 in respect of salaries not exceeding the living wage, and the higher salaries have been reduced according to a scale in which the rates range from 15 per cent. on the part of the salary which exceeds £200 per annum to 32½ per cent. on the part over £1,500.

In the service of the Commonwealth Government a deduction was made in terms of the Financial Emergency Act from the salaries of all officers in July, 1931, to cover a decrease in the cost of living, viz., men and married minors £34, women £28, juniors £17; also a proportionate reduction ranging from 3 per cent. to 24 per cent. according to salary. In both State and Federal services provision was made to limit the reductions in special cases.

HOURS OF WORK.

Prior to the introduction of industrial arbitration, hours of work in New South Wales were restricted by legislation in order to safeguard the health of the workers, especially women and juveniles. Thus the Factories and Shops Act has prohibited the employment in factories of youths under 16 and of women for more than 48 hours in any week, though overtime not exceeding 3 hours in any day is allowed on 30 days in a year, or by written permission of the Minister, on 60 days.

Hours of employment in shops have been restricted by the operation of the Early Closing Acts. Except in the case of specified shops, only one late shopping night is allowed, when the closing hour must not be later than 10 o'clock. On four days a week the shops must close at 6 o'clock, and on one day at 1 o'clock. In the Metropolitan and Newcastle districts, and in the country shopping districts in the county of Northumberland, the shops are subject to the Saturday Half-holiday Act; the late closing night is on Friday, and the 1 o'clock closing on Saturday. In other districts the half-holiday is either on Wednesday with the late night on Saturday, or on Saturday with the late night on Friday.

With the development of the arbitration system the actual working hours in organised trades and callings became subject to awards and agreements, and special legislation has been enacted for the direction of the industrial

tribunals in making awards and agreements under the State jurisdiction. Thus the Eight Hours Act of 1916 prescribed a standard working week of 48 hours. In 1920 the Act was amended and a special court was constituted in February, 1921, to consider applications for a reduction of working hours, with the result that the 44-hours week was adopted in many industries. In September, 1922, the amending Act of 1920 was repealed and the Court of Industrial Arbitration restored the 48-hour week in most of these cases.

The 44-hours week was in operation again, except in rural industries, from 4th January, 1926, to 15th June, 1930. Then the law was amended to extend the hours to 48 per week, and provision was made for part-time employment, to enable the available work to be shared or "rationed" amongst the employees. Authority was given also for agreements between employers and employees for a week of forty-four hours at eleven-twelfths of the rates of pay fixed by award or agreement.

Six months later, after a change of Government, the 44-hours week was restored in terms of the Industrial Arbitration (Eight Hours) Further Amendment Act, 1930. This Act prescribes that the ordinary hours in industries—with the exception of coal-mining and ocean shipping, and of rural industries as defined by the Industrial Arbitration Act—may not exceed 8 per day, 44 per week, 88 in fourteen consecutive days, or 176 in twenty-eight consecutive days. It is provided, however, that the time worked in a day may exceed 8 if a short day or less working days than six per week are adopted by award or agreement. Thus allowance is made for the practice, adopted in many cases, of completing the full week's work in five days, leaving Saturday a whole holiday. Overtime may be permitted under certain conditions, or it may be prohibited or restricted for the purpose of relieving unemployment by distributing the work available.

The Act provides also that rates of wages fixed by award or agreement upon a weekly basis may not be reduced by reason only of a reduction in hours in accordance with the Act, and that the rates fixed upon a daily or hourly basis must be increased so that each employee working full time as reduced will receive the same amount of wages as for full time under the provisions of the award or agreement.

By this Act the provisions of the amending Act passed in June, 1930, in relation to the rationing of employment were repealed and specific authority for rationing is conferred in respect of Crown employees only, so that the application of the system in other employment is liable to be restricted in terms of awards, agreements, etc.

The hours of work in the coal-mines are eight hours bank to bank, inclusive of one half-hour for meal time, on Monday to Friday, and six hours bank to bank, inclusive of one half-hour for meal time, on Saturday, Sunday, and holidays, the usual number of shifts being eleven per fortnight. The hours are reckoned from the time the first person working on a shift leaves the surface to the time the last man on the same shift returns to the surface.

The power of the Commonwealth Court of Arbitration and Conciliation in regard to hours is restricted by the condition that the question of varying the hours which have been adopted in an industry must be decided by the Full Bench. Until February, 1927, the general practice had been to adhere to the standard hours of 48 per week, and shorter hours were granted only in exceptional cases, *e.g.*, to miners working below ground, to builders' labourers who are required to spend much time in travelling to jobs, and to clothing factory hands, who are mostly women.

A claim by the Amalgamated Engineering Union for a 44-hours week was approved by the Full Court in February, 1927, and subsequently hours were reduced in some other industries—*e.g.*, the printing trades, and certain occupations in gas works. Nevertheless, the 44-hours week was not generally adopted in the Commonwealth jurisdiction, and in December, 1928, the Full Court decided that 48 hours per week should be the standard working time in the timber industry, though 44 hours had been customary in some sections of the trade.

Public Holidays.

Certain days are observed as public holidays, on which work is suspended as far as practicable. In continuous processes and in transport and other services where the employees work on holidays they receive recreation leave in lieu thereof, and in some cases extra wages.

The days which are observed generally throughout the State as public holidays are as follows:—1st January (New Year's Day), 26th January (the Anniversary of the first settlement in Australia), Good Friday, Easter Monday, 25th April (Anzac Day), Christmas Day, 26th December (Boxing Day), and the King's Birthday.

If a public holiday falls upon a Sunday, or if Boxing Day falls upon a Monday, the following day is a holiday. If the King's Birthday falls upon any day of the week other than Monday the following Monday is a holiday in lieu thereof.

In addition to the days listed above, the day after Good Friday and the first Monday in August are bank holidays, observed in respect of banks and many other financial institutions and public offices. The Governor may appoint by proclamation a special day to be observed as a public holiday throughout the State or any part of the State. It is customary in certain districts to proclaim a day in each year as Eight Hour Day. In the county of Cumberland the first Monday in October is Eight Hour Day.

PREFERENCE TO UNIONISTS.

The laws relating to industrial arbitration confer upon both State and Federal industrial tribunals the authority to embody the principle of preference to unionists in their awards, etc., but this may not prevent the employment of returned soldiers or sailors.

The State industrial tribunals may prescribe by award that preference of employment be given to members of a union, and it is a general rule to grant preference to a union which substantially represents the trade concerned. By the Industrial Arbitration (Amendment) Act of 1926 the tribunals were authorised to award "absolute preference," and many awards contained provisions which practically precluded non-unionists from engagement or made it a condition that when such persons were engaged they must apply for admission to an appropriate union. An Amending Act in 1927 nullified such provisions of current awards, and limited the authority of the tribunals so that preference may be prescribed only as between unionists and other persons offering or desiring service or employment at the same time.

The Commonwealth Court is authorised to grant preference to members of registered organisations, but it is the usual practice to refuse to order preference if the respondents undertake not to discriminate against unionists.

APPRENTICESHIP.

Conditions of apprenticeship in New South Wales are subject to general regulation in terms of the Apprentices Act of 1901, which prescribes that children may not be indentured until they reach the age of 14 years, the maximum term of apprenticeship being seven years. The hours of work may not exceed 48 per week, except in farming occupations and in domestic service.

The Industrial Arbitration Act of New South Wales confers upon the industrial tribunals authority to attach certain conditions to the employment of apprentices, the term being defined to include all employees under 22 years of age serving a period of training under indenture or other written contract for the purpose of rendering them fit to be qualified workers in an industry. Under this authority the conditions in nearly all the skilled occupations in which apprenticeship is a recognised custom were determined by industrial awards and agreements, until the year 1923, when the Board of Trade, in the exercise of its powers in regard to the control of apprenticeship, issued regulations in respect of many occupations, and the relevant provisions of awards and agreements ceased to have effect.

In April, 1926, when the Board of Trade was dissolved, apprenticeship in each industry became a matter for determination by the Conciliation Committee concerned, and provision was made for the continuance of the Board's regulations until varied or rescinded by a committee.

Contracts of apprenticeship must be registered. The normal period of apprenticeship is usually five years in the case of boys entering the trade before reaching the age 17 years. Shorter periods are arranged for those entering at older ages, and such apprentices are required usually to attend trade or continuation schools, and, in some cases, to pass through courses of intensive training. In several occupations adult apprenticeship may be allowed under special contract. To obviate difficulties which arise from the intermittent employment of those qualified to undertake the training of apprentices, it is provided that apprentices may be transferred from one master to another, and that organisations of employers and of operatives, by official representatives, may be masters of apprentices. In some occupations the proportion of apprentices to journeymen is fixed. The rates of wages are prescribed for the apprentices in each trade. The hours and other conditions of employment are those determined by the industrial awards relating to the trade.

At 31st December, 1930, there were subsisting 6,064 indentures of apprenticeship which had been lodged with the Industrial Registrar in accordance with regulations of the Board of Trade or awards under the Industrial Arbitration Act. The number at 31st December, 1931, was 4,573. The following statement shows the distribution of these apprenticeships amongst the various trades:—

Trades.	Dec., 1930.	Dec., 1931.	Trades.	Dec., 1930.	Dec., 1931.
Baking	217	219	Glass-working	36	37
Boilermaking... ..	244	170	Hairdressing	184	124
Bootmaking	197	183	Jewellery, Electroplating, etc.	38	36
Building	1,574	1,227	Metal Moulding	100	72
Butchering	28	23	Pastrycooks	108	106
Coachmaking (Rail) ...	27	12	Printing	431	293
„ „ (Road)	161	108	Sheet Metal-working and Tin-		
Electrical	928	749	smithing	32	22
Engineering	923	576	Ship and Boat building ...	28	22
Farriery	55	41	Other	110	98
Furniture	619	430			
Gas meter making ...	24	25	Total	6,064	4,573

The foregoing figures do not include indentures of apprenticeship which are not required by award or regulation to be filed with the Industrial Registrar.

INDUSTRIAL DISLOCATIONS CONTINGENT UPON DISPUTES.

Under the State law strikes may be recognised as lawful if fourteen days' notice of the intention to strike has been given to the Minister for Labour and Industry, except strikes by employees of the Government or of municipal and shire councils, or by workers engaged in military or naval contracts. Strikes are illegal also in industries in which conditions of employment are regulated by award or agreement, unless the award has been in operation for at least twelve months and the union has decided by a secret ballot to withdraw from its conditions. When a strike is contemplated, or at any time during a strike, the Minister may direct that a secret ballot be taken in order to ascertain whether the majority of the unionists concerned is or is not in favour of the strike.

The maximum penalty for being concerned in a lockout is £1,000, and for an illegal strike £500 in the case of a union, and £50, or six months' imprisonment, in regard to an individual. Penalties may be imposed also for obstructing a ballot, for picketing in connection with an illegal strike, or for inducing persons to refrain from handling any commodity during a strike.

Provisions of the Commonwealth Conciliation and Arbitration Act by which lockouts and strikes were prohibited under severe penalty were repealed in August, 1930. Lockouts and strikes may be prohibited, however, by the terms of an award and the insertion of a clause to this effect renders the parties liable to penalty for breach of the award if they take part in a lockout or strike. The maximum penalty is £100 in the case of an organisation, and £10 in the case of an individual.

Particulars of Dislocations.

Records relating to industrial dislocations contingent upon disputes in all classes of industry in New South Wales are kept by the Department of Labour and Industry. Data are obtained principally from reports by police officers, departmental inspectors, and managers of coal-mines, also from managers of other industrial establishments, from union secretaries, and from newspapers and trade journals.

In the compilation of the tables relating to industrial dislocations contingent upon disputes, it is the rule of the Department of Labour in counting the number of dislocations to consider that the cessation of work contingent upon any one dispute constitutes only one dislocation. For example, if a section of employees in an industry ceases work and the dispute extends subsequently to other employees in that industry in the same or in other localities, one dislocation is recorded. On the other hand, if employees in other industries cease work in sympathy with the militant unions, the sympathy strikes are counted as another dislocation, that is, one in addition to the original dislocation.

In the coal-mining industry, when the action of one section of the employees has caused a complete cessation of the operations of the mine, the number counted is the full complement of the mine. Where a section has ceased work and the operations of the mine have continued, only those who ceased work have been included as workers involved.

In calculating the duration, only actual working days, viz., days on which work would be performed ordinarily, have been counted, but apparently no allowance has been made for intermittency of employment,

and it has been assumed that if the dispute had not occurred work would have been continuous during the period of its currency. Consequently the figures are inflated, particularly in the mining industry, where there is considerable intermittency due to causes other than disputes.

The following statement shows, so far as can be ascertained, the number of workers involved, and, subject to the remarks above with respect to intermittency, the time lost by industrial dislocations contingent upon disputes in each year since 1921. Particulars are shown separately regarding dislocations which originated during the year specified, and those which commenced at an earlier date:—

Year.	Dislocations.			Workers Involved.			Duration—Working Days.		
	An- terior.	New.	Total.	Anterior.	New.	Total.	Anterior.	New.	Total.
1921	4	555	559	20,597	169,510	190,107	227,645	438,273	665,918
1922	3	479	482	358	188,861	189,219	733	587,726	588,459
1923	2	250	252	957	88,739	89,696	28,143	861,419	889,562
1924	4	520	524	484	185,268	185,752	28,634	611,135	639,769
1925	6	644	650	4,192	239,320	243,512	29,436	593,668	923,104
1926	13	379	392	2,368	211,366	213,734	127,275	1,304,246	1,431,521
1927	3	457	460	650	178,920	179,570	53,250	841,702	899,952
1928	6	276	282	904	100,937	101,841	29,236	470,546	499,782
1929	2	330	332	567	100,676	101,243	4,303	3,209,761	3,214,064
1930	6	185	191	11,136	52,045	63,181	1,210,266	339,783	1,550,049
1931	5	99	104	1,302	23,772	28,074	211,380	103,661	315,041

The loss in working days during 1931 was the smallest in any year of the period—1914 to 1931—for which complete records are available.

A classification of the dislocations according to mining and non-mining industries reveals the fact that disputes leading to a suspension of work occur more frequently and are more extensive in the mining industry than in any other. Moreover, the time lost in coal-mining, as a general rule, exceeds the aggregate loss in other industries. In calculating the duration of the dislocations, however, allowance is not made for intermittency, and it is probable that the over-statement arising from this factor is far greater in coal-mining than in other occupations, especially in recent years, when the demand for coal has been below normal. For instance, in 1928 the loss of working time in coal-mines attributed to industrial disputes was 369,778 days, and the loss arising from slackness of trade and other causes was 2,337,500 days. In 1929 the principal collieries in the northern district were closed in March owing to a dispute, and were still idle at the end of the year. As a result the loss of working days attributed to industrial strife in coal-mining in 1929 increased to 2,476,536 days, while the loss due to other causes (which are inoperative during a dispute dislocation) declined to 751,865 days.

In analysing statistics of industrial disputes, especially if they are being compared with those of other countries, careful consideration should be given to the method of computation and the definition of terms, as shown on the preceding page, because the practices vary greatly in the different countries in which such data are published.

The following statement shows the particulars of the dislocations in mining and in other industries which commenced in each of the last eleven years. The working days during each dislocation have been assigned to the year in which the dislocation commenced, and for this reason the figures differ from those in the previous table, which show the working days classified according to the year specified.

Year.	Dislocations.			Workers Involved.			Duration—Working Days.		
	Mining.	Non-mining.	Total.	Mining.	Non-mining.	Total.	Mining.	Non-mining.	Total.
1921	531	24	555	145,282	24,228	169,510	360,652	78,354	439,006
1922	417	62	479	171,327	17,534	188,861	470,972	144,897	615,869
1923	197	53	250	86,110	2,629	88,739	878,820	11,233	890,053
1924	483	37	520	173,160	12,078	185,268	537,040	103,531	640,571
1925	555	89	644	218,034	21,286	239,320	741,825	280,968	1,022,793
1926	315	64	379	148,210	63,156	211,366	1,010,052	350,594	1,360,646
1927	366	91	457	153,095	25,825	178,920	710,731	160,207	870,938
1928	231	45	276	93,438	7,499	100,937	346,123	128,726	474,849
1929	300	30	330	94,692	5,984	100,676	3,681,701*	746,486	4,428,187
1930	158	27	185	44,453	7,592	52,045	466,206*	76,797	543,003
1931	81	18	99	25,116	1,656	26,772	95,932	7,729	103,661

* Includes working days up to 31st December, 1931, in one dispute pending at that date.

The loss in the mining industry attributed to disputes which commenced in 1929 included 3,463,922 working days—2,300,772 in 1929 and 1,163,150 in 1930—on account of the closing of the northern collieries from 1st March, 1929, to 3rd June, 1930.

The days lost in non-mining industries in 1925 included 172,000 days attributed to a dispute regarding wages between the owners and the crews of British oversea vessels engaged under articles signed in ports outside Australia. A serious dispute occurred in the timber industry in January, 1929, following an extension of hours by award of the Commonwealth Court of Conciliation and Arbitration. The dislocation continued until October.

It is difficult to obtain reliable information regarding the cost of industrial dislocations. An estimate of the losses in wages in each of the eleven years is shown below, the method adopted being as follows:—The working days lost were classified into the fourteen industrial groups, for which average rates of wages are shown subsequently in this chapter, the days being assigned to the year in which the dislocation commenced; the days lost in respect of each group in each year were then multiplied by the rate of wages which is the mean of the average rate for adult males in that group as at the end of that year and at the end of the previous year.

Year.	Duration—Working Days.			Estimated Loss of Wages.		
	Mining.	Non-mining.	All Industries.	Mining.	Non-mining.	All Industries.
	Days	Days.	Days.	£	£	£
1921	360,652	78,354	439,006	317,100	66,600	383,700
1922	470,972	144,897	615,869	411,100	115,400	526,500
1923	878,820	11,233	890,053	765,300	9,000	774,300
1924	537,040	103,531	640,571	469,900	82,800	552,700
1925	741,825	280,968	1,022,793	663,000	232,000	895,000
1926	1,010,052	350,594	1,360,646	928,000	295,800	1,223,800
1927	710,731	160,207	870,938	660,400	136,900	797,300
1928	346,123	128,726	474,849	323,000	109,700	432,700
1929	3,681,701*	746,486	4,428,187	3,443,800	668,500	4,112,300
1930	466,206*	76,797	543,003	430,300	63,600	493,900
1931	95,932	7,729	103,661	86,100	6,000	92,100

* Includes working days up to 31st December, 1931, in one dispute pending at that date.

Apart from the matter of intermittency which is discussed on the previous page, these quotations of estimated loss of wages are open to question in so far as the records are deficient in regard to the sex and age of the workers involved, therefore allowance has not been made for the proportion of women and juveniles. The proportion is small, however, as dislocations have been relatively unimportant in industries in which the majority of the women and juvenile workers are employed. Another factor for which allowance has not been made is the extent to which losses in wages during a dislocation may have been compensated by higher rates of pay after resumption of work.

Information is given in the following table regarding the duration of the dislocations which originated during the year 1931:—

Duration in Working Days.	Dislocations.	Workers Involved.	Duration—Work Days.
Under 1 day	5	944	276
One day	48	13,996	13,996
Over 1 and not exceeding 7 ...	33	8,464	30,921
„ 7 „ „ 14 ...	5	1,790	16,176
„ 14 „ „ 21 ...	4	931	16,523
„ 21 „ „ 28 ...	2	58	1,123
„ 28 „ „ 50 ...	2	589	24,646
Total	99	26,772	103,661

A very large proportion of the dislocations are of brief duration. The number of workers affected by dislocations lasting one day or less during 1931 was 14,940, and the loss of working days 14,272.

The causes of the disputes which led to dislocations in the mining industries and in the non-mining group during 1931 are classified in the following statement. Dislocations arising from the employment of non-union labour are included in the category, "employment of persons, etc." Those pertaining to the recognition of a union and the enforcement of union rules are classified under the head of "trade unionism."

Cause.	Mining.			Non-Mining.			All Industries.		
	Dislocations.	Workers involved.	Duration—Working days.	Dislocations.	Workers involved.	Duration—Working days.	Dislocations.	Workers involved.	Duration—Working days.
Wages	14	5,706	48,846	4	346	1,101	18	6,052	49,947
Hours	3	1,025	2,075	2	204	122	5	1,229	2,197
Working conditions ..	18	6,138	16,347	2	116	937	20	6,254	17,334
Employment of persons ..	27	6,468	21,056	9	790	5,319	36	7,258	26,375
or classes of persons ..	3	544	946	..	..	..	3	544	946
Trade unionism	3	1,279	2,879	..	..	..	3	1,279	2,879
Sympathy	7	2,733	2,463	..	..	..	7	2,733	2,463
Miscellaneous	6	1,223	1,320	1	200	200	7	1,423	1,520
Not stated .. ..	..	..	..	..	..	..	..	..	..
Total	81	25,116	95,932	18	1,056	7,729	99	26,772	103,661

In the mining industries disagreements about wages involved more than half of the loss of working time during 1931, and in the non-mining group 69 per cent. of the loss was due to disputes about the employment of persons or classes of persons.

By extending the analysis of the causes of disputes over a period of five years from 1927 to 1931 it is found that in the mining industries 80 per cent. of the time lost was due to disagreements regarding wages and 9 per

cent. to those relating to working conditions. Disputes in reference to the employment of persons or classes of persons were the cause of 7 per cent. of the loss, and those relating to hours, 1 per cent.

In non-mining industries disputes relating to hours showed a proportion of 70 per cent., and wages 12 per cent., the employment of persons 11 per cent., and working conditions 7 per cent. during the quinquennium.

Taking all classes of industries together, the experience of the quinquennium showed that the loss of working time incurred in disputes about wages was about 68 per cent., in disputes relating to hours 13 per cent., working conditions 9 per cent., and employment of persons or classes of persons 8 per cent.

INDUSTRIAL HYGIENE.

The trend of legislation, the organisation of public services for research and propaganda, and the development of private schemes for the promotion of industrial welfare show that widespread attention is being directed towards the reduction of the waste occasioned by preventable diseases and accidents arising in the course of industrial employment.

In both State and federal departments of public health a section has been created to deal with industrial hygiene. The work of these units embraces the investigation of occupational diseases, the supervision of health conditions in industry, and the dissemination of advice regarding measures which safeguard the health of the workers.

Legislation in regard to industrial hygiene is contained in a number of Acts which apply to various classes of industry. The Factories and Shops Act, 1912, and its amendments, impose upon occupiers of factories the obligation of providing suitable buildings and of keeping the premises clean, of securing adequate protection against fire, and of safeguarding dangerous machinery. The employment of women and juveniles and of out workers is subject to limitations, and the employment of workers without remuneration is prohibited. Factories must be registered annually, and inspection, with the object of securing compliance with the law, is conducted by a staff of inspectors attached to the Department of Labour and Industry. In match factories the use of white phosphorus is prohibited by the White Phosphorus Prohibition Act, 1915.

In terms of the Scaffolding and Lifts Act, 1912, the use of scaffolding, lifts, cranes, hoists, and derricks is subject to supervision in order to minimise the risk of accident. In the Metropolitan and Newcastle districts where the Act is operative regulations have been promulgated regarding the construction of scaffolding, lifts, etc., and lift attendants and crane-drivers must obtain certificates of competency, which are issued by the Department of Labour and Industry.

Under the Rural Workers Accommodation Act, 1926, employers are required to provide proper accommodation for rural workers who reside on the premises. The Act applies in proclaimed districts in respect of workers employed for a period exceeding twenty-four hours in agricultural, dairying, or pastoral occupations.

The conditions under which mining is conducted are subject to regulation in terms of Acts which are described in the chapter relating to the mining industry. The Navigation Acts—State and federal—prescribe conditions to be observed for safeguarding the health of seamen.

Industrial Accidents.

Under various enactments relating to industrial hygiene, employers are required to give notice to the statutory authority of accidents which cause injury to workers, but the available data do not supply a comprehensive record of such occurrences. In factories, employers are required to report accidents causing loss of life; accidents due to machinery or to hot liquid or other hot substance, or to explosion, escape of gas or steam, or to electricity, if an employee is disabled as to prevent him from returning to his work in the factory within forty-eight hours; and other accidents if an employee is disabled for seven days or more.

During the year 1930 six persons died as the result of accidents in factories, and there were 116 accidents which involved permanent injury, and 5,299 causing temporary injury. In the following year there were 19 fatal accidents in factories and 4,190 non-fatal, including 105 which caused permanent injury. There were also 10 fatal and 71 non-fatal accidents in connection with lifts, scaffolding, cranes, and boilers in 1930, and 7 fatal and 28 non-fatal accidents in 1931. Particulars of accidents in mines and of railway and tramway and traffic accidents are shown in other chapters of this Year Book.

WORKERS' COMPENSATION.

Under State legislation provision has been made for the payment of compensation to workers who suffer injury in the course of their employment. The principal enactment is the Workers' Compensation Act, 1926-29, which commenced on 1st July, 1926.

Special provision for workers who are disabled by the effects of silica dust is made under the Workmen's Compensation (Silicosis) Act, 1920, as amended in 1926, and for certain cases of disablement by pneumoconiosis, tuberculosis, and lead poisoning in the Broken Hill mines under the Workmen's Compensation (Broken Hill) Act, 1920-1929, and the Workmen's Compensation (Lead Poisoning—Broken Hill) Acts, 1922 and 1924.

Compensation to members of the police force, killed or disabled by injury in the execution of duty, is payable in terms of the Police Regulation (Superannuation) Act, which is described in the section of this Year Book relating to the police. The amount of compensation is determined by the Governor.

The laws of the Commonwealth provide for compensation to men in a particular class of work, such as that of seamen, which is subject to special risks, and to workers in the service of the Commonwealth Government.

Under the Workers' Compensation Act, 1926-29, compensation is payable to manual workers irrespective of the amount of their earnings, and to other classes of employees whose remuneration does not exceed £550 per annum.

A worker and, in the case of his death, his dependents are entitled to compensation if he receives personal injury or contracts a disease, arising out of and in the course of his employment, except a disease caused by silica dust, in respect of which special legislation has been enacted. The Act does not impose the obligation of compensation in respect of an injury unless it disables a worker for at least seven days.

The Act provided for compensation in respect of injuries on the periodic journey between the place of abode and the place of employment until November, 1929, when this provision was repealed.

Where death results from an injury persons wholly dependent on the worker's earnings are entitled to a sum equal to four years' earnings or £400, whichever is the larger, but not exceeding £800. The amount of any

weekly payments or lump sum received by the worker is to be deducted from the amount payable, but may not reduce it below £200. In addition a sum of £25 is payable in respect of each child and step-child under 16 years who was wholly dependent on the worker's earnings.

Where there are no persons totally dependent, compensation, as determined by agreement or by the Workers' Compensation Commission, may be paid to persons partially dependent. Where there are no dependants reasonable burial expenses up to £30 are payable.

In cases of total or partial incapacity the compensation payable includes: (a) weekly payments, and (b) the cost of medical and hospital treatment and ambulance service.

The maximum weekly payment in respect of the worker is two-thirds of the average weekly earnings up to £3 a week. Where the weekly earnings of an adult worker are less than £3 he may be paid 100 per cent. up to £2 per week and a minor earning less than 45s. a week may receive as compensation 100 per cent. of his earnings up to 30s. a week. In addition, a worker is entitled to £1 a week in respect of his wife and 8s. 6d. per week in respect of each child and step child under 14 years totally or mainly dependent upon his earnings. Where no compensation is payable in respect of a wife, a worker may receive £1 a week in respect of one female dependant, who is an adult and is caring for a child of the worker under 14 years, or is a member of his family over 14 years. Where no compensation is payable in respect of children, a worker may receive 8s. 6d. a week in respect of each dependent brother and sister under 14 years. The total weekly payments to the worker and his dependants may not exceed his average weekly earnings, or £5 whichever is the smaller amount, and the total liability of the employer in respect of weekly payments may not exceed £1,000.

The employer's liability for ambulance service rendered to a worker is limited to two guineas unless the Commission allows a further sum on account of distance travelled. For medical treatment the maximum is £25 in respect of the same injury. For hospital treatment the maximum is £25, treatment as an out-patient being calculated at a rate of 3s. per treatment up to one guinea per week, and as an in-patient at a rate not exceeding three guineas per week.

With the consent of a worker, the liability for a weekly payment may be redeemed wholly or in part by the payment of a lump sum determined by the Commission, having regard to the worker's injury, age, occupation, and diminished ability to compete in an open labour market. By agreement or order of the Commission the lump sum may be invested or applied for the benefit of the person entitled thereto. The Act contains a list of amounts which, if the worker so elects, may be paid for specific injuries.

The Act prescribes that every employer must insure with a licensed insurer against his liability to pay compensation, unless he is authorised by the Workers' Compensation Commission to undertake the liability on his own account. Insurers transacting workers' compensation business must obtain a license from the Commission, and must deposit with the State Treasurer a sum of £6,000 or £10,000 according to premium income as a guarantee that compensation payments will be met when due. Self-insurers must deposit an amount determined by the Commission.

The Workers' Compensation Commission consists of a chairman, who must be a barrister-at-law of five years' standing and who has the same status as a District Court judge, and two other members appointed by the Governor. An additional member may be appointed as deputy-chairman.

The Commission exercises judicial functions in regard to the determination of compensation claims, and its decisions are final. The Commission is required to furnish workers and employers with information as to their rights and liabilities under the Act, and to make reasonable efforts to conciliate the parties to any dispute which may arise. The Commission may appoint medical practitioners as referees, and may summon a medical referee to sit as an assessor, or may submit any matter to a medical referee or a board of medical referees for report.

Salaries and other expenses incurred by the Commission are payable from a fund constituted for the purpose by contributions from insurers, who are required to pay thereto a percentage, fixed by the Commission, of their total premiums in respect of workers' compensation insurance.

Facilities to enable employers to insure are provided by the State Insurance Office as well as by private insurers.

Returns supplied to the workers' compensation by insurers indicate that over 50,000 claims for compensation under the Workers' Compensation Act of 1926 were admitted during the year ended 30th June, 1927, and that the approximate number of workers entitled to compensation in the subsequent years was 61,000, 60,130, 49,842, and 37,765 respectively. Some groups of employees are paid full wages in certain cases of illness or accident, and, as a general rule, claims for compensation are not made in respect thereof unless they result in death or serious disability.

From particulars recorded by the Commission the following summary has been prepared, some cases being omitted in each year owing to incomplete data:—

Year.	Accidents.			Industrial Diseases.			Total Cases Reported.	Compensation Paid during Year.
	Fatal.	Non-Fatal.	Total.	Fatal.	Non-Fatal.	Total.		
Males.								
1926-27	86	27,244	27,330	1	188	189	27,519	439,980
1927-28	136	42,114	42,250	5	296	301	42,551	721,288
1928-29	138	41,630	41,768	6	241	247	42,015	796,931
1929-30	138	39,457	39,595	10	271	281	39,876	945,846
1930-31	86	27,094	27,180	8	157	165	27,345	718,333
Females.								
1926-27	...	911	911	...	65	65	976	6,557
1927-28	2	1,675	1,677	...	76	76	1,753	12,678
1928-29	1	2,003	2,004	...	179	179	2,183	19,381
1929-30	...	2,094	2,094	...	121	121	2,215	24,378
1930-31	...	1,516	1,516	...	77	77	1,593	22,587

The compensation paid in each year after 1926-27 includes payments in respect of cases continued from earlier years.

The decline in the number of claims for compensation in 1929-30 and 1930-31 was due mainly to a diminution in the volume of employment, and in a smaller degree to a reduction in benefits under an amending law which came into force in November, 1929.

Of the compensation paid in 1930-31 in respect of male workers, £75,150 were paid for medical treatment and £109,395 in weekly payments to dependants. The corresponding figures for 1929-30 were £91,347 and £141,345.

Compensation in respect of female workers included £5,329 for medical treatment and £424 to dependants in 1930-31, and medical expenses £5,032 and dependants £90 in 1929-30.

It has been estimated by the Workers' Compensation Commission that the cost of workers' compensation insurance under the Workers' Compensation Act, 1926-29, was £1,078,902 during the year 1930-31.

Compensation in terms of the Workmen's Compensation Act, 1916-1920, amounting to £3,238, was paid during 1930 in respect of 39 cases in which injury was sustained before the repeal of that law in 1926.

The Workmen's Compensation (Lead Poisoning—Broken Hill) Acts, 1922 and 1924, provide for the payment of compensation in respect of lead poisoning amongst men who had been employed by Broken Hill mine owners prior to 31st May, 1919, when mining operations were interrupted as a result of an industrial dispute. The duties of certifying surgeon or medical referee are entrusted to a board consisting of three medical practitioners appointed by the Governor, including one nominated by the mine owners and one by the workmen.

In terms of the Workmen's Compensation (Broken Hill) Acts, 1920 to 1929, which will remain in force until Parliament otherwise provides, compensation is payable in respect of persons who contracted pneumoconiosis or tuberculosis by reason of employment in the Broken Hill mines. Compensation in respect of those who were employed in the mines after the commencement of the Act of 1920 is paid by the mine-owners, and at 30th June, 1931, payments were being made in respect of 46 cases, including 41 employees who were living.

Payments to other persons eligible under Workmen's Compensation (Broken Hill) Acts are made from a fund which is maintained by contributions—one-half by the Government of New South Wales and one-half by the mine-owners. At 30th June, 1931, compensation was payable from the fund in respect of 660 workers, viz., 399 who were living and the dependants of 261 who had died. The amount paid as compensation during 1930-31 was £116,082, funeral and medical expenses amounted to £819, and fees and administrative expenses to £6,881. The total disbursements from the fund from 1st January, 1921, to 30th June, 1931, amounted to £893,814.

The Workmen's Compensation (Silicosis) Act, 1920, as amended by the Workers' Compensation Act, 1926, empowers the Government to establish a scheme for the payment of compensation with respect to workmen who suffer death or disablement owing to fibroid phthisis or silicosis of the lung, or other diseases of the pulmonary or respiratory organs caused by exposure to silica dust. Provision may be made by the scheme for the establishment of a general compensation fund to which employers in any specified industry involving exposure to silica dust may be required to contribute. In this manner liability in respect of a disease contracted by a gradual process may be distributed amongst the employers concerned.

A scheme of compensation for stonemasons, quarrymen, rock-choppers, and sewer miners employed in the county of Cumberland, entitled the Workmen's Compensation (Silicosis) Scheme No. 1, 1927, was gazetted in September, 1927, and amendments in June, 1929, and March, 1930.

The maximum amount of compensation payable in cases of death is £500; and in the cases of incapacity a weekly payment up to 66½ per cent. of the workman's average weekly earnings during the twelve months preceding

the date of his injury, but not exceeding £3; the maximum liability in each case being £750. The compensation fund into which the employers pay contributions at the rate of 3 per cent. on wages is administered by a joint committee appointed by the Minister for Labour and Industry. Up to 30th June, 1931, compensation had been awarded in respect of 109 workmen, and at that date compensation was being paid in respect of 102 workmen, viz., 88 who were incapacitated and 14 deceased whose dependants numbering 25 were beneficiaries. The amount of compensation paid in 1930-31 amounted to £12,770.

WAGES.

For the protection of juvenile labour a law was passed in 1908 to prevent the threatened development in unorganised trades of a system under which young workers were being employed without remuneration. It provides that a minimum wage of not less than 4s. per week must be paid to factory workers, shop assistants, and others.

In recent years the minimum rates of wages for nearly all classes of juvenile and of adult workers have been fixed by industrial tribunals exercising statutory authority.

The Living Wage.

Early legislation empowering industrial tribunals to fix minimum wages, as incidental to the preservation of industrial peace, did not give any direction regarding the principles to be observed in the exercise of the function. In practice, the tribunals adopted the principle of basing their determinations on the living wage, which must be sufficient to secure to the unskilled worker a reasonable standard of living, as distinct from the secondary wage, which is remuneration for skill or other special qualifications.

Details regarding the development of the living wage principle since it was defined by Mr. Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration, in the well-known *Harvester case* in 1907, are published in earlier issues of the "Year Book," with particulars relating to the standard of living and the living wage determinations. In this issue only a brief description of the existing practice is inserted.

In the State jurisdiction, the living wages for men and for women are fixed by an industrial tribunal, after public inquiry regarding the average cost of living, the declarations having statutory force as the basis of industrial awards and agreements relating to wages. For the purpose of the declarations which were made prior to December, 1926, the living wage for adult males was defined as the standard wage which would do neither more nor less than enable a worker of the class to which the lowest wage would be awarded to maintain himself, his wife, and two children, in a house of three rooms and a kitchen, with food, plain and inexpensive, but quite sufficient in quantity and quality to maintain health and efficiency and with an allowance for miscellaneous expenses.

In 1927, as a result of a recommendation by the Industrial Commission, a system of family allowances was introduced in terms of the Family Endowment Act, which is described on page 391 of this Year Book. The allowances, at a maximum rate of 5s. per week for each dependent child, were supplementary to the living wage fixed by the Industrial Commission, and the Industrial Arbitration Act was amended to provide that the living wage for men be based on the requirements of a man and his wife without children.

Notwithstanding this amendment, the first declaration made by the Commission after it became law fixed the living wage for men in June, 1927, at £4 5s. per week—which represents the rate fixed by its previous declaration in December, 1926, with an addition to cover an increase in prices during the interval. Apparently the Commission regarded as a vested

right, which "ought not to be disturbed without some irresistible necessity" the standard of living which had been available for a number of years to the married couple without dependent children where the man had been receiving the living wage.

Before the living wage again became a matter for determination, the Court had been reconstituted; and in October, 1929, the new tribunal, consisting of the President and two judges, decided by a majority verdict that a substantial reduction—from 85s. to 72s. 6d.—would ensue upon the practical application of the amended law, which excluded children from the family unit on which the wage for adult males was based. The Commission postponed the actual declaration for a period of fourteen days to enable Parliament, then in session, to consider the situation, and legislation was passed directing that the wage be fixed by adding to the amount 72s. 6d. per week, the extra cost of maintaining one child under 14 years, and that subsequent declarations be based on the requirements of a man, his wife, and one dependent child. At the same time the endowment payable to each family was reduced by excluding one of the children who would have been eligible but for the amending law. In a subsequent declaration the Commission fixed the rate at 82s. 6d. per week.

A living wage for women was fixed for the first time under the State industrial arbitration system in 1918, when the Board of Trade conducted an inquiry into the matter. The standard adopted was the minimum wage to cover the cost of living of the adult female worker of the lowest paid class, but having no other responsibility and living away from home in lodgings. The rate declared in December, 1929, was fixed as a percentage of the living wage for men, in terms of the Industrial Arbitration (Living Wage) Amendment Act, 1929.

The variations in the living wages, as determined by the industrial authority constituted under State legislation, are shown below. The determinations were made by the Court of Industrial Arbitration in the years 1914 to 1916, by the Board of Trade from 1918 to 1925, and later by the Industrial Commission:—

Year.	Men.		Women.	
	Date of Declaration.	Living Wage.	Date of Declaration.	Living Wage.
		£ s. d.		£ s. d.
1914	16th February	2 8 0	...	...
1915	17th December	2 12 6	...	...
1916	18th August...	2 15 6	...	...
1918	5th September	3 0 0	17th December	1 10 0
1919	8th October...	3 17 0	23rd December	1 19 0
1920	8th October...	4 5 0	23rd December	2 3 0
1921	8th October...	4 2 0	22nd December	2 1 0
1922	12th May ...	3 18 0	9th October ..	1 19 6
1923	10th April ...	3 19 0	10th April ...	2 0 0
1923	7th September	4 2 0	7th September	2 1 6
1925	24th August...	4 4 0	24th August...	2 2 6
1927	27th June ...	4 5 0	27th June ...	2 6 0
1929	20th December	4 2 6	20th December	2 4 6

As explained above, the family unit covered by the living wage for men consisted of a man, wife, and two children from 1914 to 1925, inclusive; a man and wife only in 1927, with family allowances for dependent children; and a man, wife and one child in 1929, one child being excluded from family endowment. From 1st July to 31st December, 1930, unemployment relief tax (3d. in the £) was levied on wages where the rate was 30s. per week or over, and since 1st January, 1931, the tax has been 1s. in the £ on wages at 40s. per week or over.

The rates shown in the table did not apply to employees in rural industries, for whom a declaration fixing the living wage at £3 6s. per week was in force for twelve months from October, 1921, and at the rate of £4 4s. per week from June, 1927, to December, 1929. At the last-mentioned date the power of the State industrial tribunals to fix wages for rural workers was rescinded.

Living Wage in Federal Awards.

Under federal jurisdiction, the Commonwealth Court assesses a basic wage for each case in which minimum wages are to be determined. The standard adopted is the Harvester wage, 7s. per day in Melbourne in 1907, which was based apparently on the needs of a man, his wife, and three children, the rate being adjusted to cover variations in the cost of living with a view to ensuring to the lowest paid worker the same standard of comfort as that rate gave in 1907.

Since 1921 it has been a general practice to make the adjustments quarterly or half-yearly during the currency of each award on a basic rate which is ascertained by applying to the Harvester wage the index number of the cost of food, groceries, and rent for the preceding quarter as determined by the Commonwealth Statistician and adding 3s. per week to the result. The sum of 3s. per week, though an arbitrary figure, was chosen after deliberation as a fair addition to cover possible increases in the cost of living in the quarter succeeding each adjustment, and to set off past losses suffered by the workers during the period when wages had been lagging behind the rapidly rising prices. This method of adjustment has been embodied in the majority of federal awards, though there are notable exceptions.

During the year 1930 employers in various industries subject to federal awards applied to the Commonwealth Court of Conciliation and Arbitration for a variation in the method of adjusting the Harvester wage. The Full Court dealt with the applications, as required by law, and decided not to vary the basic wage, nor the method of adjusting it, without further investigation, but in view of the prevailing economic conditions it directed that wage rates in awards covered by the applications should be reduced by 10 per cent. for a period of one year from 1st February, 1931, and thereafter until further order. An exception was made in respect of certain awards such as the pastoral industry award, in which rates had been reduced by more than 10 per cent. in 1930.

The following statement shows the quarterly adjustments in the Harvester wage, according to the index numbers for each capital city, since 1st August, 1928. The rates are stated on a weekly basis, and include the

additional sum of 3s. per week, mentioned above, but account has not been taken of the general reduction of 10 per cent. ordered by the court as from 1st February, 1931:—

Date.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.
1928.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1st August ...	4 12 0	4 7 6	3 19 6	4 7 6	4 4 0	4 3 0
1st November ...	4 10 6	4 6 0	3 19 0	4 5 0	4 5 0	4 2 6
1929.						
1st February ...	4 11 0	4 6 0	4 0 0	4 4 0	4 5 0	4 3 0
1st May ...	4 15 0	4 9 6	4 1 6	4 8 0	4 6 0	4 6 0
1st August ...	4 14 6	4 10 0	4 0 6	4 8 6	4 6 6	4 5 6
1st November ...	4 15 0	4 10 0	4 0 6	4 8 6	4 5 6	4 6 0
1930.						
1st February ...	4 15 6	4 10 0	4 1 0	4 7 0	4 3 6	4 6 6
1st May ...	4 12 0	4 6 0	3 17 6	4 4 0	4 2 6	4 4 0
1st August ...	4 11 0	4 5 6	3 13 0	4 2 6	4 2 0	4 4 0
1st November ...	4 8 0	4 3 0	3 10 6	3 18 0	3 19 0	4 2 0
1931.						
1st February* ...	4 5 0	3 18 0	3 7 6	3 13 6	3 13 6	3 18 0
1st May* ...	4 2 6	3 16 0	3 7 6	3 11 6	3 14 0	3 16 6
1st August* ...	4 1 0	3 13 0	3 7 0	3 9 0	3 13 0	3 14 6
1st November* ...	3 18 6	3 10 6	3 5 0	3 4 6	3 9 0	3 11 6
1932.						
1st February* ...	3 16 6	3 10 6	3 5 0	3 4 6	3 7 6	3 12 0
1st May* ...	3 16 6	3 11 0	3 5 0	3 5 6	3 8 6	3 12 6

* With certain exceptions, rates of wages adjusted according to these rates are then reduced by 10 per cent.—see paragraph above.

When it is necessary to assess a basic wage for women the Commonwealth Court takes into consideration any special conditions affecting the employees concerned, such as broken time, allowances for travelling, etc. For this reason the rates used by the Court for various awards sometimes show substantial differences. In two industries in which the majority of women working under federal awards are employed, viz., clothing and printing, the basic rate has been about 54 per cent. of the corresponding rate for men and in periodical adjustments this ratio has been preserved.

Living Wage Determinations in the Various States.

In Queensland, South Australia and Western Australia a standard living wage is fixed by industrial tribunals established under State jurisdiction. In Victoria and Tasmania the rates of wages in the various industries are fixed by wages boards by a process of collective bargaining between the employers and the employees in the industry concerned. In Victoria it has become the usual practice to assess a basic rate according to the method used by the Commonwealth Court of Conciliation and Arbitration. In Tasmania the standard of the Federal Court is observed to some extent, but the general average rate for unskilled labour is usually somewhat lower.

In Western Australia the State Arbitration Court determines a basic wage in June of each year. The rate so determined in the years 1926 to 1929 operated for a period of twelve months. In December, 1930, the law was amended to provide that the Court may review the wage during its currency, if data supplied at quarterly intervals by the State Government Statistician indicate that a change of one shilling or more per week has occurred in the cost of living. The Financial Emergency Act, 1931, further empowers the Court in Western Australia to reduce the rate of wages under any award to 71s. 4d. per week (*i.e.*, 82 per cent. of the basic wage).

for the year 1929-30). This power may be exercised, upon application by an employer, if the Court is satisfied that the present national emergency justifies it in ordering a reduction.

The family unit upon which the basic wage is determined by the State tribunal in Queensland consists of a man, wife, and three children. In South Australia and Western Australia the unit is not defined by legislation, but the respective tribunals have adopted a family unit which includes three children in South Australia and two children in Western Australia. In New South Wales the unit is a man, his wife and one child and the wage may be supplemented by family allowances at the maximum rate of 5s. per week for each additional child.

The following statement shows the basic wage determinations of the State industrial tribunals which were current in each year from 1921:—

Basic Wage Declared by State Industrial Tribunals.

Year.	Sydney.		Brisbane.		Adelaide.		Perth.	
	Date of Declaration.	Rate.	Date of Declaration.	Rate.	Date of Declaration.	Rate.	Date of Declaration.	Rate.
		s. d.		s. d.		s. d.		s. d.
1921 ...	Oct. ...	82 0	Mar. ...	85 0	July ...	79 6	...	...
1922 ...	May ...	78 0	Feb. ...	80 0	Apr. ...	77 6	...	...
1923 ...	{ Apr. ... Sept. ...	{ 79 0 82 0 }	...	80 0	Oct. ...	78 6	...	...
1924 ...	...	82 0	...	80 0	Apr. ...	82 0	...	...
1925 ...	Aug. ...	84 0	Sept. ...	85 0	July ...	85 6	...	...
1926 ...	...	84 0	...	85 0	...	85 6	June ...	85 0
1927 ...	June ...	85 0*	...	85 0	...	85 6	...	85 0
1928 ...	...	85 0*	...	85 0	...	85 6	...	85 0
1929 ...	Dec. ...	82 6†	...	85 0	...	85 6	June ...	87 0
1930 ...	...	82 6†	{ Aug. ... Dec. ...	{ 80 0 77 0 }	Oct. ...	75 0	June ...	86 0
1931 ...	...	82 6†	May ...	74 0	Aug.	63 0	{ Mar. ... Nov. ...	{ 78 0 73 6†

* Plus Family Endowment. † Plus Family Endowment—one child excluded. ‡ Reduced to 72s. in March, 1932.

Secondary Wage.

Having ascertained the basic rates of wages for unskilled labour, the assessment of the secondary wages is a matter to be considered separately in connection with each occupation. It is the usual practice, under the State system in New South Wales, when varying wages on account of an increase or decrease in the cost of living, to preserve unaltered the recognised margin between the skilled and the unskilled workmen in an industry, and to vary all rates of wages by the amount by which the basic wage has been increased or reduced.

The Commonwealth Court determines in each case an amount which it considers to be the fair value, as at the date of the award, of the skill required.

RATES OF WAGES.

The rates of wages for various occupations at intervals since 1901 are shown in the following statement. Except where specified, the figures indicate the minimum amounts payable for a full week's work on the basis of the weekly, daily, or hourly rates fixed by industrial awards and agreements, and for

occupations not subject to industrial determinations, the ruling or predominant rates are stated. The table contains particulars of a few occupations only, but similar information relating to a large number of callings is published annually in the "Statistical Register of New South Wales." In the Register for the year 1920-21 the rates are stated for each year from 1901 to 1913, inclusive, and for 1921; and the following issue contains the rates for each year from 1914 to 1922:—

Occupation.	1901.	1911.	1921.	1926.	1928.	1929.	1930.	1931.
Manufacturing—	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Cabinetmaker	52 0	56 0	101 9	110 0	111 0	108 6	108 6	98 0
Boilermaker	60 0	66 0	107 6	115 6	119 6	123 6	112 0	102 6(b)
Coppersmith	60 0	68 0	109 6	115 6	114 6	118 6	113 0	103 6(b)
Fitter	60 0	64 0	107 6	115 6	114 6	118 6	112 0	102 6(b)
" electrical	60 0	66 0	108 6	117 0	121 0	118 6	114 0	104 6(b)
Baker	52 6	50 0	100 6	127 6	128 6	128 6	128 6	128 6
Bootlicker	45 0	54 0	98 6	101 6	100 6	102 6	98 6	98 6
Tailor (ready-made) ..	50 0	55 0	102 6	107 6	107 0	108 0	108 0	93 0
Compositor (jobbing) ..	52 0	60 0	105 0	114 0	113 0	116 0	112 0	101 0
Building—								
Bricklayer	60 0	69 0	108 0	126 6	126 6	126 0	126 6	126 6
Carpenter	60 0	63 0	110 0	126 6	127 6	125 0	125 0	125 0
Painter	54 0	60 0	104 0	117 6	118 6	116 0	116 0	116 0
Plumber	60 0	66 0	110 0	117 0	120 6	127 0	127 0	127 0
Mining—								
Coalminer, perton (best coal)	4 2	4 2	6 11½	6 11½	6 11½	6 11½	6 1	6 1
Coalwheeler	42 0	42 0	103 6	109 6	109 6	109 6	106 6	106 6
" to			to	to	to	to	to	to
Silverminer	54 0	66 0	106 6	112 6	112 6	112 6	109 6	109 6
" to			99 0	104 0	106 0	112 0	104 0	99 0
Transport—								
Railway loco-driver ..	66 0	66 0	106 0	112 0	111 0	114 0	109 0	106 6
" to	to	to	to	to	to	to	to	to
" 90 0	90 0	130 0	136 0	135 0	138 0	133 0	133 0	130 6
Wharf-labourer per hour	1 0	1 6	2 9	2 11½	2 11	2 11	2 9½	2 4½(b)
" to	1 3							
Rural industries—								
Shearer .. per 100 sheep	20 0	24 0	40 0	40 0	41 0†	41 0†	32 6§	32 6(a)
" and					45 0			
" 54 8					54 8			
Station-hand, with keep ..	20 0	25 0	48 0	56 0	56 0	54 8	56 8	42 6
" and					56 0			
Farm-labourer, with keep	15 0	20 0	42 0	55 0	55 0	55 0	35 0	25 0
" to	to	to					to	to
" 20 0	25 0						50 0	32 6
Miscellaneous—								
Pick and shovel man ..	42 0	48 0	94 6	96 6	97 6	95 0	95 0	95 0
Standard minimum wage ..	*	45 0	82 0	84 0	85 0†	82 6†	82 6†	82 6†

* Standard not fixed. † Plus family endowment. ‡ Less 2s. 3d. per week. § Plus 3s. 4d. per week.
(a) Less 7s. 6d. per week. (b) Less 10 per cent. under federal award.

Prior to the determination of the Harvester rate in 1907 a standard wage was not fixed, and an inspection of the predominant rates in 1901 shows that wages as low as 30s. per week were paid for unskilled labour in some factories, but the average was probably about 35s. per week.

The wages of coalminers are based on contract rates, which vary according to the condition of the seams or places where the coal is mined. The rates had been fixed by awards of a special tribunal under federal legislation between 1920 and 1929. A dispute occurred in some of the northern mines in March, 1929, and these mines were closed. They remained idle till June, 1930, when an agreement was made and registered under the Commonwealth Conciliation and Arbitration Act, the contract rates being reduced by 12½ per cent. and the daily rates by 6d. per day.

The wages of railway engine-drivers are increased by 6s. per week on the completion of each of the first four years of service, the highest rates being paid to drivers of mail and passenger trains. An hourly rate is prescribed for wharf-labouring, as intermittency is a constant factor owing to irregularity in the daily volume of shipping trade. Extra rates are paid for handling special cargoes such as wheat, explosives, and frozen meat.

In the rural industries, rates for shearers and other pastoral employees are fixed by the Commonwealth Court of Conciliation and Arbitration. The contract rate for shearing ordinary flock sheep was raised from 35s. per 100 to 38s. in September, 1923, to 40s. in June, 1926, to 41s. in September, 1927, and reduced to 32s. 6d. in July, 1930. In the current award provision has been made for the adjustment of the rates as from 1st March in each year according to the rise or fall of the index numbers of the cost of food, groceries, and housing as determined by the Commonwealth Statistician. Under this arrangement the adjustments shown below were made in respect of shearers' earnings under contract rates.

Period.	Rate per 100 Sheep (Flock).	Cost of Living Adjustment (per week).
	s. d.	s. d.
September, 1927, to March, 1928	41 0	.....
March, 1928, to March, 1930	41 0	Deduct ... 2 3
March, 1930, to July, 1930	41 0	Add ... 3 4
July, 1930, to March, 1931	32 6	Add ... 3 4
March, 1931, to March, 1932	32 6	Deduct ... 7 6
March, 1932, to March, 1933	32 6	Deduct ... 21 0

A State award for pastoral employees prescribing a shearing rate of 45s. per 100 flock sheep and a weekly rate of 56s. and keep for station hands was in operation from August, 1926, to December, 1929, when it was rescinded by Act of Parliament. Persons not bound by the federal award were bound to observe the conditions of the State award.

Wages of farm labourers were not fixed by award or agreement until October, 1921, when a living wage for rural workers was declared at the rate of 66s. per week without board or residence, or 42s. per week for those who were provided with board and lodging. The declaration lapsed after a period of twelve months. In October, 1926, an award covering agricultural workers was issued by the Conciliation Committee relating to the industry, and in July, 1927, the living wage for rural employees at the rate of 84s. per week was declared by the Industrial Commission. In December, 1929, rural workers were excluded from the jurisdiction of the State industrial arbitration system, and State awards and agreements applying to such employees were rescinded.

The rates shown in the table for pick and shovel men relate to those engaged in the work of railway construction.

The following table of average rates shows the extent to which changes in the rates for individual occupations have affected wages in various groups of industries, and in all industries combined. The figures represent the average weekly rates of wages payable to adult males in each group of industries, and the weighted average for all groups combined in various years since 1901.

For the computations particulars were obtained in respect of 874 occupations. The industrial awards and agreements were the main sources of information, and for occupations not subject to the industrial determinations, the ruling or predominant rates were ascertained from employers and from secretaries of trade unions. The occupations were classified into fourteen industrial groups, and the averages were calculated on the basis of the weekly rates payable to adult male employees in the metropolitan district, except in regard to the mining, shipping, and rural industries, which are conducted for the most part outside the metropolitan area.

In determining the average wage in each group an arithmetic mean was taken; that is, the sum of the rates was divided by the number of occupations, no detailed system of weights being applied owing to the difficulty of obtaining satisfactory data as to the number of persons employed in each occupation. In computing the average for all the industries combined, the average for each industrial group was weighted in accordance with the relative number of all male workers engaged in that group.

The rates shown in the table for 1921 and later years are those determined for New South Wales by the Commonwealth Statistician.

In the shipping, pastoral, and domestic industries, where food and lodging are supplied, the value of such has been added to the rates of wages:—

Group of Industries.	Average Weekly Rates of Wages at end of Year.							
	1901.	1911.	1921.	1926.	1928.	1929.	1930.	1931.
1. Wood, Furniture, Sawmill, Timber Works, etc.	s. d. 48 4	s. d. 55 6	s. d. 101 0	s. d. 107 5	s. d. 107 7	s. d. 107 9	s. d. 104 9	s. d. 91 6
2. Engineering, Shipbuilding, Smelting, Metal Works, etc.	40 4	55 4	98 7	102 0	104 0	103 10	101 7	95 11
3. Food, Drink, and Tobacco Manufacture and Distribution	44 11	51 4	95 2	98 10	101 1	101 2	99 9	95 8
4. Clothing, Hats, Boots, Textiles, Rope, Cordage, etc.	44 5	51 7	91 10	95 4	97 3	96 10	96 8	85 5
5. Books, Printing, Bookbinding, etc.	53 1	64 4	106 3	108 2	122 5	123 6	121 10	107 8
6. Other Manufacturing	44 10	51 7	97 7	101 4	102 11	103 7	100 7	91 9
7. Building	56 2	63 4	104 7	110 0	114 3	111 7	114 3	109 4
8. Mining, Quarries, etc.	52 3	60 0	105 4	111 2	111 11	112 9	109 1	106 7
9. Railway and Tramway Services	52 2	55 2	95 5	102 1	103 0	107 8	103 11	97 2
10. Other Land Transport	41 8	44 4	92 0	97 4	99 3	97 1	97 1	96 10
11. Shipping, Wharf Labour, etc.	38 4	44 6	100 5	101 3	102 2	106 2	99 10	82 11
12. Pastoral, Agricultural, Rural, Horticultural, etc.	32 5	43 5	92 0	98 10	100 9	100 9	89 5	84 0
13. Domestic, Hotels, etc.	37 11	44 3	89 0	90 2	94 11	92 7	92 7	92 1
14. Miscellaneous	43 5	49 0	91 5	94 9	96 8	96 5	95 2	91 4
All Industries	43 11	51 5	95 10	100 5	102 6	102 11	99 1	93 5

At the end of 1921 the average rate of wages for all industries was 86.4 per cent. above the average of 1911. In the following years the average rose and fell alternately, and in 1925 it was a point slightly above the average in 1921. There was an increase of 4.6 per cent. during 1926 and a further increase in each succeeding year until June, 1929, when the average, 103s. 6d. per week, was double the average of the year 1911. At the end of the year 1929 the living wage declared by the Industrial Commission of New South Wales was reduced by an amount equal to 2s. 6d. per week, and State rural awards were rescinded. During 1930 the "Harvester" wage for Sydney as adjusted for variations in the retail price index numbers declined by 7s. per week, and the wages of coal-miners and of pastoral workers under federal jurisdiction were reduced. Consequently the average wage in December, 1930, was lower by 3s. 10d. than at the end of the previous year.

During 1931 there was a reduction of 9s. 6d. per week in the Harvester adjusted rate for Sydney, and the majority of rates determined under federal jurisdiction were reduced by 10 per cent. by order of the court. Under these influences the average nominal wage declined from 99s. 1d. in December, 1930, to 93s. 5d. twelve months later.

The highest average rates are in the building, printing, and mining industries, which are strongly organised, and include a large proportion of skilled artisans. The next in order are the woodworking and the engineering trades. The lowest average is in the shipping group. Between 1929

and 1931 there were increases in all the groups, ranging from 23s. 3d. to 3d. per week. The classes with largest reductions were shipping 23s. 3d., rural 16s. 9d., woodworking 16s. 3d., and printing 15s. 10d.

After the Industrial Arbitration Act of New South Wales was amended in 1926, wages for certain rural occupations were fixed for the first time by awards, the prescribed rates being considerably higher than the average or predominant rates which had been paid hitherto. This caused a marked increase in the average rate for the rural group in that year. Rural workers were removed from the jurisdiction of the State tribunals in December, 1929, and federal award rates for pastoral workers were reduced in 1930, and the rate declined to the same average as in December, 1924, viz., 84s. per week.

The foregoing tables relate to the nominal rates of wages, that is the actual amounts of money payable in return for labour, and in order to show the effective value of these amounts it is necessary to consider them in relation to the purchasing power of money. Food and rent are the only elements of expenditure of which records as to variations in the purchasing power of money since 1901 are available, and in the following statement the relation between the cost of these items and the average rates of wages is illustrated. For this purpose the average rates of wages have been reduced to index numbers, which have been divided by the index numbers of food and rent. The results indicate the variations in the effective wage.

The index numbers of the nominal wage for 1916 and subsequent years, as shown below, represent the mean of the average rates at the end of the four quarters of each year. Quarterly data are not available for 1901 and 1911 and the average nominal rate at the end of the year has been used; it is not likely, however, that this would have an appreciable effect on the comparison as wages were fairly stable in these years.

Year.	Average Nominal Wage for a Full Week's Work.		Index Number of Food and Rent Combined.	Index Number of Effective Wage. (Full Work.)
	Amount.	Index Number.		
	s. d.			
1901	43 11*	854	848	1007
1911	51 5*	1000	1000	1000
1916	59 7	1160	1351	859
1921	95 5	1855	1672	1109
1922	93 2	1812	1586	1142
1923	92 7	1801	1685	1069
1924	93 10	1826	1662	1099
1925	94 7	1840	1709	1077
1926	97 9	1901	1790	1062
1927	101 2	1968	1776	1108
1928	102 7	1995	1783	1119
1929	103 1	2005	1859	1079
1930	101 8	1977	1738	1138
1931	94 10	1844	1548	1191

* At end of year.

In 1901 the effective wage was slightly higher than in 1911. It declined steadily after 1911 as living became dearer, until in 1916 it was 14 per cent. lower than in 1911. Subsequently wages increased at a faster rate than the cost of food and rent, and when prices declined in 1922 the effective wage index number rose to a point 14 per cent. above the level of 1911. In later years this index number fluctuated at lower levels, and in 1929 it was about 8 per cent. higher than in 1911.

The rates of wages, nominal and effective, as stated in the foregoing tables, are based on the rates payable to employees under awards or agreements or on predominant rates for work without intermittency or overtime, and not on actual earnings, which are liable to fluctuate on account of the rise and fall in the volume of employment. Thus the census records show that there was a much larger proportion of unemployment in 1921 than in 1911, and there was an exceptional degree of unemployment throughout 1930 and 1931, as well as part-time employment in many industries. Moreover, employers have been required since 1st July, 1930, to deduct from the earnings of their employees unemployment relief tax, of which the rate was 3d. in the £ until 1st January, 1931, when it was increased to 1s. in the £. Thus the employee with a nominal weekly wage of 94s. 10d. in 1931 would have received 90s. 10d. for a full week's work, corresponding to an effective wage index-number 14 per cent. higher than in 1911.

PRODUCTION.

The value of production, as shown in this section, relates to the primary industries—pastoral, agricultural, dairying and farmyard, mining, forestry, fisheries, and trapping—and to the manufacturing industries.

The values in regard to the primary industries—except mining—are stated as at the point or place of production, on the basis of the prices to the producers, which are somewhat less than the wholesale prices in the Metropolitan market. No deduction has been made on account of the cost of items such as seed, fertilisers, containers, fodder for animals, machinery, etc.

Some of the quotations are known to be understated. For instance, the values as estimated for agricultural and farmyard produce are deficient, because records are not available as to production (which in the aggregate must be large) on areas less than one acre in extent. The production from fisheries includes only the catches of licensed fishermen.

The figures showing the estimated value of mining production in each year from 1911 to 1919-20 inclusive are based on the records of the Department of Mines, of which details are stated in the chapter of this volume relating to the mining industry. The values as recorded by the Department have been reduced by the exclusion of certain values which are included here in the production of the manufacturing industries, *e.g.*, coke produced at coke works, also the value added to minerals in the manufacture of lime and cement at limestone quarries, and in the treatment of ores at mines. The values shown for the last eleven years are those supplied by the mine owners in returns collected under the Census Act, and they indicate the estimated value at the mines of the minerals raised during each year. The figures do not represent exact values, but may be considered to be the best estimates which may be made from the data available. The values do not include the production from quarries except in 1925-26 and earlier years when the output from quarries held under mining title was included.

The value of the manufacturing production is taken as the value at the factory of the manufactured goods less the cost of raw materials, water, fuel, and electricity, and containers used, and of tools replaced. With a few exceptions returns are not collected as to the production in small establishments employing less than four hands where manual labour only is used, nor from butchers' smallgoods factories.

For the foregoing reasons the aggregate value of production as stated is not complete, and should not be assumed to be the total fund available as the wages fund of the State nor as remuneration for the agents of production in the form of wages, rent for land, and interest on capital invested. The values quoted for the specified industries do not include the value added by reason of transportation to market and distribution to the consumer, nor, in the case of exports, carriage to the point of shipment. Moreover, the earnings of many important activities, such as the building industry, of which records are not available, or from railway construction or commercial and other pursuits are not included.

Thus it will be seen that the amounts quoted have several shortcomings, nevertheless they are valuable as indicating the increase or decrease in the annual production of the industries specified and as important data for measuring variations in the national income.

The following statement shows the estimated value of production of the specified industries, at the place of production, at intervals since 1871. After 1913 the values are stated for the years ended 30th June, except those

relating to the mining industry, which relate to the calendar years ended six months later.

Year.	Primary Industries.							Total, Primary and. Manu- facturing Industries.	
	Rural Industries.				Forests, Fisheries, and Trapping.	Mining.	Total, Primary Industries.		Manu- facturing Industries
	Pastoral.	Agri- cultural.	Dairying and Farmyard.	Total, Rural Industries.					
1871	£ 000	£ 000	£ 000	£ 000	£ 000	£ 000	£ 000	£ 000	
1881	7,609	2,220	1,110	10,939	324	1,626	12,889	2,490	
1891	10,866	4,216	2,285	17,367	492	2,138	19,997	5,183	
1901	14,725	3,615	2,735	21,075	758	6,434	28,267	7,799	
1911	12,447	7,060	3,188	22,695	986	5,681	29,362	10,011	
1912	20,586	9,749	6,534	36,869	2,213	7,392	46,474	19,432	
1913	19,431	11,817	7,192	38,440	2,347	8,177	48,964	22,681	
1915-16	21,555	12,378	7,063	40,996	2,644	8,712	52,352	23,764	
1920-21	23,494	20,362	7,649	51,505	2,603	7,478	61,586	25,235	
1921-22	20,336	32,373	16,447	69,156	4,089	10,192	83,437	43,128	
1922-23	25,020	20,261	12,914	58,195	3,628	9,666	71,489	46,746	
1923-24	36,783	21,301	13,445	71,529	4,810	10,419	86,758	51,596	
1924-25	39,775	20,556	12,327	72,658	4,204	11,845	88,707	55,661	
1925-26	46,028	28,785	14,336	89,149	5,039	11,785	105,973	59,044	
1926-27	42,369	20,741	14,712	77,822	5,609	12,346	95,777	64,838	
1927-28	47,822	22,098	14,591	84,511	6,147	12,352	103,010	69,849	
1928-29	45,407	17,018	15,273	77,698	5,208	10,436	93,342	71,805	
1929-30	43,701	19,923	14,849	78,473	5,144	8,833	92,450	73,627	
1930-31	28,511	15,438	14,796	58,745	4,131	7,499	70,375	66,848	
1930-31	22,175	15,105	12,560	49,840	2,607	5,709*	58,156*	49,524	
								107,680*	

* Preliminary—subject to revision.

The total value of production increased in each decade between 1871 and 1891. During the early nineties there was a decline from which the recovery was slow. In 1901, however, the value of production was considerably higher than in 1891. During the succeeding decennium the State entered upon a period of industrial expansion, and the value of production rose rapidly. The increase during the decade 1911 to 1921 was due mainly to enhanced prices. In 1926-27 the value, £172,859,000, was the highest yet recorded, and the value in each of the two following years was about 4½ per cent. lower owing to a decline in respect of primary production. In 1929-30 there was a further decline of 16½ per cent., dairying being the only important industry which did not show a marked diminution. In 1930-31 the total value decreased by 21½ per cent.

Apart from seasonal influences, fluctuations in the value of pastoral production are mainly the result of variations in the prices of wool. In the year ended June, 1925, the total value was higher than in any earlier year. In 1925-26 the clip was very heavy, but a fall in prices caused a decline of £7,850,000 in the value to the growers. This decline was offset to a large extent by the inclusion, for the first time, of items of pastoral production formerly omitted, viz., the natural increase in livestock, due allowance being made for exports and imports. In 1926-27 the quantity of wool was the largest yet recorded, and with an upward movement in prices the total value to the grower recovered to the extent of £7,000,000. The return from wool increased slightly in 1927-28, but a diminution in the natural increase in flocks and herds caused a decline of £2,400,000 in the total value of pastoral production. In 1928-29 the value declined further on account of a fall in the price of wool. In the following season the average price for greasy wool was 36 per cent. below the reduced level of 1928-29, and as the clip was somewhat smaller the value of pastoral production was the lowest since 1921-22. In 1930-31 there was a further decline of £6,000,000.

The value of agricultural production shows considerable fluctuation, for which the principal reasons are seasonal. In 1927-28 a deficiency of rain during the growing season affected the wheat crops and prices of agricultural products declined in a marked degree during the year. In 1928-29 the decline in prices continued but the harvests were generally larger. In 1929-30 the crop was much smaller and prices fell to a lower level, then seasonal conditions improved and the value in 1930-31 was nearly equal to the previous year's figure notwithstanding the downward trend of prices.

In the mining industry coal is the principal product, and the value of the output of the collieries decreased by £4,000,000, or 47 per cent., between 1927 and 1930. The condition of the overseas market usually exerts the most powerful influence on the production of metals, which fluctuates accordingly. The output from metalliferous mines was below normal in 1929, but the value was somewhat greater than in the previous year in consequence of an improvement in prices of lead. In 1930 the volume of the output was maintained but there was a persistent fall in prices. The value of mining production as quoted does not include the output from quarries, estimated at £940,800 in 1930 and £630,700 in 1931.

The figures relating to the manufacturing industries disclose a steady advance from the beginning of the period under review, when it was less than £2,500,000, and only 16 per cent. of the total production, until 1928-29, when the value was £73,627,000, and 44 per cent. of the total. In 1929-30 the value declined to £66,848,000 or £26 19s. 7d. per head, but it represented nearly 49 per cent. of the aggregate value of the production as recorded above. In the following year there was a decline of 26 per cent.

In the following table the values per head of population are shown:—

Year.	Primary Industries.							Manufacturing Industries.	Total Primary and Manufacturing Industries.
	Rural Industries.				Forests, Fisheries, and Trapping.	Mining.	Total, Primary Industries.		
	Pastoral.	Agricultural.	Dairying and Farm-yard.	Total, Rural Industries.					
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1871	14 19 5	4 7 5	2 3 8	21 10 6	0 12 9	3 4 0	25 7 3	4 18 0	30 5 3
1881	14 4 0	5 10 2	2 19 9	22 13 11	0 12 11	2 15 11	26 2 9	6 15 6	32 18 3
1891	12 17 10	3 3 4	2 7 11	18 9 1	0 13 3	5 12 8	24 15 0	6 16 7	31 11 7
1901	9 2 1	5 3 4	2 6 8	16 12 1	0 14 5	4 3 1	21 9 7	7 6 6	28 16 1
1911	12 7 3	5 17 1	3 18 6	22 2 10	1 6 7	4 8 9	27 18 2	11 13 5	39 11 7
1912	11 2 10	6 15 6	4 2 6	22 0 10	1 6 11	4 13 9	28 1 6	13 0 2	41 1 8
1913	11 16 11	6 16 0	3 17 7	22 10 6	1 9 1	4 15 8	28 15 3	13 1 2	41 16 5
1915-16	12 8 1	10 14 11	4 0 9	27 3 9	1 7 6	3 18 11	32 10 2	13 6 5	45 16 7
1920-21	9 14 7	15 9 8	7 17 4	33 1 7	1 19 2	4 17 6	39 18 3	20 12 8	60 10 11
1921-22	11 15 2	9 10 5	6 1 4	27 6 11	1 14 2	4 10 10	33 11 11	21 19 4	55 11 3
1922-23	16 18 6	9 16 0	6 3 9	32 18 3	2 4 3	4 15 11	39 18 5	23 14 0	63 13 3
1923-24	18 0 1	9 6 0	5 11 6	32 17 7	1 18 1	5 7 2	40 2 10	25 3 8	65 6 6
1924-25	20 8 9	12 15 6	6 7 3	39 11 6	2 4 7	5 4 7	47 0 8	26 4 1	73 4 9
1925-26	18 8 10	9 0 6	6 8 0	33 17 4	2 8 10	5 7 6	41 13 3	28 2 4	69 18 0
1926-27	20 7 4	9 8 3	6 4 4	35 19 11	2 12 4	5 5 3	43 17 6	29 15 0	73 12 6
1927-28	18 13 3	7 1 9	6 7 3	32 7 3	2 3 5	4 6 11	38 17 7	29 18 2	68 15 9
1928-29	17 17 1	8 2 10	6 1 3	32 1 2	2 2 1	3 12 2	37 15 5	30 1 7	67 17 0
1929-30	11 10 2	6 4 7	5 19 5	23 14 2	1 13 4	3 0 6	23 8 0	26 19 7	55 7 7
1930-31	8 17 4	6 0 10	5 0 6	19 18 8	1 0 10	2 5 8	23 5 2	19 16 2	43 1 4

The value of production per head from the pastoral industry was considerably greater in 1871 and 1881—when sheep-raising was the staple industry of the colony and pastoral output represented nearly half the total value of production—than in subsequent years when the population had entered into other activities and the export trade in wheat, butter, etc., was developed.

The development in the manufacturing industries in 1871 and in 1881, as measured by the value of output per head of population, was not so great as the figures appear to indicate. The production included the output from several classes of machines used in connection with the agricultural industry and not, strictly speaking, factories; and most of the industries were subsidiary to agricultural and pastoral activities, viz., boiling-down works, fellmongering, woolwashing, grain mills, chaffcutting, soap and candle works.

The following statement shows, in regard to the principal commodities, the average annual production, absolute and per head of population, during the three-year periods ending June, 1923, and June, 1930, in comparison with the three pre-war years, 1911-13, which were years of high production:—

[Product.		Average Annual Production (000 omitted).			Average Production Per Head of Population.		
		1911-13.	1921-23.	1928-30.	1911-13.	1921-23.	1928-30.
Wool (as in the grease) ...	lb.	370,221	315,341	462,250	212·4	184·0	189·3
Meat, Frozen (Exported)—							
Beef	lb.	11,120	10,271	5,274	6·4	4·8	2·2
Mutton	„	63,828	41,525	25,024	36·6	19·5	10·3
Butter	„	79,198	86,222	100,954	45·4	40·5	41·3
Cheese	„	5,845	6,324	6,657	3·4	3·0	2·7
Bacon and Ham	„	15,940	18,642	23,394	9·1	8·8	9·6
Wheat	bush.	31,865	42,353	36,902	18·3	19·9	15·1
Maize	„	4,691	3,813	3,158	2·7	1·8	1·3
Potatoes	cwt.	1,824	1,046	651	1·0	·5	·3
Hay	„	18,612	23,100	14,896	10·7	10·8	6·1
Coal	ton.	9,664	10,485	8,053	5·5	4·9	3·3
Coke	cwt.	9,217	16,257	18,922	5·3	7·6	7·8
Gold	oz.	200	32	11	·1	·0	0·0
Silver*	„	14,183	8,741	8,502	8·1	4·1	3·5
Lead*	cwt.	4,204	2,244	3,415	2·4	1·1	1·4
Zinc*	„	3,553	2,447	2,691	2·0	1·2	1·1
Timber, Sawn	sup. ft.	169,078	157,899	137,984	97·0	74·1	56·5
Fish, Fresh	lb.	15,499	20,588	25,352	8·9	9·7	10·4
Rabbit Skins (Exported)	„	5,305	6,747	8,118	3·0	3·2	3·3
Iron, Pig	cwt.	771	5,373	7,986	·4	2·5	3·3
Steel	„	...	2,887	6,407	...	1·4	2·6
Portland Cement	„	2,374	3,778	8,471	1·4	1·7	3·5
Beer and Stout	gal.	22,253	24,845	27,888	12·8	11·7	11·4
Tobacco	lb.	6,370	12,211	15,240	3·7	5·7	6·2
Biscuits	„	24,175	39,244	42,424	13·9	18·4	17·4
Boots and Shoes	pairs	3,752	4,174	4,454	2·2	2·0	1·8
Bricks	No.	366,985	339,721	394,627	210·5	159·4	161·6
Candles	lb.	5,511	4,596	2,519	3·2	2·2	1·0
Electricity	units	165,249	386,742	958,098	94·8	181·5	392·3
Gas	1,000 cub. ft.	4,878	8,465	10,792	2·8	4·0	4·4
Jam and Preserved Fruit	lb.	27,767	30,396	32,187	15·9	14·3	13·2
Soap	„	31,670	37,085	50,559	18·2	17·4	20·7
Sugar, Refined	cwt.	1,834	2,373	2,960	1·1	1·1	1·2
Meat, Preserved	lb.	25,501	4,320	4,119	14·6	2·0	1·7
Tweed and Cloth	yd.	1,170	2,313	2,876	·7	1·1	1·2

* Estimated contents of ore raised.

The statement shows that the annual production of most of the commodities in the list has increased considerably since 1911-13, the principal exceptions being frozen and preserved meats, coal, metals, maize, hay,

potatoes, and timber. In some cases, however, the increase has not been proportionate to the growth of population, *e.g.*, wool, butter, wheat, beer, boots and shoes, bricks, jam and preserved fruits.

Annual variations in the quantity and value of the chief rural products—wool, wheat, and butter—are shown below. A comparison of average prices is shown also, *viz.*, the average price of greasy wool at Sydney auctions where the bulk of the clip is sold; the average wholesale price for bagged wheat in Sydney during the period when, as a general rule, the bulk of the crop is marketed, *viz.*, the four months December to March; and, in regard to milk used for butter, the average price paid at the butter factories to suppliers:—

Year.	Wool.			Wheat—(grain).			Butter.*		
	Quantity (as in grease).	Value to Grower.	Average Price per lb. (greasy) Sydney Sales.	Quantity.	Value to farmer.	Wholesale price per bush. (bagged) Sydney. †	Quantity.	Value of milk used.	
								Total.	Per lb. of butter.
	000lb.	£000	d.	000 bush.	£000	s. d.	000lb.	£000	d.
1911	404,655	14,085	8½	25,088	4,113	3 8½	83,205	3,631	10½
1912	326,557	12,488	8½	32,487	5,239	3 6½	76,610	3,895	12½
1913	379,450	14,437	9½	38,020	5,988	3 7¼	77,779	3,450	10¾
1920-21	275,269	13,023	12½	55,625	20,164	9 0	84,268	8,411	24
1921-22	333,856	15,557	12¼	42,767	9,978	5 2¼	100,673	5,800	13¾
1922-23	336,899	23,048	17½	28,668	6,689	5 9½	73,724	5,805	19
1923-24	303,032	28,209	23½	33,176	7,603	4 7	72,684	5,027	16½
1924-25	369,118	34,073	25½	59,767	16,685	6 6¼	117,211	6,342	13
1925-26	402,490	26,223	16¾	33,806	8,590	6 0	106,968	7,045	15¾
1926-27	499,322	33,234	17½	47,541	10,697	5 2½	95,853*	6,478	16
1927-28	443,860	33,874	19½	27,042	6,197	5 4½	100,795*	6,722	16
1928-29	482,920	30,879	16½	49,183	9,851	4 7¾	95,337*	6,779	17
1929-30	459,970	18,099	10½	34,407	5,448	4 10½	104,175*	6,842	15¾
1930-31	427,220	13,705	8½	65,877	5,215	2 2¼	113,237*	5,931	12½
1931-32†	495,000	15,500	8½	54,140	7,400	3 1¼	124,000	5,800	11¼

* Made in New South Wales from cream produced in the State, butter made from cream imported or exported interstate being excluded.

† Preliminary—Subject to revision.

‡ Average—four months—Dec.-Mar.

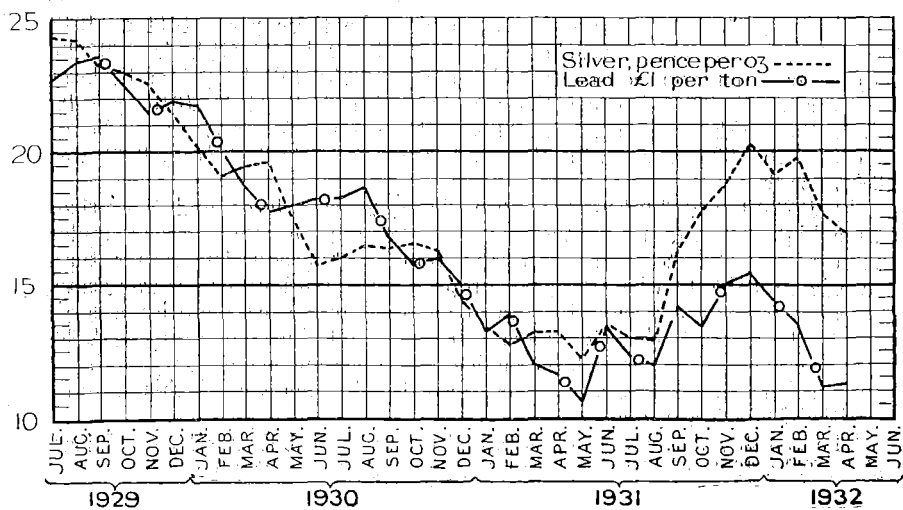
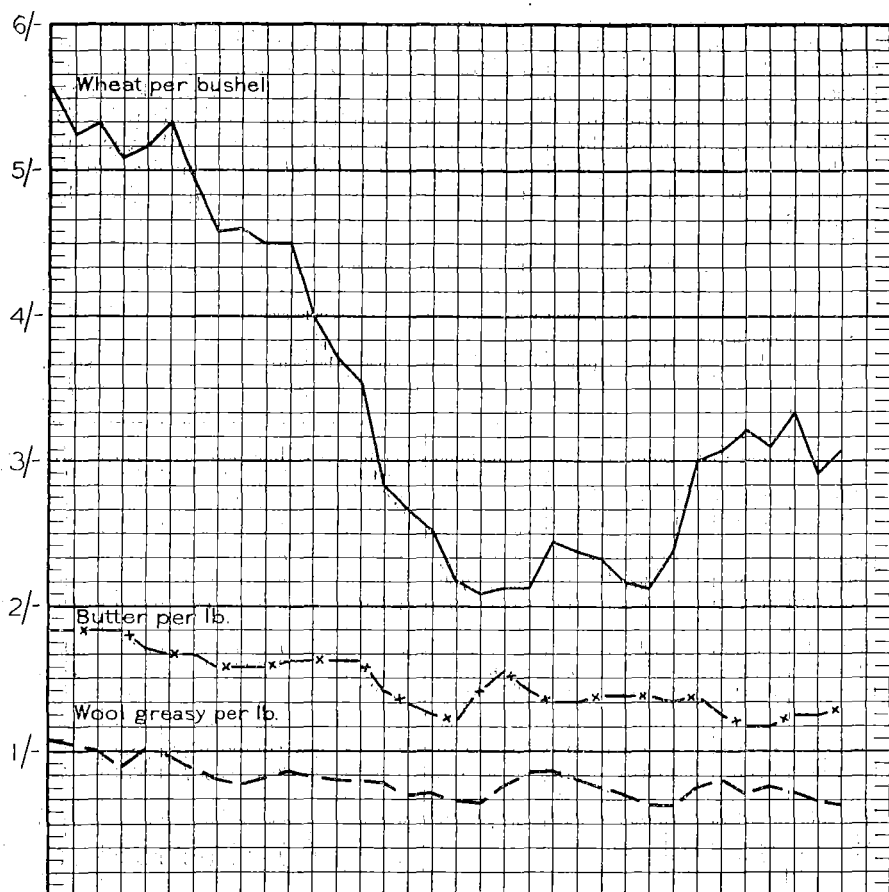
The average price of greasy wool during the three years 1911 to 1913 was 8½d. per lb. and it reached an extraordinary level, 25½d., in 1924-25. Increased production offset to a large extent the fall in prices in later seasons until 1929-30 when the average price declined to 10½d. per lb. A further decline occurred in 1930-31, the average for greasy wool being 8.7d. per lb. The average for the current season up to 31st May, 1932, was 8.4d. per lb.

In 1920-21 and 1924-25 the wheat harvests were large and the prices were high. Variations in the value of the crop in other seasons under review were due to changes in the volume of production rather than in prices until 1931 when the price dropped below the level of pre-war years.

Dairy farmers are paid for cream supplied to butter factories according to the amount of butter made therefrom, and since 1st January, 1926, the prices of butter have been subject to an arrangement for stabilising the markets in Australia, as described in the chapter of this volume entitled Dairying Industry.

The monthly movements in prices of wheat, wool, butter, silver and lead since July, 1929, are illustrated in the graph on the next page.

MONTHLY PRICES 1929-1932.
BUTTER, WHEAT, WOOL, SILVER AND LEAD.



The quotations for the various commodities, as illustrated in the graph, are as follows:—

Wheat.—Shippers' and millers' quotations for bagged wheat ex trucks, Sydney, at the end of each month.

Wool.—Average prices for greasy wool based on the actual prices realised at Sydney auctions during each month for typical grades of merino wool.

Butter.—The wholesale price of choicest quality in Sydney at the end of each month as fixed by the Butter Stabilisation Committee.

Silver.—The middle (spot) price for standard silver on the London Metal Exchange at the end of each month.

Lead.—The middle (spot) price for soft lead on the London Metal Exchange at the end of each month.

INDUSTRIAL HISTORY OF NEW SOUTH WALES.

An account of the Industrial History of the State up to 1899 appears in the "Wealth and Progress of New South Wales, 1897-8," and is continued on a broader basis in the "Official Year Book, 1921." A resumé of developments from 1921 to 1926 appears in the Year Book of 1928-29 and is here continued in outline for later years to the middle of 1931.

1926-27.

The course of industrial history in this year may be considered in two parts, the first terminating and the second commencing with the advent of a period of dry weather early in 1927. With this change of weather conditions was associated a deterioration of business conditions, partly as a consequence, but partly of independent origin, and the year did not close quite so propitiously as it opened.

In the latter half of 1926 activity on the Stock Exchange increased, and the steady rise in quotations that had set in early in 1925 was strongly maintained. All classes of stocks except Government bonds advanced in price, and the contrast served to illustrate the great buoyancy of shares in financial and other business enterprises. This development was accompanied by a continued rise in the rates of net profit earned and of dividends declared by public companies, but the movement in prices was such that the yield to investors from many classes of stock diminished. This rise on the Stock Exchange was due to the weight of money seeking investment, and further evidence of the accumulation of loanable funds was present in the rapid growth of fixed deposits at credit of private customers in trading banks.

Although adverse seasonal factors had appeared in October and November 1926, all parts of the State except the southern and far western districts received bountiful rains in December. As the growing periods of the season's wool and wheat had practically finished before the dry conditions set in, the effects were felt only in a small diminution in butter production and in the yield of wheat. However, dry conditions again appeared in the summer and autumn of 1927 over a considerable part of the hinterland and over the whole State from April until the end of September, 1927, becoming severe in July. The effect of this marked change in the seasonal factors made itself felt in the outlook for production in 1927-28 and prevented the moulding of financial and business policies on the assumption of continued expansion. The autumn and winter lambing proved small, a reduced clip of wool was anticipated for 1927-28, and the sowing and germination of wheat was retarded.

As the financial position was sustained by the proceeds of realisation of the record wool-clip and of the large wheat harvest of 1926-27, the reaction was at first only slight. Until after the middle of 1927 the growth of bank deposits and of advances was maintained with no abnormal movement, and there was only a slight fall in the high prices that had ruled on the Stock Exchange. However, as money was diverted to meet the

exigencies of the pastoral season, the expansion in the volume of business became less regular. These developments, however, were probably not unconnected with a slight decline in the net earnings of companies which declared their profits in the first half of 1927, though it is probable that the reduction was mainly due to factors external to New South Wales, such as the severe drought in Queensland.

But, in general, the proceeds of the year's activities were eminently satisfactory, and despite some shrinkage in the various sources of prosperity, conditions were outwardly very prosperous.

The national income, which had increased rapidly since 1920-21, continued to expand, the increase for the year 1926-27 being approximately 4 per cent., making a total of 30 per cent. in the aggregate and 20 per cent. in the average amount per head in six years. The volume of primary production far exceeded that of any previous year and provided abundant employment. This, coupled with the favourable prices realised, made it inevitable that business activity should intensify. Bank clearings, which had reflected an increase of over 30 per cent. in interbank cheque transactions from 1921 to 1926 showed a further growth of 5 per cent. in 1926-27. The value of merchandise exported rose by nearly £2,000,000, and the value of imports increased by over £5,000,000, one-fourth of this latter increase being on account of machinery and implements. In addition, building activity continued to increase, a healthy feature being a marked expansion in the country districts.

Returns of unemployment, so far as available, showed considerable diminution, and stoppages to industrial processes through industrial disputes also decreased. Although the State basic wage was not varied between August, 1925, and June, 1927, and then only slightly, there was a considerable increase in the minimum rate used in Federal awards, and the average rate of wages paid to male adults increased steadily until, at the close of 1926, it exceeded £5 per week for the first time on record. Concurrently, there was a marked increase in the number of savings bank accounts and in the amount of deposits. Though the cost of living had risen in 1926, there was an appreciable reduction in 1927, contributed to by a slight fall in rents. This latter development was due to the improved supply of houses consequent on the steady expansion of building operations and was doubtless partly due to the fact that favourable conditions had placed an increasing proportion of home-seekers in possession of the amount of deposit necessary for the acquisition of a home by instalment purchase. This development in turn exercised an important effect in increasing the number of small property owners and stimulated the saving of capital in small amounts from many incomes which otherwise would have provided little or no permanent accumulation.

The principle of the 44-hour working week was extended to a number of industries operating under Federal awards, and a further important social and economic development was the introduction in 1927 of a form of child endowment in conjunction with the State basic wage. The rate which formerly had been intended to provide the needs of life on a minimum scale for man, wife and two children—and as such was the minimum rate payable to adult males employed under State awards—was declared at £4 5s. in June, 1927, without any children in the family unit, and was supplemented by the provision of endowment where required to raise the family income to a maximum of the basic wage plus 5s. per child per week. This provision applied to wage-earners and non-wage-earners alike.

While action was continued by the Federal Government in promoting the marketing of primary products abroad, more especially of dried fruits and wine, the State, as a result of opinions expressed at the producers' conference in 1926, enacted a law to provide for the more effective marketing of any primary product, except wool, in respect of which producers desired the benefit of the new law. This action, together with the growing spirit of co-operative endeavour, is gradually increasing the economic organisation of the primary industries of the State.

The maintenance of favourable business conditions throughout the year was facilitated by the stability of the general level of prices and by the effectiveness of the steps taken to maintain foreign exchanges in a steady and satisfactory position.

The continuance of bountiful seasons had, not unnaturally, been accompanied by "boom" tendencies in certain directions, and the effect of these, though never very apparent, became more noticeable in 1926-27. There had been a pronounced increase of building activity in the city since 1923-24, but notwithstanding the stimulus given by extensive demolitions for city improvements, the demand for new premises did not always keep pace with the supply. Again, city land values rose at a rapid rate, the average increase over all land in the city proper being approximately 40 per cent. in the three years ended 1927. There was, in addition, a very large and increasing volume of sales of individual properties at greatly enhanced prices, accompanied by considerable speculation. On the Stock Exchange values had risen to high levels, which it was apparent could be maintained only if a large amount of funds continued to be available for this class of investment, and if earnings and dividends of companies were maintained at the abnormally high rates that had been reached.

A measure of artificial stimulus was given by a large increase in the annual loan expenditure on account of the various Governments. Furthermore, a system of instalment purchase (based largely on cash orders) introduced from abroad and applied to the acquisition of both necessities and luxuries had been extensively used, and the volume of business had thereby received temporary stimulus, placing a measure of encumbrance on future income and causing a feeling of uneasiness as to the possible outcome of the system should a dry season or a depression of trade occur. In one or two instances the financial methods adopted were comparable with those of the speculative land companies which grew up before the financial crisis of 1893, the system being to offer high rates of interest for fixed deposits and to utilise these deposits in extending credit at very remunerative rates of interest through instalment purchase of goods.

Though the year had been a period of great prosperity and progress, signs of retardation were apparent at its close.

1927-28.

Into a situation, already fraught with a small element of danger, there were intruded the effects of a severe though short period of dry weather over nearly the whole of the State from April to September, 1927. When the seasonal position became acute in July and the ratio of advances to deposits was decreased, there was a noticeable reaction on the Stock Exchange, business conditions generally became less buoyant, and unemployment increased.

But the financial situation, though depressed, did not become strained, and though, doubtless, the drought was the proximate cause of the unemployment and the short business depression which followed, it was evident that factors other than these were operating to produce the phenomenon of extensive unemployment at the culmination of a period of marked industrial activity.

For, although the advent of widespread rains during October and November brought an assurance of favourable seasonal conditions, the money market continued tight, and a measure of business depression set in accompanied by a growth of acute unemployment.

Except for the temporary modification produced by the opening of relief works over the Christmas period, this unemployment increased steadily until towards the middle of 1928, when it assumed larger proportions than at any time since 1921. On the other hand, there were favourable trends in several important respects, and the year 1927-28 was one of peculiar contrasts.

Despite the continued strong growth of deposits in trading banks, the margin of deposits over advances was maintained at a much higher level during 1927-28 than for three years previously, and as the capital of the banks had been heavily increased by large issues of shares in the first half of 1927, it was apparent that the banking situation was relatively strong, and that the financial stringency of 1927-28 was due rather to the imposition of restrictions on unhealthy activities and the husbanding of reserves against possible contingencies than to depletion of resources. It is possible also that the banks, having underwritten the issue of a large Federal conversion loan maturing in December, 1927, found it necessary to conserve their funds to meet requirements.

Though general business activity, as reflected in the inter-bank clearings, failed to increase in the high ratio that had been maintained in the five preceding years, there was nevertheless a slight increase in 1928 over the records that had been reached in 1927. Company profits taken on the whole showed some diminution, but, towards the middle of 1928, share prices and the volume of business on the Stock Exchange improved. In point of fact, after the middle of 1928 shares of banks and of well-established trading and manufacturing companies rose to a higher level than had been attained prior to the decline of 1927. The yield from investments declined mainly because of the rise in prices of securities, and rates of interest tended to fall. For instance, the price of Government $5\frac{1}{2}$ per cent. stocks sold over the Treasury counter was raised from £98 10s. to £100, and current reports from the Stock Exchange indicated that there was a large volume of money available for investment.

The growth in trading bank deposits continued unabated, although there was an appreciable slackening in the rate of addition to savings bank balances. Company flotations and building activity also continued on the large scale of previous years.

The production of wool, though 10 per cent. less than in the preceding year, was still 10 per cent. greater than had been attained in any other previous year; the production of wheat was 20 per cent. below the average by reason of the drought, but slaughtering activities and the output of butter remained at high levels.

Generally speaking, while there was no noteworthy expansion of business or industrial activity during the year, neither was there any marked degree of recession from the high standard attained in preceding bountiful years, except in the mining industry.

A close survey of material conditions does not reveal any factor likely to be sufficiently potent in its operation to cause the increase of unemployment

and the depression which occurred. There seems little doubt, however, but that the adverse seasonal factor in 1927 operated to cause a degree of uncertainty in the outlook—even apprehension of a protracted drought—and that this uncertainty (though removed by the early advent of abundant rains) produced some pessimism, which reacted adversely on business enterprise and strengthened the influence of latent factors which, otherwise, might have had less effect than they really had. Although the value of production and the total of wages paid in the manufacturing industry showed continued expansion in 1927-28, there was not the same degree of robust growth as in the three preceding years and, in point of fact, there was a decline in the total number of employees engaged in the industry.

It seems certain that (as had happened at an earlier date in other parts of the world) the end had come to the artificial stimulus given to business by the rapid extension of instalment purchase through such devices as the "cash order," and there had ensued a period of some slackness due to the temporarily diminished purchasing power of the community. Simultaneously the accumulation of loanable funds indicated that business confidence had waned probably in consequence of the continued decline of world prices coupled with uncertain seasonal and industrial conditions.

In addition, the anticipation of increases in the tariff, which had been under consideration for nearly a year, had led to a large increase in the volume of imports of certain goods—notably iron, steel, and knitted goods—and certain industries temporarily suspended part of their operations. This gave rise to some further uncertainty of outlook, which was again increased by the difficulties experienced by certain companies in the motor trades and by a suspicion—justified by later events—that certain companies were over-trading in luxury goods on insecure credit.

All these occurrences had an undoubted influence on the events which followed. There had been also a succession of changes in the conditions of employment during 1926 and 1927, the last, introduced in July, 1927, being a modification of the principle of the basic wage through the introduction of family endowment financed by a tax on wages.

The growth of unemployment set in definitely in August or September, 1927, and rose to a peak about the middle of 1928, but declined in the next six months. Except as regards the mining industry—which was affected as to both coal and metals by world-wide causes—there does not appear to have been sufficient decline in industrial production nor depression in business to account for any appreciable part of the pronounced growth in unemployment. The causes of this increase seem to have been psychological rather than material, and the downward trend seems to be explainable rather by the intrusion of factors unrelated to the volume of business and industrial activity than to any inherent weakness in the general economic condition of the State, except, of course, the mining industry.

The immediate causes of the unemployment appear to have been a possible measure of shortening of staff in face of the uncertain seasonal outlook in the latter part of 1927, dislocation in certain industries consequent on the sudden increase in volume of imports, and the rapid decline of the coal-mining industry. These occurrences alone could scarcely have been sufficient to produce the depression, but their effects were apparently intensified by the continued operation of causes which had tended to reduce the volume of employment in relation to production. These factors were the long-continued decrease in the volume of rural employment notwithstanding the expansion of output—a trend related to a general movement, viz., the

continued changes in the processes of trade and industry due to the rapidly increasing use of machinery, particularly in rural industries, the rapid substitution of the more efficient motor for horse transport, and changes in industrial processes such as the partial substitution of concrete for bricks in building.

Added to these were the facts that conditions governing employment were rapidly changing, and that immigration from overseas had increased. It would appear that, at the same time, there had been a considerable accession of unemployed from neighbouring States which had been visited by depression during the period that employment in New South Wales had remained plentiful.

Once started to operate, the influence of these forces could not be suddenly arrested, and their adverse effects were increased by the steady extension of the depression in the coal trade, which alone produced unemployment or intermittent employment for a large proportion of the employees in the industry. Related in some measure to this was the continued depression in the iron and steel industry, which was affected during the year by competition from accumulated imports.

It was evident from the facts that up to this time the causes of the business depression in New South Wales were mainly adventitious. Production had been maintained at a high level and, given continuance of average seasonal conditions and normal stability in oversea markets, there was little likelihood that a severe crisis would develop or that recovery would be long delayed.

1928-29.

The prospects of a quick recovery in industrial conditions in 1928-29 were diminished by a number of internal factors and were finally extinguished towards the close of the year by the course of price movements oversea.

There was early anxiety regarding the wheat crops and pastures, occasioned by the absence of rain in August and September and the prevalence of warm, drying winds in pastoral districts during the latter month. Timely falls over the wheat belt in October, however, assured a large harvest, and as the wool production was the second highest on record, the high value of production from rural industries helped materially to sustain the position. In the closing months of 1928 and at the beginning of 1929 signs of some improvement were evident, notably in the slight diminution in unemployment. But, unfortunately, the continuance of dry weather until February, 1929, and again from May to August, retarded ploughing and sowing and seriously discounted agricultural and pastoral prospects for the ensuing season throughout the southern half of the hinterland.

The supply of money upon the loan markets of the world became depleted and the development of adverse conditions both at home and abroad rendered Australia unable either to borrow new money or to fund her existing floating debts. In January, 1929, the completion of a number of temporary Government works threw a considerable number of men out of employment, and in the same month, following an award which increased their working week from forty-four to forty-eight hours, about 4,000 timber employees ceased work, and the dispute dragged on to an unsuccessful ending in October, 1929. Although the industry was carried on meanwhile by voluntary labour, its operations were necessarily restricted, with consequential effects on the building industry.

The depression in the coal industry continued and, recognising its increasingly ill effect on industry, the Government put forward a scheme designed to regain lost trade overseas, to retain interstate trade, and stimulate Australian consumption by a reduction in the price of coal. The scheme was rejected by the employees as involving a reduction of wages, and on 1st March, 1929, all except two of the associated northern mines were closed by the proprietors and remained closed for fifteen months. This action left 12,000 men without employment and was the final factor in raising the number of unemployed beyond the level of any previous year of which records are available.

It was not surprising in the circumstances that trading operations, as indicated by banks' exchange settlements, were only equal in volume to those of the previous year, showing no expansion. Business of all kinds suffered from the uncertainty of the seasonal outlook in the spring of 1928, by the dislocation in the coal-mining and timber industries and the resultant increase in unemployment in 1929, and finally by the sudden and severe break in the wool market in June, 1929, coupled with an intensification of the depression that was settling on the rest of the world. This produced a sudden transformation in the Australian outlook.

The banking position remained strong during the year. Deposits in private accounts in private banks increased by £4,200,000, and though advances were expanded by £12,400,000 in order to meet the depression, there still remained a reserve of loanable funds.

The prices of stock were maintained generally, and during the greater part of the year money was readily available for investment, with a decided preference in the final quarter for Government stocks and gilt-edged securities.

1929-30.

The general economic situation in New South Wales became increasingly merged into that of the Commonwealth of Australia and the Australian situation into that of the world under the influence of an acute world-wide depression which developed with increasing severity through the latter part of 1929 and the whole of 1930. The steady decline which had been in evidence in world prices since 1925 began to accelerate rapidly about the middle of 1929, and during 1930 prices reached disastrously low levels. Practically every staple commodity and every country in the world was affected by this movement and nearly the whole of the goods exported from Australia for sale overseas suffered under the decline in prices, which was especially severe in respect of our staple exports—wheat and wool. There resulted a fall of approximately £17,000,000 in the value of merchandise exported overseas from New South Wales in 1929-30 as compared with the preceding year. This amount was equivalent to nearly 35 per cent. of the income normally earned by the exporting industries, and its loss caused a disturbance of the balance of distribution of real income. This disturbance was increased by the cessation of the flow of loan moneys from abroad as from January, 1929, resulting in curtailment of industries and enterprises which had for many years been dependent on the regular introduction of new capital into the State.

An acute industrial depression ensued, which was reflected in a diminished volume of business, widespread unemployment coupled with "rationing" of employment, falling prices, lower profits, a severe decline in the values of real property and of most securities and investments, and a heavy diminution in deposits in trading and savings banks, accompanied by a large increase in the ratio of advances. The activities of the manufacturing

industries (which had expanded almost continuously over a long period of years) showed an average diminution of nearly 10 per cent., and building operations declined rapidly to only 20 per cent. of the volume of preceding years. The principal rural industries (except wheat-growing, which was affected in some degree by an adverse season) maintained the large volume of output of previous years, but were affected by the heavy fall in values. The coal and metalliferous mining industries suffered heavy declines. At the same time, the earnings of governmental enterprises, such as railways and tramways, diminished and the yield of taxation decreased. There resulted in this, as in practically every State of Australia, adverse budget balances. Bank advances were heavily increased and exceeded deposits for the first time in many years.

In the early part of 1930 the Government of New South Wales passed legislation re-introducing the 48-hour week, reducing the salaries of members of Parliament and of Government employees, and imposing a tax on all incomes in order to raise funds for the relief of unemployment. The Federal Government took action to correct the adverse trade balance by restricting the volume of imports by prohibition, rationing and the imposition of increased import duties. Rates of federal income tax were increased, and a sales tax was imposed.

In February, 1930, the first of a series of Premiers' Conferences was called to devise means of meeting the position.

1930-31.

The economic depression intensified during 1930-31, and there was a continued diminution in business and industrial activity which was especially marked in the second and third quarters of 1931. In the later months, however, a temporary improvement occurred in oversea prices of wool and wheat, and this, coupled with a depreciation of sterling in terms of gold, produced a substantial improvement in the prices of wheat and wool (in Australian currency), restoring them to the vicinity of pre-war level in November, 1931. This movement was accompanied by a slight improvement in certain phases of the general position.

During the year the volume of activity in secondary industries (as shown by factory returns) and in general business (as measured by bank clearings) continued to contract sharply to a point between 30 per cent. and 40 per cent. below the level existing immediately before the access of depression. The decline was in consonance with the decline in value of rural production, which had fallen from £78,500,000 in 1928-29 to £53,700,000 in 1929-30 and £49,800,000 in 1930-31.

In particular, the index of bank clearings, which in June, 1930, was 90 per cent. of pre-depression level, was in the vicinity of 65 per cent. in June, 1931. Factory employment, which had fallen by 10 per cent. in 1929-30, declined by a further 20 per cent. in 1930-31, and the general volume of employment fell to about 63 per cent.

During January, 1931, the exchange premium on transmission of funds to London rose from 8 per cent. to 30 per cent., where it remained until reduced to 25 per cent. in December, 1931.

Since the discontinuance of Government loan flotations both locally and abroad in 1929, construction of capital works on Government account had been progressively reduced and the unfavourable business outlook caused a suspension of practically all new investments on private account. Thus the value of new building permits in 1931 was less than one-tenth of the pre-depression total, and new company registrations in 1930 and 1931 were only

a fraction of the totals for previous years. Sales of real estate decreased from £54,600,000 in 1929 to £26,100,000 in 1930 and to £13,700,000 in 1931. The value of shares on the Stock Exchange fell by approximately 40 per cent. between July, 1929, and August, 1931, though some improvement occurred towards the end of 1931.

In certain other directions, however, the depression was not so marked. Deposits in trading banks declined by about 10 per cent., and though, during 1930 advances exceeded deposits, a more healthy relationship was established in 1931. Records of wholesale trade which became available in the latter half of 1930 indicated a fairly stable volume of turnover from that time to the close of 1931.

Fortunately, the output of primary production continued to approach record levels in 1930-31 and, though world values continued to decline, the large volume of exports, coupled with the exchange premium, prevented a further decrease in rural producers' returns from the export trade.

In June, 1931, a conference of Premiers in Canberra resolved to adopt the following measures for rehabilitation:—

- (a) A reduction of 20 per cent. in all adjustable Government expenditure, as compared with the year ending 30th June, 1930, including all emoluments, wages, salaries and pensions paid by the Governments, whether fixed by statute or otherwise, such reduction to be equitably effected.
- (b) Conversion of the internal debts of the Governments on the basis of a 22½ per cent. reduction of interest.
- (c) The securing of additional revenue by taxation, both Commonwealth and State.
- (d) A reduction of bank and Savings Bank rates of interest on deposits and advances.
- (e) Relief in respect of private mortgages.

Further measures taken to cope with the depression included (in the State sphere) a Moratorium Act, a Landlord and Tenant (Distress Abolition) Act, an increase in the scale of taxation for unemployment relief, and an Ejectments Postponement Act. As part of measures co-ordinated with the other States after conference, there were passed a Public Debt Conversion Act, Interest Reduction Act, Rents Reduction Act, and a reduction of Parliamentary and Public Service salaries. As from 1st January, 1931, the forty-four-hour week was re-established as the standard working week within State jurisdiction. In the Federal sphere there was an increase in the sales tax and primage duties, a wheat bounty was provided, and the general conversion loan, reducing rates of interest on internal public debt by 22½ per cent., was effected. As from 1st February, 1931, the Federal Arbitration Court reduced the basic wage applicable under Federal awards by 10 per cent. over and above the cost of living adjustments.

PUBLIC FINANCE.

The collection and expenditure of public moneys in New South Wales are controlled by four authorities, viz.:—(1) The Government of the State of New South Wales; (2) the Government of the Commonwealth of Australia; (3) the Municipal, Shire, and County Councils (local governing bodies operating in defined areas); and (4) statutory bodies appointed by the Government to administer such public services as railways, tramways, water and sewerage, Sydney Harbour, irrigation, and main roads.

The governmental revenue of the State Government is derived mainly from taxes such as the income tax, stamp and probate duties, motor, betting, totalisator, racecourses admission and entertainments taxes, and (since 1st July, 1930) unemployment relief tax; and fees for licenses; from the sale and leasing of its lands and forests; and from the contribution by the Commonwealth under the financial agreement of 1927. The expenditure of the State on governmental account includes the cost of such services as education, public health, hospitals, police, prisons, the State law courts, Industrial Commission and conciliation boards, navigation (in part), agriculture, and lands administration, water conservation and irrigation, local government (administration and grants), widows' pensions, care of the destitute, administration of mining, fisheries, and factory laws, the construction of public works and unemployment relief.

The governmental revenue of the Commonwealth Government is derived mainly from the customs and excise and primage duties, income tax, land tax, estate duty, sales tax, and entertainments tax. Its expenditure is mainly in connection with war and repatriation services, old age and invalid pensions, maternity allowances, naval and military defence, lighthouses, navigation (in part), quarantine, bounties on production, the control of customs, meteorological observations, assistance in marketing operations, bankruptcy law (as proclaimed in August, 1928), the maintenance of a High Court and courts of industrial arbitration.

Local governing bodies are required to levy a rate of not less than 1d. in the £1 on the unimproved capital value of lands within the areas administered by them, and, in some cases, they are empowered also to levy rates on the improved capital value. They provide minor services, such as the construction, maintenance, and lighting of streets and roads, the control and maintenance of public parks and recreation areas, the supervision of building operations, and, in some cases, the provision of water and sanitary services. In general the cost of these services is defrayed from the rates, but not infrequently charges are imposed for special services rendered. In some instances loans are raised for expenditure on revenue services and are repaid by special or increased general taxation in the area concerned.

The revenue of the statutory bodies such as the railways, tramways, Sydney Harbour Trust, etc., is derived almost entirely from charges for the use of services which they administer, and all are ultimately subject to the control of the Government by which they are appointed.

Besides their ordinary governmental activities, the various Governments conduct certain business and industrial undertakings. Thus the State Government owns brickworks, monier pipe works, and metal quarries and other establishments, and many of the local governing bodies have established light and power services which are retailed to the general public.

Both State and Federal Governments have power to borrow money as approved by the Loan Council. Loans are applied to capital expenditure on works usually of a reproductive character, the interest, sinking fund, and cost of repairs and renewals to the works being paid from revenue.

The Commonwealth Government, however, incurred a heavy debt for war and repatriation services and for the soldier settlement schemes. Arrangements made under the Financial Agreement of 1927 to co-ordinate borrowing and sinking funds are described on a later page. In terms of this agreement the Commonwealth took over the debts of the States on 1st July, 1929, and agreed to contribute a certain sum towards the annual interest and sinking fund charges thereon. A national debt sinking fund was established, and the management of the debts and the supervision of public borrowing were entrusted to the Australian Loan Council of representatives of the Commonwealth and each of the States.

Municipalities and shires have power under certain conditions to raise loans. In the case of a municipality the total amount of loans must not exceed 20 per cent. of the unimproved value of the ratable land in its area, and, in the case of a shire, thrice its annual income.

Of the statutory bodies referred to, the Metropolitan Water, Sewerage and Drainage Board alone has power to raise loans on its own initiative, but such loans are subject to the approval of the Governor.

TAXATION.

The following statement shows the amount of taxation collected in New South Wales by the State Government, and the rates and charges received by local bodies, etc., during the five years ended 30th June, 1931.

Head of Taxation, or Charge.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
STATE.	£	£	£	£	£
Land Tax	2,870	2,744	2,870	2,£88	2,486
Income Tax	7,739,627	6,382,467	7,343,049	7,084,465	6,183,481
Unemployment Relief Tax ...	...	...	...	...	4,375,803
Family Endowment Tax ...	...	1,012,758	52,813	1,886,715	1,018,429
Stamp and Probate Duties—					
Stamps	1,626,318	1,552,117	1,586,776	1,£62,147	931,419
Betting Tickets	125,645	124,059	114,351	116,933	75,674
Probate	1,223,979	1,£96,804	1,816,927	1,860,052	1,496,530
Motor Tax	952,481	1,130,280	1,310,565	1,388,771	1,258,641
Motor Licenses	295,434	348,706	399,888	418,605	411,328
Betting Taxes	110,957	114,527	113,127	107,211	316,273
Totalizator Tax	233,867	201,008	193,868	193,172	142,939
Racecourses Admission Tax...	143,608	136,175	129,713	129,320	86,579
Entertainments Tax ... ..	...	...	...	54,711	78,345
Fees for Registration of Dogs..	20,837	20,336	21,051	22,184	22,000
Other Licenses	243,856	615,356	535,455	543,708	243,176
Total, State Taxation £	12,719,479	13,237,337	13,625,453	15,170,582	16,643,103
LOCAL, ETC.					
Wharfage and Tonnage Rates	907,457	895,137	873,57£	787,548	616,426
Municipal Rates*—					
City of Sydney	795,368	1,016,882	1,033,634	1,085,382	1,148,778
Suburban and Country ...	2,322,274	3,093,476	3,490,996	3,753,855	3,963,814
Shire Rates*	1,474,857	1,598,035	1,551,386	1,£79,538	1,719,530
Water and Sewerage Rates ...	2,519,343	2,768,833	3,029,918	3,080,686	3,037,313
Total, Local Rates and Charges ... £	8,519,299	9,372,363	9,979,513	10,387,009	10,485,861
Grand Total ... £	21,238,778	22,609,700	23,604,966	25,557,591	27,128,964

* Year ended 31st December preceding; Harbour Bridge and Main Roads rates are included.

The Family Endowment Tax was first imposed as from 23rd July, 1927, and the Unemployment Relief Tax as from 1st July, 1930. The proceeds:

of the former are distributed for the maintenance of children where the family income is below the living wage standard, and the latter is utilised for the provision of food relief and special work for the unemployed. Neither of these taxes and only part of the motor revenue is used for ordinary revenue purposes. Full details of amounts collected, rates and allocations are shown on pages 391, 584, and 643.

It is not practicable to determine the precise amount of federal taxation which is borne by the people of New South Wales. The amount of customs excise revenue actually collected in the State is shown on page 123 of this Year Book, but some of these taxes relate to goods consumed in other States, as there is considerable interstate movement. Federal land and income taxes paid by persons owning property and deriving income in more than one State are included in single assessments made by the Central Office, and cannot be allocated to the individual States except arbitrarily. It may be assumed, however, that the average federal taxation per head in New South Wales is not less than the average calculated on the receipts and population of the whole Commonwealth. These averages, were £9 13s. 2d. in 1926-27, and £9 1s. 10d., £8 17s. 10d., £9 1s. 6d., and £7 15s. 10d. in the succeeding years.

Taxation per Head of Population.

The amounts in the preceding table stated in their equivalent rates per head of population are shown below:—

Head of Taxation, or Charge.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
STATE.					
Land Tax	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Income Tax	3 5 11	2 13 2	3 0 0	2 17 2	2 9 6
Unemployment Relief Tax ... ..	...	...	...	...	1 15 0
Family Endowment Tax ... ..	...	0 8 5	0 0 6	0 15 3	0 8 2
Stamp and Probate Duties—					
Stamps	0 13 10	0 13 0	0 12 11	0 11 0	0 7 5
Betting Tickets	0 1 1	0 1 0	0 1 0	0 0 11	0 0 7
Probate, etc.	0 10 5	0 13 3	0 14 10	0 15 1	0 12 0
Motor Tax	0 8 1	0 9 5	0 10 8	0 11 2	0 10 1
Motor Licenses	0 2 6	0 2 11	0 3 3	0 3 5	0 3 3
Betting Taxes	0 1 0	0 1 0	0 0 11	0 0 10	0 2 6
Totalizator Tax	0 2 0	0 1 8	0 1 7	0 1 7	0 1 2
Racecourse Admission Tax	0 1 3	0 1 2	0 1 1	0 1 0	0 0 8
Entertainments Tax ... ..	...	...	...	0 0 5	0 0 8
Fees for Registration of Dogs	0 0 2	0 0 2	0 0 2	0 0 2	0 0 2
Other Licenses	0 2 1	0 5 1	0 4 5	0 4 5	0 2 0
Total, State Taxation ...	5 8 4	5 10 3	5 11 4	6 2 5	6 13 2
LOCAL, ETC.					
Wharfage and Tonnage Rates ...	0 7 9	0 7 5	0 7 2	0 6 4	0 4 11
Municipal Rates*—					
City of Sydney	0 6 9	0 8 6	0 8 5	0 8 9	0 9 2
Suburban and Country	1 4 0	1 5 9	1 8 6	1 10 4	1 11 8
Shire Rates*	0 12 7	0 13 4	0 12 8	0 13 7	0 13 9
Water and Sewerage Rates ...	1 1 6	1 3 1	1 4 9	1 4 10	1 4 4
Total, Local Rates and Charges ...	3 12 7	3 18 1	4 1 6	4 3 10	4 3 10
Total, State and Local Taxation ...	9 0 11	9 8 4	9 12 10	10 6 3	10 17 0

* See footnote to previous table.

STATE TAXES.

State Land Tax.

Land tax is levied by the State only on the unincorporated districts of the Western Division where no local rates are imposed. The rate of tax is 1d. in the £ on the unimproved value. For the purpose of assessment a statutory deduction of £240 is made from the assessed value of the lands held by each individual. The amount of land tax collected in the year ended 30th June, 1931, was £2,486.

State Income Tax.

Income tax was first levied in New South Wales as from 1st January, 1896, and it has since been levied annually with, latterly, frequent changes of incidence. Incomes are usually assessed for taxation in the year following that in which they are derived, the returns for assessment being normally made up for the twelve months ended 30th June.

The income tax law was revised in 1928, and the new Acts apply to the taxation of incomes derived in 1927-28 and following years. The field of taxation was extended by reducing the statutory deduction and by repealing certain exemptions. Special provisions were inserted to lessen opportunities for the avoidance of tax, and the rates in respect of the higher incomes were increased. In certain matters further concessional deductions were allowed.

Taxable Income is gross income less expenses incurred in earning it and (except in respect of companies) less the statutory deduction and concessional deductions.

Statutory Deductions.—Resident taxpayers are allowed a statutory deduction of £250, and absentees £50, less £1 for every £8 by which the net income exceeds £250 or £50, respectively, the net income being the assessable income less all deductions except the statutory deduction. Thus this exemption is a diminishing deduction which vanishes altogether at net incomes of £2,250 in the case of residents and £450 in the case of absentees. For net incomes exceeding those amounts there is no statutory deduction.

Concessional Deductions include rates and taxes (except income tax) imposed by the State or a State authority, Federal land tax, contributions up to £50 to industrial unions, and to approved agricultural societies, gifts of 10s. and over to public charitable institutions in the State and to the Sydney University and affiliated colleges. In the case of resident taxpayers the following concessional deductions also are allowed:—(a) Premiums up to £50 for life assurance, annuity or fidelity guarantee; (b) contributions up to £100 paid by a salary or wage earner, or by a taxpayer with a taxable income not exceeding £800, in respect of superannuation, or sustenance, or widows or orphans funds, or registered friendly societies; (c) £50 for each child under 16 years of age; (d) £50 in respect of the wife of a married taxpayer and contributions up to £50 by unmarried taxpayers for the maintenance of dependants. Where the taxable income does not exceed £400, medical and dental expenses for the taxpayer, his family, or dependants may be deducted, also funeral expenses up to £20; and where the taxable income does not exceed £800, expenses up to £50 per child for the education of children under 18 years, if suitable facilities are not provided by the State within reasonable daily travelling distance.

Tax is levied on the net income of companies without deduction, and dividends are treated as income in the hands of the shareholders, but shareholder-taxpayers are allowed a rebate in respect of the tax paid by the companies.

Rates of Tax on Individuals.—The tax payable in respect of the incomes of individuals derived in the year 1927-28 was assessed at the following rates:—

On income from personal exertion the tax was graduated from a commencing rate of 7d. in the £, reaching 35d. in the £ on a taxable income of £7,000, the intermediate rates being determined on the formula $7d. + (\frac{1}{100} \times \text{number of £ in taxable income})$ pence in the £. Taxable incomes over £7,000 were taxed at 35d. in the £ on the first £7,000 and 60d. in the £ on the excess over £7,000.

On income from property the rate of tax was graduated from 9d. in the £ to 42d. in the £ on a taxable income of £5,500, the intermediate rates being determined on the formula $9d. + (\frac{3}{100} \times \text{number of £ in taxable income})$ pence in the £. Taxable incomes over £5,500 were taxed at 42d. in the £ on the first £5,500 and 60d. in the £ on the excess over £5,500.

For assessing the tax on incomes derived in the years 1928-29 and 1929-30, the foregoing rates were reduced by 5 per cent.

Where income is derived partly from personal exertion and partly from property the rate on the income from personal exertion is calculated as if the total taxable income had been derived from personal exertion, and the rate on the income from property as if the total had been derived from property.

The minimum amount of tax is 10s.

The rate of tax applicable to income derived by individuals from the pastoral, dairying, and agricultural industries is determined under a system of averaging, the rate applied to such income being the rate chargeable in the year of assessment on an amount of taxable income equal to the taxpayer's average taxable income derived from such industries during not more than the preceding five years, including the year of assessment. It is provided, however, that where the taxable income of the fifth preceding year was more than that of the fourth preceding year, the averaging period shall commence from the next succeeding year in which the taxable income was less than in that which followed it.

Rates of Tax on Companies.—The rates of tax payable by New South Wales companies are graduated according to taxable income. The scale commenced in respect of income derived in 1927-28 at a rate of 2s. in the £ if the income did not exceed £500, and increased by 1d. in the £ for each £500 until the rate was 36d. for each £ where the taxable income was £6,000 or over. The rate for all foreign companies was 36d. in the £. In addition there was a supertax of 3d. in the £. Incomes derived by New South Wales companies for 1928-29 and the succeeding two years were taxed on a similar scale without supertax to a maximum rate of 33d. for each £ where the income exceeded £4,500. The rate for foreign companies has been 33d. per £ since 1927-28. The rate payable by mutual life assurance companies has been 24d. per £ throughout.

A tabular summary of the deductions allowed and rates of tax in the years 1923 to 1928 was published on page 397 of the Year Book for 1927-28.

The incomes exempt from income tax include the following:—The salary of the State Governor, the official salaries of representatives of the Government of another country, including foreign consuls and British trade commissioners and members of their staffs temporarily resident in New South Wales (subject to certain conditions as to reciprocity, etc.); the revenues of municipal corporations and of local or public authorities; the income of mutual life assurance companies not being income from

investments or rent or casual profits on the sale of property; the income of registered friendly societies and trade unions; the incomes of ecclesiastical, charitable, and educational institutions of a public character, and of trust funds for public charitable purposes; the incomes of Starr-Bowkett building societies, and of societies not carried on for the purpose of profit, established to promote the development of the resources of Australia, or for the encouragement of music, art, science or literature; pensions paid by the Federal Government under the Australian Soldiers Repatriation Act; incomes derived by individuals in 1928-29 and four succeeding years from gold mines in Australia, Papua, or New Guinea, including dividends paid by a company out of such income.

In regard to registered co-operative societies, exemption is provided also in respect of the following:—Undistributed profits; profits paid to members as rebate or bonus on business done with the society (where 90 per cent. of the society's business is done with its own members); and dividends from other societies or from incorporated companies, and interest on bonds of other societies, received by investment societies. Members of investment societies are not taxable in respect of dividends paid to them out of the non-taxable income of the society. By decision of Cabinet certain co-operative societies, including those selling goods to shareholders for domestic use, were exempt from payment of income tax for the years 1927-28 to 1930-31.

State tax is not levied on interest from bonds, debentures, stock and other securities issued by the Commonwealth Government or on certain loans raised by the Commissioners of the Government Savings Bank of New South Wales. Interest on local State loans raised after 1st January, 1923, has been subject to State tax but, as from 1st July, 1927, all local borrowings have been by way of the issue of Commonwealth securities which are free of State tax.

The statistics published by the State Income Tax Commissioner since those for assessments made in 1910-11 have been very scanty, but the following data have been made available:—

Returns supplied in year ended 30th June (Income derived previous year).	Companies.		Individuals.		Total Amount of Tax Assessed.
	Number Assessed.	Amount of Tax Assessed.	Number Assessed.	Amount of Tax Assessed.	
		£		£	£
1921	2,201	2,344,043	68,599	2,472,281	4,816,324
1922	2,201	2,258,441	97,334	2,148,370	4,406,811
1923	2,236	2,326,141	101,578	2,092,461	4,418,602
1924	2,720	2,757,822	111,528	2,156,641	4,914,463
1925	3,068	3,104,151	120,557	1,970,845	5,074,996
1926	3,338	3,602,863	85,795	2,054,146	5,747,009
1927†	3,478	4,342,248	83,775	1,788,424	6,130,672
1928§	3,190	4,500,000	93,238	2,000,000	6,500,000
1929	3,346	4,618,594	119,507	2,813,378	7,431,972
1930	3,946	4,404,311	135,459	2,937,594	7,341,905
1931	3,418	3,123,846	121,567	2,125,815	5,249,661

† Partly estimated.

§ Approximate.

In considering the variations in the number of assessments and the amount of tax assessed from year to year, due allowance should be made for changes in the rates and incidence of the tax. Particulars for the years

ended 30th June, 1928, were shown in the Year Book for 1927-28 at page 397. In 1928-29 the taxable field and rates of tax were increased substantially, as described on pages 636 and 637 hereof.

A summary of assessments actually issued, amounts collected, and carry-over in each of the past three years is provided below. The transactions of individual years presented in this way do not relate to the income derived in any individual year, but to the actual time of issuing assessments:—

Heading.	Years ended 30th June.		
	1929.	1930.	1931.
	£	£	£
Tax Assessed—			
Net Tax Assessed and Levied	7,390,087	7,698,792	6,365,887
Miscellaneous Receipts	5,301	17,063	6,227
Net Tax unpaid from previous year	379,827	422,661	1,044,540
Total Receivable	7,775,215	8,138,516	7,416,654
Tax Collected—			
Net collections, amounts written off, etc.	7,352,554	7,093,976	6,211,130
Unpaid Tax carried forward to succeeding year £	422,661	1,044,540	1,205,524

The amount of unpaid tax as at 30th June, 1931 (£1,205,524) was distributed as follows, according to years of assessment:—1930-31, £572,561; 1929-30, £266,775; 1928-29, £166,742; 1927-28, £102,636; 1926-27, £31,605, and previous year £65,204.

State Probate Duties.

Probate duties have been imposed as a State tax continuously since 1880. The rates of probate duty payable on estates of persons dying between 1st January, 1921, and 31st March, 1931, on the assessed value of estates of deceased persons were as follow:—

Estates valued at—

Over £1,000 and under £5,000—2 per cent. of total value.

„ £5,000 „ £10,000—2½ to 4½ per cent. Increasing by ½ per cent. per £1,000.

„ £10,000 „ £20,000—5 to 7 „ „ by ½ „ £2,000.

„ £20,000 „ £140,000—7½ to 19 „ „ by ½ „ £5,000.

„ £140,000 „ £150,000—19½ „

Exceeding £150,000—20 per cent.

As from 1st April, 1931, the rates were as follow:—

Estates of residents valued at—

Over £1,000 but under £61,000, rate 2 per cent. on first £1,000, increasing by steps of ½ per cent. per £1,000 up to 17 per cent. on estates valued at £60,000 to £61,000.

Over £61,000 but under £100,000, rate 17½ per cent., increasing to 25 per cent. by steps of ½ per cent. per £1,000.

Over £100,000, rate 25 per cent.

Estates of non-residents valued at—

Up to £500, rate 3 per cent.

£501 to £1,000, rate 3½ per cent., thence increasing in steps of ½ per cent. to 20 per cent. on £50,000 to £51,000.

£51,000 to £75,000, rate 20½ per cent., increasing to 25 per cent. by steps of ½ per cent. per £1,000.

Over £75,000, rate 25 per cent.

Duty at the rates specified is charged upon the whole value of the estate. Up to the end of March, 1931, estates were exempt from the tax if the value did not exceed £1,000, and half rates were levied on estates under £5,000 in value when the property passed to widows, or to legitimate children under 21 years of age. The amending Act passed in March, 1931, provides that where the value of an estate, wherever situate, does not exceed £1,000 property passing to dependants is exempt, and half rates may be levied under certain conditions on property passing to dependent widow or children under 21 years of age if the value of the estate does not exceed £3,000.

The tax is due and payable on assessment or within six months after the death of the deceased.

The dutiable value of the estate of a deceased person is the assessed value of all property of the deceased situated in New South Wales at his death, and in case of persons deceased since 31st March, 1931, domiciled in New South Wales, personal property outside New South Wales. It includes all property disposed of by trust to take effect after his death; any gift made by him within three years of his death (inclusive of any money paid or property transferred by him without equivalent consideration other than by way of gifts for charitable or patriotic purposes); any property so disposed of that a life interest therein was reserved to deceased or that deceased reserved power to restore to himself; any gift not assumed by the donee to the entire exclusion of deceased; any property comprised in a *donatio mortis causa*; any property vested by deceased in himself and another jointly, so that the beneficial interest therein passes to such other person on the death of deceased; money payable under policy of assurance on the life of deceased kept paid by him for the benefit of a beneficiary; any annuity purchased by deceased to accrue at his death to a beneficiary; any property over which deceased at his death had general power of appointment; any property which on death of deceased passes to any other person by virtue of an agreement made by deceased to the extent which the value of the property exceeds the value of the consideration; any property which deceased has within three years of his death vested in a private company in consideration of shares or an interest in the company.

Whether deceased was domiciled in New South Wales or not at the time of his death, his estate includes every specialty debt secured to him over property in New South Wales; any shares or stocks held in any company carrying on mining or treatment of minerals, or the processes of pastoral or agricultural production in New South Wales; any shares held by deceased in any company carrying on business in New South Wales and having a share register therein where such shares are registered.

The deductions allowed are all debts actually due and owing by deceased.

Particulars of the amount of probate duty collected in each of the past five years are shown on page 634. The number and values of estates assessed annually are shown in the chapter relating to "Private Finance" of this Year Book, and in greater detail in the Statistical Register.

State Stamp Duties.

In addition to the probate duty, stamp duty is imposed on a considerable number of legal and commercial documents, such as agreements, appointments of trustees, bank notes, betting tickets, bills of exchange and promissory notes, bills of lading, company capital, memoranda and articles of association, and certificates of incorporation of companies, contract notes on marketable securities, conveyances of property, declarations of trust, deeds of all kinds, hire purchase agreements, leases, letters or power of attorney,

insurance policies (other than life), receipts or discharges given for payments of money of £2 or more (other than wages and salaries), share certificates and transfer of shares. Certain exemptions in all cases are laid down in the Stamp Duties Act, and specifically in other statutes, notably in regard to documents of organisations not operating for profit.

The amount of stamp duty collected in each of the past five years is shown on page 634.

State Motor Taxes.

Particulars of the rates and amount of taxes on motor vehicles and fees for licenses in respect thereof, and the allocation of the proceeds, are shown on pages 173 to 177 of this Year Book.

Between 1st July, 1924, and 30th June, 1929, except in the year ended 30th June, 1927, when special provisions operated (as explained on page 394 of the Year Book for 1926-27), 90 per cent. of the proceeds of taxes, fees, and fines collected under the Motor Traffic Acts, the Motor Vehicle (Taxation) Acts, and the Metropolitan Traffic Acts were paid into the funds of the Main Roads Board. The remaining 10 per cent. of this revenue was credited to Consolidated Revenue Account to cover cost of collection. The amounts paid to the Main Roads Board in respect of the taxes collected in each year were as follows:—£560,467 in 1924-25, £897,664 in 1925-26, £644,278 in 1926-27, £1,330,399 in 1927-28, and £1,537,598 in 1928-29, and the amount credited to Consolidated Revenue in 1928-29 was £172,855. As from 1st July, 1929, the Transport Act, 1930, provided that there should be credited to Consolidated Revenue 5 per cent. of motor taxes (other than taxes on public vehicles) plus a recoup of the actual cost of police supervision and control of road transport and traffic. The total amounts so credited to Consolidated Revenue were £333,207 in 1929-30 and £284,258 in 1930-31.

In the latter part of 1931 a special license fee of 5s. per annum was placed on public hire vehicles, and certain taxes were imposed upon the carriage of passengers and goods by motor vehicles.

State Taxes on Betting and Horse-racing.

The following table shows the total amount of taxation in connection with betting and horse-racing during each of the last ten years:—

Year ended 30th June.	Racing Clubs and Associations.	Book-makers.	Betting Tickets Stamp Duty.	Totallisator Tax.	Racecourse Admission Tax.	Winning Bets Tax.	Total
	£	£	£	£	£	£	£
1922	65,707	44,422	106,066	281,818	155,630	.....	653,643
1923	67,476	43,603	109,550	275,944	150,587	.....	647,160
1924	67,941	40,789	108,688	266,893	143,013	.....	627,324
1925	69,579	43,365	119,144	248,283	139,499	.....	619,870
1926	65,434	40,210	118,624	237,431	137,903	.....	599,602
1927	68,149	42,808	125,645	233,867	143,608	.....	614,077
1928	73,136	41,391	124,059	201,008	136,175	.....	575,769
1929	71,785	41,342	119,351	193,868	129,713	.....	556,059
1930	68,704	38,507	116,933	193,172	129,320	.....	546,636
1931	57,676	30,947	75,674	142,939	86,579	227,650	621,465

Further references to this matter are contained on page 403 of this Year Book.

State Betting Taxes.

The Finance (Taxation) Act, 1915, and amending Acts, imposed taxes on racing clubs and associations, on bookmakers, and on betting tickets. The last-named tax is now imposed by the Stamp Duties Act, 1924.

With regard to clubs, the taxes are levied on licenses and fees received from bookmakers. The existing rates range from 50 per cent. on racecourses within 40 miles of the General Post Office, Sydney, to 20 per cent. on courses outside that limit.

The taxes payable by bookmakers are regulated according to the particular courses and enclosures where operations are carried on, and they vary considerably.

The Act of 1915 further provided for the imposition of a stamp duty on all betting tickets issued by bookmakers, the amount being one penny in the saddling paddock, and one-halfpenny for the other parts of the racecourse. During 1917 these rates were doubled, and in 1920 the amount on the paddock tickets was increased to threepence, but the other rates were not altered. In addition to these amounts, bookmakers are required to furnish a monthly statement showing the number of credit bets made, the duty on them being the same as if tickets had been issued.

In terms of the Winning Bets Taxation Acts, as from 20th December, 1930, a tax was imposed at the rate of one shilling in each ten shillings of the amount of each winning bet, but as from 26th November, 1931, the amount of the wager was excluded from the taxable amount.

State Totalizator Tax.

Under the Totalizator Act passed on 20th December, 1916, amended in 1919, 1920, and 1927, registered racing clubs and associations must establish an approved totalizator if so directed by the Government. The commission to be deducted by the clubs and associations from the total amount invested by patrons is $12\frac{1}{2}$ per cent. Of this the Colonial Treasurer receives from the Australian Jockey Club and the metropolitan clubs racing for profit 9 per cent. of the total payments into the machine, and from other clubs $5\frac{1}{2}$ per cent.

State Racecourses Admission Tax.

An Act enabling the Government to levy a tax on persons entering racecourses came into operation on the 1st October, 1920, and an amending Act was passed on the 31st December, 1920. The Acts apply to racecourses within 40 miles of the General Post Office, Sydney, and to the racecourse of the Newcastle Jockey Club. The rates vary from 2d. to 3s. 4d. on the charges for admission, the highest rates being levied on admissions of males to the saddling paddock at Randwick. Members of racing clubs and season ticket-holders are required to pay a tax equal to 40 per cent. on the amount of their annual subscriptions.

In order to carry out the provisions of this Act, racing clubs are compelled to furnish returns of the number of persons who paid for admission and the number of members and season-ticket holders.

State Entertainments Tax.

A tax on entertainments was imposed by the State Government as from 1st January, 1930. Entertainments for purely philanthropic objects are exempt, also race meetings taxable under the Racecourses Admission Tax Act. The entertainments tax is collected on the payments for admission at the following rates, those which do not exceed 1s. 6d. being free from taxation:—Over 1s. 6d. and under 2s., tax $\frac{1}{2}$ d.; 2s. and over, tax 1d. for the first 2s. and $\frac{1}{2}$ d. for each additional 6d.

Family Endowment Tax.

In order to provide the funds necessary for making effective the provisions of the Family Endowment Act for the payment of allowances in respect of dependent children, a tax was imposed on the amount of wages paid by

employers as from 23rd July, 1927. The tax is paid by employers except those who paid less than £150 in wages in the twelve months immediately preceding the period of assessment, and employers who are public hospitals or public benevolent or charitable institutions. Wages paid to employer's children and to domestic servants are exempt and instrumentalities of the Federal Government are not taxable. The tax was assessed on quarterly returns lodged with the State Commissioner of Taxation until 1st July, 1932, when it became payable by stamps affixed to pay sheets.

The rate of the Family Endowment Tax and the principal changes in basis of assessment have been as follows:—

Tax levied on assessable wages paid with a remission of 10 per cent. of tax in respect of wages paid under federal awards or agreements—

23 July, 1927, to 31 October, 1927—3 per cent.

1 November, 1927, to 30 March, 1929—nil.

1 April, 1929, to 19 December, 1929—2 per cent.

Tax levied on assessable wages the following being exempt—

(a) Wages fixed on federal basic wages or under awards or agreements prescribing allowances for children;

(b) wages of Crown employees except those employed in connection with State industrial undertakings or statutory bodies—

20 December, 1929, to 31 December, 1929—2 per cent.

1 January, 1930, to 30 June, 1931—1 per cent.

Tax levied on all assessable wages, including those paid under federal awards, and wages of Crown employees—

As from 1 July, 1931, 2 per cent.

As from 1 July, 1932, 5d. in each £.

The amounts of tax collected are shown in the table on page 634 and further general information is contained on page 32 of the Report of the Auditor-General on Ministerial Departments, 1930-31.

A description of the family endowment scheme is given on pages 391 to 394 of this Year Book.

Unemployment Relief Tax.

The Unemployment Relief Tax Acts passed in June and December, 1930, and in June, 1931 and 1932, imposed taxes at the following rates:—

- (1) On wages and salaries, 3d. in each whole £ paid on or after 1st July, 1930, and 1s. in each whole £ as from 1st January, 1931: payments at rates less than 30s. per week were exempt prior to 1st January, 1931, on which date the exemption was raised to £2 per week.
- (2) On incomes (other than wages and salaries) derived in the year ended 30th June, 1930, 7½d. in each £ and on incomes derived in the two succeeding years 1s. in each £ of total net income before subtracting the usual statutory and concessional deductions. Residents are exempt where the total income from all sources does not exceed £100 per annum.

The tax on wages and salaries is collected on behalf of the Government by employers who affix stamps to receipts for the amount of tax due on gross payment. The tax on other incomes is levied by annual assessment.

Incomes entirely exempt include old-age, invalid, war, and widows' pensions and allowances under the Family Endowment Act, the official salaries of consuls, etc., the incomes of bodies who do not conduct business for profit or gain, and the incomes of life assurance companies except dividends taxable in the hands of shareholders.

COMMONWEALTH TAXES.

Federal Land Tax.

The first direct taxation by the Federal Government was the land tax imposed in 1910. This is a graduated tax on the unimproved value of the lands in the Commonwealth. In the case of landowners who are not absentees, an amount of £5,000 is exempt from taxation, and the rate of tax is $1\frac{1}{8}\frac{1}{50}$ d. for the first £1 of value in excess of that amount, increasing uniformly to 5d. in the £ on a taxable balance of £75,000, with 9d. in the £ for every £ in excess of that amount. Absentee owners are required to pay 1d. in the £ up to £5,000, with a uniform progression from $2\frac{1}{8}\frac{1}{50}$ d. to 6d. for the next £75,000. On every £ in excess of £80,000, the rate payable is 10d. The amount of tax payable on assessments made for financial years subsequent to 1st July, 1927, was reduced by 10 per cent. of the amounts determined under the foregoing rates.

Lands exempt from taxation are those owned by a State, municipality, or other public authority, by savings banks, friendly societies, or trade unions, and those used for religious, charitable, or educational purposes, grounds owned by clubs, etc., and used for sports (except golf and horse-racing), and pastoral lands leased from the Crown.

The latest statement issued by the Commonwealth Commissioner of Taxation shows the following particulars in respect of taxable lands held in New South Wales and in the Commonwealth at 30th June, 1926:—

Heading.	New South Wales.			Commonwealth.		
	Residents.	Absentees.	Total.	Residents.	Absentees.	Total.
Improved value—	£	£	£	£	£	£
Town Lands ...	101,224,887	1,414,838	102,639,725	234,459,854	3,274,381	237,734,235
Country Lands ...	110,138,837	592,991	110,731,828	235,400,017	1,683,830	237,083,856
Total ...	211,363,724	2,007,829	213,371,553	469,859,871	4,958,220	474,818,091
Unimproved value—						
Town Lands ...	50,166,453	863,235	51,029,688	127,029,311	2,084,673	129,113,984
Country Lands ...	58,520,831	318,958	58,839,789	139,433,688	1,119,786	140,553,474
Total ...	108,686,784	1,182,193	109,868,977	266,462,999	3,204,459	269,667,458
Tax Assessed—						
Town Lands ...	664,362	9,060	673,422	1,567,125	24,896	1,591,961
Country Lands ...	551,380	3,292	554,672	973,092	12,126	985,218
Total ...	1,215,742	12,352	1,228,094	2,540,217	36,962	2,577,179
Area of Country Lands assessed	30,807,529	142,940	30,950,478	60,109,491	707,777	60,817,268

The land tax assessed in the Commonwealth up to 30th June, 1930, was £2,837,662 for the year 1927-28, £2,803,117 for the year 1928-29, and £2,846,289 for the year 1929-30. As an Act, assented to on 22nd December, 1927, allows the department a maximum period of two years from the date of assessment in which to revise valuations, the latest complete assessment available is that for 1926-27, when the amount of tax assessed was £2,577,179 for the Commonwealth. The same Act provided that assessments of land shall be made in respect of valuations made at the end of every third year. The first triennial valuation date was 30th June, 1927, which was the basis of the assessments for 1927-28, 1928-29 and 1929-30. Valuations as at 30th June, 1930, for the assessments of the ensuing three years are likely to be modified as a result of landholders' appeals in view of the heavy decline in values of rural products.

Commonwealth Income Tax.

In addition to the taxation of incomes imposed by the State, the Commonwealth levies a tax which is payable by residents and absentees in respect of income derived from sources within Australia (which includes Papua), except that assessment may be made on income derived by an Australian resident from sources outside Australia to the extent that that income is not chargeable with income tax in another country or is derived from the sale of produce chargeable with royalty or export duty by the Government of another country. The tax was first levied as a war measure in the year ended 30th June, 1916, in respect of income derived in the previous year.

Towards the end of 1923 arrangements were made between the Commonwealth and State Governments for the collection by the State Commissioners of Taxation of the income tax payable under Commonwealth law, thus obviating the necessity for taxpayers to supply separate returns, and leading to an amalgamation of the Federal and State Taxation Departments. This arrangement was entered into in all States except Western Australia, where the Commonwealth Taxation Office collects both Federal and State taxes. Originally the Commonwealth Government contributed 80 per cent. of the working expenses of the Taxation Office in New South Wales, but this was reduced to 50 per cent. on 1st April, 1925, consequent on the raising of the federal statutory exemption and the diminution in the number of assessments.

Returns for purposes of taxation are made up normally for the twelve months ending 30th June, and the tax is assessed and is usually payable before the next succeeding 30th June.

The *taxable income* is the net income (*i.e.*, gross income after deducting what may broadly be described as the cost of earning it) less statutory and concessional deductions allowed by law. The *statutory deduction* allowed to resident individual taxpayers in respect of income derived in each of the seven years ended 30th June, 1930, was £300 less £1 for every £3 by which the net taxable income exceeded £300, so that the deduction gradually diminished on successive grades of income, and vanished when the net income exceeded £1,200. The statutory deduction on income derived by resident individuals from property in 1929-30 was £200 less £1 for every £2 by which the net income exceeded £200, vanishing at £600. In respect of income derived in the year ended 30th June, 1931, this statutory deduction was reduced in the case of resident individuals deriving income from personal exertion, to £250 less £1 for every £2 by which the net income exceeded £250 vanishing at £750. Absentees are taxed on the total income derived by them from all sources in Australia.

The concessional deductions include £50 for every child under 16 years of age maintained by a resident taxpayer; actual payments up to £100 for friendly society benefits, superannuation, etc., if the taxpayer is a salary or wage-earner; or has a taxable income not exceeding £800; premiums up to £50 for life assurance and fidelity guarantee; gifts of £1 and over to public charitable institutions, or Universities in Australia, or to public funds for war memorials, or contributions to the Department of Repatriation; donations to any public authority for research in respect of diseases of human beings, animals, and plants, payments in calls on shares in companies mining for gold, silver, base metals, rare minerals or oil or engaged in afforestation in Australia, rates and taxes including State and Federal land taxes and State income-tax. Where the taxable income is less than £900 the deduction is allowed of fees paid to medical practitioner, hospital,

nurse, or chemist in respect of the illness of the taxpayer, his wife, or children under 21 years of age, and the sum (up to £20) paid to an undertaker for funeral expenses.

Persons engaged in agricultural or rural pursuits in a district subject to the ravages of animal pests are entitled to a deduction of money expended in the purchase of wire-netting.

The incomes exempt from the tax include the revenues and funds of local governing bodies or public authorities; friendly societies; trade unions and kindred associations; religious, scientific, charitable, or public educational institutions; the income of provident, benefit, or superannuation funds established for the benefit of the employees in any business, and of funds established by any will or instrument for public charitable purposes; official salaries of Governor-General, State Governors, foreign consuls, and trade commissioners of any part of the British Dominions and of members of their staffs where reciprocal arrangements exist; the revenues of agricultural, pastoral and horticultural, viticultural, stock-raising, manufacturing and other industrial societies not carried on for profit or gain, and of musical, art, scientific, and literary societies; remuneration paid by the Commonwealth or a State Government to persons domiciled outside Australia for expert advice; war pensions paid under the Australian Soldiers Repatriation Act, 1920-21; the income derived by a person from a mining property in Australia or in the Territory of New Guinea worked for the purpose of obtaining gold, or gold and copper, if gold represents at least 40 per cent. of the total output; income derived by a *bona-fide* prospector from the sale of gold-mining rights in a particular area; so much of the assessable income of co-operative societies or companies as is distributed among their shareholders as interest or dividends on shares, and rebates or bonuses made to a customer by a co-operative society or company and treated as a charge on profits.

Certain Commonwealth War Loans were issued tax free prior to 1923, but under the Taxation of Loans Act, 1923, the interest on any loan raised in Australia after 31st December, 1923, by the Commonwealth or a State or any other authority is subject to Commonwealth income tax. The position in relation to taxation of securities converted under the National Debt Conversion Loan, 1931, is shown on pages 668 and 670.

As a general rule the rate of tax applied to the taxable income is calculated as if the taxable income were the average taxable amount derived in a period of at least two and not more than five years immediately preceding except in assessing the special tax on interest, etc., described below in respect of income derived in the years 1929-30 and 1930-31.

The tax payable in respect of income derived by individuals in the years ended 30th June, 1928, 1929, and 1930 was calculated according to the basic or schedule rates shown below, plus 8 per cent. of the amounts so determined. A super-tax was imposed on the incomes derived in 1928-29 and 1929-30 where the taxable income exceeded £200, viz., 10 per cent. of tax on taxable incomes from £201 to £1,500; 15 per cent. from £1,501 to £3,000; and 20 per cent. where the taxable income exceeds £3,000. In addition, taxable incomes exceeding £500 derived in the year ended 30th June, 1930, were subject to a further tax equal to 15 per cent. of the total amount of tax (including the 8 per cent. additional tax and the super-tax). Furthermore, income from property, income which would have been property income if not derived from carrying on a business and income from personal exertion derived by way of interest, dividends, rents, and royalties was subject to a further tax of 7½d. per cent. of that taxable income.

The basic or schedule rates of tax in respect of incomes derived prior to 30th June, 1930, were as follow:—

Incomes derived from personal exertion.—For so much of the taxable income as did not exceed £7,600, the average basic rate of tax per £ is $3\frac{3}{800}$ d. on the first taxable £ increasing uniformly by $\frac{3}{800}$ d. with each additional £ of taxable income. That is, the average rate of tax was determined in accordance with the formula:—

Rate of tax = $(3 + \frac{3}{800}I)$ pence, where I is the number of £ in the taxable income

Thus, the average basic rate of tax on an income of £400 was $4\frac{1}{4}$ d. in the £; on £1,000, $6\frac{3}{4}$ d. in the £; and on £7,600, 2s. $7\frac{1}{4}$ d. in the £. For so much of the taxable income as exceeded £7,600 the basic rate of tax was 5s. in the £.

Incomes derived from property.—For so much of the taxable income as did not exceed £546, the average basic rate of tax per £ was determined by the formula:—

Rate of tax = $(3 + \frac{1}{181\frac{1}{558}}I)$ pence, where I is the number of £ in the taxable income.

For so much of the taxable income as exceeded £546 but did not exceed £2,000, the additional basic tax for each additional £ of taxable income above £546 increased continuously from 11.713d. for the pound sterling between £545 10s. and £546 10s. to 33.6d. for the pound sterling between £1,999 10s. and £2,000 10s.

For so much of the taxable income as exceeded £2,000 but did not exceed £6,500, the additional basic tax for each additional £ of taxable income above £2,000 increased continuously to 3s. 4d. for the pound sterling between £2,499 10s. and £2,500 10s., and to 5s. for the pound sterling between £6,499 10s. and £6,500 10s.

The basic rate of tax on every £ of taxable income over £6,500 was 5s.

In respect of income derived in the year ended 30th June, 1931, the rates of tax are calculated according to the following formulæ in which I represents the number of £ of taxable income:—

Rate of Tax on Income from Personal Exertion.—3d. plus $\frac{1}{1000}$ pence per £ of taxable income up to £6,900. If taxable income exceeds £6,900, 46.125d. per £ up to £6,900, and 90d. in each £ in excess of £6,900.

Rate of Tax on Income from Property.—3d. plus $\frac{1}{1000}$ pence per £ of taxable income up to £500; 1d. plus $\frac{1\frac{1}{4}}{1000}$ pence per £ of taxable income where total taxable income is between £501 and £1,500; $4\frac{3}{4}$ d. plus $\frac{1\frac{1}{2}}{2000}$ pence per £ of taxable income where taxable income is between £1,501 and £3,700. Where taxable income from property exceeds £3,700 the amount of tax is 47.3d in each £ of the first £3,700 and 90d. in each £ of taxable income in excess of £3,700.

On taxable income derived from property and income derived from carrying on a business which, if derived otherwise, would be income from property and on income derived by way of interest, dividends, rents and royalties there is a further tax of 10 per cent. of the amount of that income. Government bonds converted in 1931 at reduced rates of interest are not subject to this additional tax.

Income derived from both personal exertion and property.—The average rate of tax on that part of the income derived from personal exertion is the average rate that would have been payable had the whole income been derived from personal exertion and the average rate of tax on that part of the income derived from property is the average rate that would have been payable had the whole income been derived from property.

Income of Trustee.—Where a trustee is liable to be separately assessed the rate of tax is determined as above as if one individual were liable to be separately assessed on the income concerned.

Income of Companies.—No statutory or concessional deductions are allowed to companies. The rate of tax on the taxable income derived by companies in the six years ended June, 1928, was 1s. in the £, and the company was liable also to pay a tax of 1s. for every £ of interest paid or credited to any person who is an absentee in respect of debentures of the company or money lodged at interest with the company. Additional tax was levied at the rate of 20 per cent. in respect of income derived in the year 1928-29 and 33½ per cent. in 1929-30. In respect of income derived in the year ended 30th June, 1931, the rate of tax is 16.8d. in the £, with a further tax of 10 per cent. of income from property as above in respect of individual incomes.

Dividends paid by a company to a shareholder in respect of income derived since 30th June, 1922, are taxable as part of the income of the individual, but where the rate of tax payable by him on income from property is less than the rate paid by the company he is entitled to a rebate of the additional amount of tax due to the inclusion of the dividends in his assessment. If on the other hand the rate of tax is not less than the rate paid by the company the taxpaying shareholder is entitled to a rebate of the tax paid by the company in respect of them.

Particulars of the number and amount of income according to grade are shown in the annual reports of the Federal Commissioner of Taxation, the latest report showing details of the assessments of the year 1929-30.

Commonwealth Estate Duties.

The Estates Assessment Act, which came into operation on 21st December, 1914, provided for the imposition of a duty on properties of persons who died after the commencement of the Act. The rate of tax is 1 per cent. of the value of the estate where the total value exceeds £1,000, but does not exceed £2,000, and an additional one-fifth per cent. for every thousand pounds, or part thereof, in excess of £2,000, the maximum being 15 per cent. of the value of the estate. These rates of tax have remained unchanged since the inception of the Act.

A reduction to two-thirds of the above rates is allowed if the estate is left to the widow, children, or grandchildren of the testator. Estates of persons who died on active service in the war, or as the result of injuries or diseases contracted while on active service, are exempt from the tax.

Commonwealth Entertainments Tax.

The Entertainments Tax is levied on payments for admission to almost every class of amusement. Since 15th October, 1925, the rates of tax have been two pence halfpenny when the payment for admission is two shillings and sixpence, and, if it exceeds that amount, one halfpenny for every sixpence or part of sixpence in excess thereof. Details will be found on page 404 of this Year Book.

Primage Duty.

As from 10th July, 1930, a primage duty of 2½ per cent. was imposed on practically all imports, and subsequently increased to 4 per cent. as from 6th November, 1930. On 10th July, 1931, the rate of primage was raised to 10 per cent. on most goods.

The principal classes of goods exempt are:—Bullion and specie, cornsacks, flourbags and materials therefor, fertilisers, spraying materials, radium, rock phosphates, sulphur and woolpacks.

The principal classes of good taxed at 4 per cent. are machines and machine tools, tools of trade, materials for manufacture, manufactures for use in developmental industries, branbags, gunny bags, and bags for ore and potatoes, books for public libraries, cream separators, fibres for making binder twine, fuel oil and coal consumed in Australian waters, goods for public hospitals, newsprinting paper, power kerosene, rock salt, sheep-shearing machines, stud stock, and vessels exceeding 1,000 tons gross register.

Sales Tax.

As from 1st August, 1930, a sales tax at the rate of $2\frac{1}{2}$ per cent. of sale value was imposed upon most locally-manufactured goods and imported goods. The general exemptions included primary products produced in Australia, all goods for export, goods sold by or to a Government or Government authority, and goods subject to special customs revenue duties, e.g., petrol, tobacco, cigarettes, cigars, films, newsprint, and wireless valves. Typical examples of exemptions were:—Bacon and hams, bags and sacks used in marketing primary products, bread, boxes, etc., to be used in marketing exempt goods, electricity, gas, fertilisers, metals as recovered from ores, meat, milk products, newspapers, and water supplied by local authorities.

Wholesalers dealing in taxable goods are required to be registered, and, in general, the tax is paid by the wholesaler in selling to an unlicensed person.

As from 11th July, 1931, the rate of tax was increased from $2\frac{1}{2}$ per cent. to 6 per cent., and certain additional exemptions were granted.

The value of taxable sales in New South Wales in the year ended 31st July, 1931, was £59,542,005, and the amount of sales tax collected £1,649,059. The value of exempt goods sold by local wholesalers in the same period was £62,635,193. In the eight months ended 31st March, 1931, the average monthly totals were:—Sales of taxable goods, £4,798,445; sales of exempt goods by licensed wholesalers, £5,321,912; and tax collected, £280,733.

STATE FINANCE.

It had been the practice for many years to keep the State Accounts on a cash basis, and the statements of revenue and expenditure included only the moneys actually deposited in or paid out of the Treasury during the year. A change of method was introduced as from 1st July, 1928, with the object of placing the accounts as far as practicable upon the income and expenditure basis, by crediting income to the accounts of the period in which it is earned or accrued and debiting the expenditure to the year in which it is incurred. In effect, however (but subject to qualifications as to some variations of dates for closing accounts of receipts and expenditure at the end of certain years), the Consolidated Revenue Account remains a statement of receipts and payments in the twelve months ended 30th June, so far as the Sydney accounts are concerned, and the twelve months ended 30th April so far as the London account is concerned. From time to time the accounts of the principal business undertakings have been separated from consolidated revenue and placed on an income and expenditure basis. Special funds have been created in respect of such matters as motor taxation and unemployment relief. In addition, as from 1st July, 1928, the Public Works Fund was replaced by the Special Purposes (Revenue) Fund, and the relationship of this account with Consolidated Revenue Account was completely altered. By reason of

these and other changes of which details are shown in later pages it is difficult to make comparisons as between the accounts of years preceding and following 1st July, 1928.

The principal accounts of the State Government relate to the Consolidated Revenue Fund, the Special Purposes (Revenue) Fund (formerly the Public Works Fund), the Closer Settlement Fund, the Special Deposits, the General Loan Fund, Unemployment Relief Fund, Family Endowment Fund, a State Lottery Fund, and various road and transport funds. There are also the accounts of the State business undertakings.

The Consolidated Revenue Fund was created by the Constitution Act. All taxes and territorial and other revenues of the Crown are paid to this fund, unless it is prescribed by statute that they are to be paid into some other fund. Subject to certain charges fixed by the Constitution Act, the fund may be appropriated by Parliament for expenditure on specific purposes, as prescribed by statute. Parliamentary appropriations may be either special or annual. A special appropriation is one which is contained in an Act which itself gives authority for the expenditure incurred on the object or function to which it relates. Annual appropriations are made each year to meet expenses of government not covered by special appropriations and not provided for by payments from special funds such as the Unemployment Relief Fund. Annual appropriations or balances of consolidated revenue are not available for expenditure after the end of the year for which they were voted.

Prior to 30th June, 1924, the Consolidated Revenue Account embraced practically the whole of the receipts and expenditure on revenue account of the State Government and of the statutory bodies appointed by it, inclusive of those in connection with railways, tramways, water and sewerage works, harbours and navigation works, housing and the Government grain elevators, but exclusive of certain industrial undertakings, and of the Metropolitan Meat Industry Board.

As from 1st April, 1925, the accounts of the Metropolitan Water, Sewerage and Drainage Board were separated from the Consolidated Revenue Fund, and from 1st July, 1924, the whole or part of the revenue obtained from taxation of motor vehicles and from licenses therefor has been credited to the funds of the Main Roads Board, which came into being after that date, or to funds created in terms of the Transport Act, 1930.

As from 1st July, 1928, the accounts of the railways and tramways, the Sydney Harbour Trust, and the Hunter District Water and Sewerage works were taken out of the Consolidated Revenue Account, and the Special Purposes (Revenue) Fund was constituted within the Consolidated Revenue Fund upon the abolition of the Public Works Fund, of which particulars are shown in the 1928-29 issue of the Year Book at page 148.

The *Special Purposes (Revenue) Fund* provides for the special treatment of receipts derived from the sale or disposal of the assets of the State upon the principle that such receipts should be expended exclusively for capital purposes. Into this fund are paid the whole of the net proceeds of the sales of Crown lands, royalties on minerals, and 50 per cent. of the forestry receipts—less 10 per cent. for administration in regard to each of the foregoing items—also the proceeds of land sales under the Public Instruction Act, and such other sums as Parliament may direct. The moneys may be used for the payment of contributions to the sinking fund in respect of the public debt, the purchase of plant and other assets, the acquisition and improvement of lands for parks and other public purposes, the subdivision and improvement of Crown lands for sale, and contributions payable to the Railway Commissioners in respect of losses on developmental

lines, in terms of the Government Railways (Amendment) Act, 1928, as shown on page 148 of this Year Book.

Another section of the Consolidated Revenue Account, viz., *Collections in Aid*, consists of receipts which are in payment for services rendered by a Government department, the proceeds of the sale of live stock and commodities produced at public institutions under the control of the Government, and interest earned on advances made from public funds to various authorities and individuals. These receipts are treated as a set-off against the expenditure incurred in producing them.

The *Closer Settlement Fund* relates to moneys used for the promotion of land settlement. Particulars of the fund are shown on page 657.

The *Special Deposits Account* is an account in the Treasury books for recording transactions on a number of accounts relating to sums held by or deposited with the Treasurer for store accounts, advance accounts, and moneys (not included in the consolidated revenue, general loan, or trust accounts) which the Treasurer directs to be carried to the Special Deposits Account. The funds in this account are not subject to annual appropriations by Parliament, and balances may be expended at any time subject to certain regulations and the issue of warrants.

The General Loan Account relates to the moneys which the Government has borrowed by the issue of stock, Treasury bills, and debentures under the authority of a Loan Act.

All expenditure from loan moneys must be authorised under an Appropriation Act, in the same manner as the ordinary expenditure chargeable to the general revenue. There is a restriction on the expenditure, whether from loans or from revenue, in the provisions of the Public Works Act. Under that Act the question of constructing all works estimated to cost more than £20,000, except those connected with the maintenance of railways, is referred by resolution of the Legislative Assembly to a Parliamentary Standing Committee elected by the members of each Parliament. The Committee investigates and reports to Parliament, and the Assembly decides whether it is expedient to carry out the proposed work. If the decision be favourable, a bill based thereon must be passed before the authorisation is absolute. At the close of a financial year unapplied appropriations and balances of appropriations made by a Loan Act passed two years or longer lapse except for the payment of claims in respect of any outstanding contract or work in progress.

Revenue Accounts.

The following table shows the receipts and expenditure of the principal revenue accounts combined during the six years ended 30th June, 1931, that is, the period since the exclusion of the accounts of the Metropolitan Water and Sewerage Board from Consolidated revenue.

Year ended 30th June.	Receipts.		Expenditure.	
	Governmental.	Principal Business Undertakings.	Governmental.	Principal Business Undertakings.
	£	£	£	£
1926	16,306,574	22,233,457	16,643,687	23,170,648
1927	19,839,448	24,310,118	17,807,260	24,883,374
1928	18,931,433	25,267,539	19,155,238	26,138,730
1929	20,703,940	26,284,015	20,110,771	27,201,503
1930	19,750,801	23,859,727	21,130,064	26,989,364
1931	17,444,514	20,202,890	20,318,778	25,253,265

* Omitting Metropolitan Water, Sewerage and Drainage Board.

† Including interest chargeable on loan capital.

Under Governmental are grouped the accounts of the various Government Departments, including lands, mines, and forestry revenue and administration, services rendered, revenue and working expenses of the ports other than Sydney, of the Government grain elevators, and amounts of interest paid and received other than from business undertakings. These accounts are on a cash basis and, since 1st July, 1928, have been designated Consolidated Revenue Fund in the Treasurer's accounts.

The expenditure shown above under Governmental for 1930-31 is exclusive of a sum of £1,544,750 due for payment to the Commonwealth Government in respect of oversea interest, and not paid until after 30th June, 1931.

Under the heading "Principal Business Undertakings" are included the New South Wales Government Railways and Tramways, the Sydney Harbour Trust, the Hunter District Board of Water and Sewerage. Since 1st July, 1928, the accounts of these undertakings have been on an income and expenditure basis. In tables published in this Year Book for 1923-24 and previous years, totals for the Metropolitan Water, Sewerage and Drainage Board were also included under this heading, but as from 1st April, 1925, the Board was placed in an autonomous financial position and its accounts have been excluded from the foregoing table.

An amount of £800,000 contributed from Consolidated Revenue Fund as a contribution towards losses on non-paying railways is duplicated in the above statement, being included as receipts and expenditure under both "Governmental" and "Business Undertakings" headings. Furthermore, sundry alterations as to methods of allocation of receipts and payments as between the Consolidated Revenue Fund and the Main Roads Fund, the Public Works Fund (now Special Revenue Fund), the Unemployment Relief Fund, and others, have affected the comparability of the foregoing figures. For these reasons the table is of very limited use, and does not present a complete summary of the annual finances of the State. Steps are being taken to compile such a summary.

The following table shows the debit and credit balances of the respective sections of the Revenue Accounts shown in the previous table:—

Year ended 30th June.	Surplus (+) or Deficiency (—).		
	Governmental.	Principal Business Undertakings.†	Total for Year. *
	£	£	£
1926	(—) 337,113	(—) 937,191	(—) 1,274,304
1927	(+) 2,032,188	(—) 573,256	(+) 1,458,932
1928	(—) 223,805	(—) 871,191	(—) 1,094,996
1929	(+) 593,169	(—) 917,488	(—) 324,319
1930	(—) 1,379,263	(—) 3,129,637	(—) 4,508,900
1931	(—) 2,874,264	(—) 5,050,375	(—) 7,924,639

* Omitting Metropolitan Water, Sewerage, and Drainage Board.

† After payment of interest chargeable on loan capital.

The amounts of the two deficits combined, as shown above, as at 30th June in each of the past three years, do not represent the aggregate position for reasons above stated, and they may need modification when all accounts are presented on a uniform cash basis. In addition to the deficit of £2,874,264 on governmental account as at 30th June, 1931, there was outstanding an amount of £1,544,750 for oversea interest due but not paid to the Commonwealth Government until August, 1931.

The approximate aggregate position of the State Government accounts for the two years ended 30th June, 1931, as presented to the Premiers' Conference in May, 1931, was as follows:—

		Year ended 30th June.	
		1930.	1931 (estimated)
		Thousand £	
Revenue—			
Governmental	...	24,110	26,530
Business Undertakings	...	23,850	19,910
Total	...	47,960	46,440
Expenditure			
	...	53,530	56,920
Deficit	£	5,570	10,480

Revenue and expenditure for unemployment relief, motor taxation, and certain roads, are included in the totals.

At 30th June, 1928, there was an accumulated deficiency of £4,341,183 on the Consolidated Revenue Fund, including the three principal business undertakings. In addition, a deficiency of £582,543 in respect of business undertakings as at 30th June, 1928, was brought to account after the close of the financial year 1927-28. This total accumulated deficiency of £4,923,725 was funded by the raising of loans, in respect of which an amount of £4,274,781 was credited to Consolidated Revenue Account in 1928-29 and £648,943 in 1929-30. These sums were added to the public debt and included in the loan liability to the Commonwealth under the Financial Agreement. They are subject to special sinking fund payments *vide* page 685.

Since 1st July, 1928, "Governmental" receipts and expenditure include some items not previously taken into account and excludes others, while further charges were made in 1930-31. A summary of the items of Governmental (Consolidated Revenue Fund) revenue and expenditure is shown below for the past three years:—

Classification.	Amount.			Per Head of Population.		
	1928-29.	1929-30.	1930-31.	1928-29.	1929-30.	1930-31.
Revenue.						
Contribution by Commonwealth	£ 2,856,411	£ 2,917,411	£ 2,917,411	£ s. d. 1 3 4	£ s. d. 1 3 7	£ s. d. 1 3 4
State Taxation	11,862,187	11,476,491	9,578,902	4 16 11	4 12 7	3 16 7
Land Revenue	2,244,571	1,989,626	1,578,088	0 18 4	0 16 1	0 12 7
Receipts for Services Rendered	1,562,969	1,661,821	1,718,925	0 12 10	0 13 5	0 13 9
General Miscellaneous	2,177,734	1,705,452	1,651,188	0 17 9	0 13 9	0 13 3
Total Revenue	20,703,940	19,750,801	17,444,514	8 9 2	7 19 5	6 19 6
Expenditure.						
Legislative and General Administration	4,750,596	5,766,132	6,549,007	1 18 10	2 6 7	2 12 5
Maintenance of Law, Order and Public Safety	2,919,503	3,024,572	2,867,272	1 3 10	1 4 5	1 2 11
Regulation of Trade and Industry	129,955	124,970	124,776	0 1 1	0 1 0	0 1 0
Education	4,911,861	4,791,747	4,604,392	2 0 2	1 18 8	1 16 0
Encouragement of Science, Art and Research	77,002	76,881	68,635	0 0 7	0 0 8	0 0 7
Promotion of Public Health and Recreation	1,964,952	1,910,705	1,593,634	0 16 1	0 15 5	0 12 9
Social Amelioration	1,842,352	2,075,321	*1,363,589	0 15 0	0 16 9	*0 10 11
War Obligations	100,006	75,681	82,012	0 0 10	0 0 7	0 0 8
Development and Maintenance of State Resources	3,058,154	2,932,150	2,890,237	1 5 0	1 3 8	1 3 1
Local Government	356,390	351,955	275,224	0 2 11	0 2 10	0 2 2
Total Expenditure	20,110,771	21,130,064	20,318,778	8 4 4	8 10 7	8 2 6
Surplus	593,169	(-) 1,379,263	(-) 2,874,264	0 4 10	(-) 0 11 2	(-) 1 3 0

£ (-) Indicates a deficit.

* Certain expenditure on Unemployment and Charitable Relief was met from Unemployment Relief Fund.

Particulars of the total taxation imposed are shown on a comparative basis in the table on page 634, where the figures include also motor taxes and license fees which are paid to the other funds after the deductions to cover the cost of collection and administration, viz., £172,855 in 1928-29, £297,124 in 1929-30, and £283,629 in 1930-31. The amounts so deducted were credited to the Consolidated Revenue Fund in the division, collections in aid, under the category of receipts for services rendered. An annual contribution of £2,917,411 is made by the Commonwealth to the State in terms of the financial agreement between the Commonwealth and the States, of which details are shown on a later page. The amount received in the year 1928-29 was reduced below this figure owing to the adjustment of an overpayment of £60,932 in the preceding financial year.

Land, Forestry, and Mining Revenue of the State.

At the establishment of responsible government in New South Wales in 1856, the control of lands was vested exclusively in the State Parliament. At that date only 7,000,000 acres had been alienated, and approximately 191,000,000 acres of land were owned by the Crown. Nearly all these lands have been made available for settlement, approximately 43,500,000 acres having been absolutely alienated, 23,200,000 acres being in course of sale on terms, and 115,200,000 acres being occupied by landholders at rental under various leasehold tenures.

Over a considerable proportion of the whole area the State has reserved to itself mineral rights, which produce a substantial income from royalties. In addition, there are approximately 6,900,000 acres of State forests and timber reserves returning revenue to the Government.

The receipts from lands, mineral resources, and forests credited to Consolidated Revenue Fund during the last five years are shown below:—

Particulars.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
	£	£	£	£	£
Revenue from Sales—					
Principal	1,043,388	1,102,858	767,098	664,862	498,421
Interest			372,832	356,835	301,961
Rentals for Leases	677,960	701,967	684,840	611,770	507,090
Fees and other Receipts	78,775	82,722	85,819	79,198	66,526
Royalties on Minerals, Rents for Mining Leases, etc.	297,899	255,275	214,599	187,856	160,877
Forestry—Royalties, Rentals, etc.	112,255	133,500	119,383	89,105	43,211
Total, Land Revenue	2,210,277	2,276,322	2,244,571	1,989,626	1,578,086

The receipts from the sales of land which represent principal are credited to the Special Purposes (Revenue) Fund, less a deduction of 10 per cent. treated as "Collections in Aid." The interest on deferred sales and rentals for leases of land are classified as revenue proper.

Royalties on minerals and one-half of the royalties from timber and other forestry receipts are payable to Special Purposes (Revenue) Fund, the usual deduction of 10 per cent. being credited to collections in aid. The balance of the forestry receipts are not included in the accounts of the Consolidated Revenue Fund, but are paid to a special fund and set apart for afforestation, the amount so credited in 1929-30 being £96,692, as compared with £108,777 in 1926-27, £118,663 in 1927-28 and £108,411 in 1928-29.

Royalties on minerals which constitute the principal item of mining revenue are subject to fluctuation, royalty being assessed in some cases on the profits of the mining companies and in other cases on the quantity of minerals produced. The bulk of the receipts from this source are paid in respect of coal-mining.

Receipts for Services Rendered.

The receipts for services rendered which are credited to Consolidated Revenue consist largely of "collections in aid," but a few important items are credited to revenue proper, *e.g.*, harbour and tonnage rates, fees collected by the Registrar-General and part of the receipts of the grain elevators. None of the receipts for services are payable to the Special Purposes (Revenue) Fund. The principal items of the receipts for services rendered are shown below:—

Particulars.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
	£	£	£	£	£
Harbour Rates and Fees, Pilotage, etc. ...	317,161	310,184	282,778	250,942	225,301
Fees—					
Registrar-General	220,163	222,456	227,480	207,864	136,779
Law Courts	171,032	199,395	195,296	220,133	209,570
Valuation of Land	33,250	35,040	39,392	39,900	31,099
Grain Elevators—Handling Fees, etc. ...	102,788	77,064	149,916	69,036	240,315
Charge for Collection of Motor Taxes ...	124,314	148,588	172,855	64,633†	61,649†
Maintenance of Inmates of Public Institutions	64,835	54,293	63,271	71,385	50,876
Maintenance of Patients in Mental Hospitals	85,511	96,477	108,996	114,665	107,236
Other	230,500	255,586	344,036	426,447	415,689
Total... ..	1,349,554	1,399,083	1,584,020	1,465,005†	1,484,514†

† In addition, the sum of £219,000 in 1929-30 and £256,411 in 1930-31 was credited to Consolidated Revenue from motor taxation as a recoup to Police Department for supervision of road traffic.

Amounts included above as contributions for the principal services rendered to the Commonwealth Government in 1930-31 were:—Maintenance of old-age and invalid pensions in State institutions £33,426; contribution for cattle tick eradication £53,066; part cost of income taxation collection £62,047; other £40,772; a total of £189,311.

General Miscellaneous Receipts.

All items not placed under headings already shown are included in the general miscellaneous group, a substantial part of the total amount being interest collections:—

Particulars.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
	£	£	£	£	£
Interest Collections—					
Properties transferred to Commonwealth ...	171,475	171,470	315,110	‡	‡
Metropolitan Water, Sewerage, and Drainage Board—					
Advances	163,107	204,931	357,590	354,883	199,779
Capital Expenditure	7,009	26,926	26,868	42,000	20,111
Country Towns Water Supply and Sewerage Works	100,399	109,469	134,280	199,265	179,027
Trust Works under Water Act, 1912 ...	9,280	8,462	9,744	10,938	9,828
Sydney Harbour Bridge Loan Expenditure	16,574	42,056	90,017	16,881	3,753
Fixed deposits with Banks	18,750	.....	14,197	.....	.....
Daily credit balances with Banks	29,357	19,503	22,773	4,803	10,421
Advances to Returned Soldiers	63,399	59,602	†	†	†
Advances to Necessitous Farmers	18,076	7,486	31,860	21,453	52,342
Advances for Wire-netting	17,525	17,204	18,887	16,967	10,293
Capital Value of State Abattoirs	61,728	61,574	61,443	61,637	61,827
Other Interest	114,965	141,621	172,536	216,825	199,495
Rents of Buildings, Wharves, etc.	69,743	75,149	40,254	40,465	43,083
Fines and Forfeitures	51,005	60,414	66,363	90,892	62,503
Darling Harbour Resumed Area	31,043	69,400	65,798	64,092	59,318
Sale of products of Experiment Farms, Institutions, etc.	*	*	82,175	172,080	125,866
Repayment—Balances not required	42,449	39,990	30,204	19,635	17,344
Repayments to Credit of Votes, previous years	99,273	170,684	181,605	86,761	113,206
Transfer from Public Works Fund ... ..	.....	.....	147,840	.....	.....
Other Miscellaneous Receipts	293,309	206,437	308,190	285,275	473,942§
Total... ..	1,432,156	1,552,423	2,177,734	1,795,452	1,651,188

* Credited to Special Deposit Account.

‡ Debt transferred, no interest due (see page 684).

† Transferred to Closer Settlement Fund. § Includes exchange £334,841.

The amounts of interest receipts shown in the foregoing table comprise only miscellaneous minor interest receipts and are exclusive of large sums received on outstanding balances of land sold on the instalment system, interest earned by business undertakings, etc. The interest shown as paid by the Metropolitan Water, Sewerage, and Drainage Board relates to only portion of their indebtedness.

The miscellaneous receipts in 1928-29 and subsequent years included large sums for which corresponding entries were not made under the system of accounts previously in operation, *e.g.*, the proceeds of the sale of the produce of the Agricultural College, experiment farms and other State institutions. The receipts in 1928-29 included also the credit balance amounting to £147,840 transferred from the Public Works Fund to the Special Purposes (Revenue) Fund. On the other hand, interest on advances to returned soldiers, paid previously to the Consolidated Revenue Fund, was credited to the Closer Settlement Fund in 1928-29 and subsequent years.

The amount of interest received from the Commonwealth in respect of the value of transferred properties in 1928-29 was greater by £143,640 than the sum received in 1927-28. Under the financial agreement with the Commonwealth the rate of interest, formerly $3\frac{1}{2}$ per cent., was raised to 5 per cent. for 1927-28 and 1928-29, and the amount paid in the latter year represented interest at the higher rate for that year and an adjustment in respect of 1927-28. The payment of interest ceased as from 1st July, 1929, when the Commonwealth became the owner of the properties and assumed liability for debts of the State equal to the value thereof, *viz.*, £4,788,005.

Expenditure from Revenue.

The total expenditure from Consolidated Revenue Fund in 1930-31 amounted to £20,318,778, *viz.*, £16,287,099, or 80.2 per cent., from revenue proper, £2,530,755 or 12.4 per cent. from collections in aid, and £1,500,924, or 7.4 per cent. from the Special Purposes (Revenue) Fund.

A classification of the expenditure according to the functions of Government is shown on page 653. An analysis of expenditure under the principal departmental headings is shown below:—

Department.	1929-30.	1930-31.	Department.	1929-30.	1930-31.
	£	£		£	£
Education—			Special Appropriations—		
General	4,673,841	4,373,511	Interest on portion of		
Child Welfare	566,901	555,071	Funded Debt	2,244,615	2,524,861
	5,240,242	4,928,582	Widows' Pensions Act	640,000	620,000
Chief Secretary—			Other	1,697,514	2,035,088
Police	1,558,620	1,557,124		4,582,129	5,289,944
Other	564,181	223,617			
	2,122,801	1,780,741	Attorney-General and Jus-		
Treasury—			tice	863,637	793,048
Interest	1,189,716	1,010,131	Public Works	635,499	502,678
Exchange	8,500	622,270	Agriculture	598,664	589,570
Contribution to Railways	800,000	800,000	Lands	457,375	389,987
Coal Settlement Agree-			Local Government—		
ment		254,088	Subsidies, &c.	264,844	194,577
Other	1,717,493	937,176	Other	85,162	78,445
	3,705,709	3,623,665	Premier	240,818	223,954
Public Health—			Labour and Industry	103,920	97,024
Hospital Fund	490,972	432,777	Water Conservation	144,061	114,116
Care of Sick, Aged, &c.	397,914	327,650	Mines	96,068	96,259
Mental Hospitals	658,603	681,195	Forests	79,462	68,835
Other	227,992	127,401	Other	82,962	78,432
	1,775,481	1,468,923	Grand Total	£21,130,064	20,318,778

(a) Includes £355,989 charitable relief corresponding expenditure debited to Unemployment Relief Fund, 1930-31.

(b) Includes £340,500 contributed to Hospital Fund as from 1st November, 1929, and £150,472 grants, subsidies, etc., 1st July, 1929, to 31st October, 1929.

An analysis of payments from Consolidated Revenue according to objects of expenditure in the year ended 30th June, 1930 and 1931 is as follows:—

Head of Expenditure.				1929-30.	1930-31.
				£	£
Salaries and Payments in Nature of Salaries	...	...	...	8,498,265	8,140,941
Maintenance and Working Expenses	...	...	...	2,814,556	2,368,429
Other Services	...	...	...	9,817,243	9,809,408
Total	...	...	...	£ 21,130,064	20,318,778

SPECIAL PURPOSES (REVENUE) FUND.

The Special Purposes (Revenue) Fund was created as from 1st July, 1928, to replace the Public Works Fund, which was formed in 1907 for similar purposes and received large contributions from revenue, though it did not form part of the Consolidated Revenue Fund. The sources of the receipts of the Special Purposes (Revenue) Fund and the purposes for which its moneys may be expended have been stated on page 650. A brief summary of the operations during 1929-30 and 1930-31 is shown below:—

Receipts.	1929-30.	1930-31.	Expenditure.	1929-30.	1930-31.
	£	£		£	£
Land Revenues	598,375	448,579	Contributions to Sinking Fund	191,866	656,275
Royalties on Minerals	146,018	121,440	Purchase of Plant, etc.	48,271	19,205
Forestry Receipts	72,089	32,121	Lands for Public Purposes	47,841	25,444
Sale of Government Property	8,534	3,909	Contribution to Losses on Developmental Railways...	800,000	800,000
Transfer from Consolidated Revenue Fund—Amount					
In Aid	145,172	.....		
Repayments	24,076	7,502			
Balance—Deficiency	93,214	887,373			
Total	£ 1,087,478	1,500,924	Total	£ 1,087,478	1,500,924

CLOSER SETTLEMENT ACCOUNT.

The Closer Settlement Fund was established under Act No. 9 of 1906. Under an amending Act which commenced as from 1st July, 1928, this fund was closed and its liabilities were transferred to a new Closer Settlement Fund, incorporating the Returned Soldier Settlement Accounts. A liability of £3,544,005, being the net loan expenditure as at 30th June, 1928, in respect of the settlement of returned soldiers was transferred to the new fund. The fund is maintained as a separate account, and its transactions are not included in the Consolidated Revenue Fund.

The working capital of the fund is derived from loan moneys made available by the State, Parliamentary appropriations from the Consolidated Revenue Fund, assurance fees paid in respect of property under the Real Property Act, and capital and interest repaid by settlers. The expenditure from the fund consists mainly of the purchase price of estates, the cost of subdivisions and improvements, advances to returned soldiers, interest and sinking fund charges on loan moneys, sums paid in respect of assurance claims under the Real Property Act, amounts for the redemption of closer settlement debentures issued in lieu of cash payments for estates, and premiums for fire insurance in respect of improvements. The fund is charged also with costs of administration.

The total receipts and expenditure of the Closer Settlement Fund from its inception to 30th June, 1928, were summarized on page 148 of the Official Year Book for 1928-29. A summary for the three years ended 30th June, 1931, is as follows:—

Receipts.	Amount.	Expenditure.	Amount.
	£		£
Credit-Balance at 30th June, 1928 ...	48,599	Purchase of Estates and Contingent Expenses ...	443,430
Transfer from General Loan Account of amount voted for Redemption of Debentures ...	1,256,300	Advances to Returned Soldiers ...	77,718
Repayments of Principal and Interest on account of—		Subdivision of Lands for Returned Soldiers ...	137,301
Estates acquired ...	1,619,148	Fire Insurance Premiums ...	79,541
Improvement Leases resumed, etc. Advances to Soldiers (including interest) ...	76,391	Interest on—	
Fire Insurance premiums ...	422,452	Loans—Recoup to Consolidated Revenue ...	1,871,729
Fees under Real Property Act ...	6,947	Closer Settlement Debentures ...	236,632
Various Repayments ...	63,389	Contribution to Sinking Fund ...	110, 28
Debit Balance at 30th June, 1931 ...	511	Redemption of Debentures ...	1,077,800
	563,249	Other ...	22,307
Total ...	£ 4,056,986	Total ...	£ 4,056,986

The aggregate balance-sheet of the Closer Settlement Fund is not available. The loan liability of the fund as at 30th June, 1931, was £13,232,222, comprising £8,648,067 transferred from General Loan Account, £3,544,005 advanced from General Loan Account for Returned Soldier Settlement, and £1,040,150 closer settlement debentures and certificates outstanding. At the same date arrears owing to the fund by settlers amounted to £1,578,531 compared with £1,158,823 at 30th June, 1930.

The amount of debentures issued was £97,300 during 1928-29, £34,400 during 1929-30 and none were issued during 1930-31. Redemptions amounted to £471,000 in 1928-29, £580,000 in 1929-30, and £25,200 in 1930-31.

Cash Balances.

The Audit Act provides that the Treasurer may arrange with any bank for the transaction of the general banking business of the State. The accounts are kept under various headings, and all amounts paid into any of the accounts mentioned are deemed to be "public moneys," and for interest purposes the several accounts are treated as one. The special accounts, which consist of "Supreme Court Moneys," are not controlled by the Audit Act, as they are operated on directly by the officers in charge of the Departments concerned.

The cash balance on the 30th June in each of the last five years was distributed as follows:—

	1927.	1928.	1929.	1930.	1931.
	£	£	£	£	£
Sydney ...	Cr. 1,195,482	Cr. 1,082,116	Cr. 2,516,043	Cr. 1,022,914	Cr. 2,242,587
London ...	Cr. 988,199	Dr. 1,047,573	Dr. 863,782	Dr. 4,612,002	Dr. 2,813,027
Total ...	Cr. £2,183,681	Cr. £34,543	Cr. £1,652,261	Dr. £3,589,088	Dr. £570,440

In order to obtain a complete view of the cash position it is necessary to take into account the increase in recent years in the issue of short-term Treasury Bills and debentures to cover cash deficiencies.

ACCOUNTS OF STATE ENTERPRISES.

The principal State enterprises are those usually known as the business undertakings, viz., the railways and tramways, under the management of the Railway Commissioners, the Sydney Harbour Works under the control of the Sydney Harbour Trust, and the Metropolitan and the Hunter District Water Supply and Sewerage Works, each administered by a board. The accounts of these concerns have been placed on an income and expenditure

basis and separated from the Consolidated Revenue Account as from 1st July, 1928. The finances of the Hunter District Water and Sewerage Works are transacted through a Special Deposits Account, and those of the other enterprises through separate funds. Further reference to these undertakings may be found in the chapters of this Year Book relating to "Railways and Tramways," "Shipping" as to Sydney Harbour Trust, and "Local Government" as to water and sewerage works.

In addition to these business undertakings, there are a number of other utilities and enterprises whose accounts, with a few exceptions, have been kept, on a quasi-commercial basis, separated from the Consolidated Revenue Fund, and the receipts and expenditure of these pass through the Special Deposits Account of the Treasury. Of such undertakings which were operated during 1930-31, five were classed as industrial undertakings, viz., the State Metal Quarries, the State Brickworks, the Monier Pipe Works, the Building Construction Branch, and the Government Tourist Bureau and Resorts. There was one undertaking of a national character, viz., the Murrumbidgee Irrigation Area. The public utilities included the State Abattoirs administered by the Metropolitan Meat Industry Board, the Government Dockyard at Newcastle, the Port Kembla and Burrinjuck Electricity Supply Works, and the Government Grain Elevators. There is also the Government Insurance Office. Particulars relating to the Government Savings Bank of New South Wales and the Housing Funds, which the bank administered, are shown in other chapters of this Year Book.

The receipts and expenditure of the business undertakings during the year ended 30th June, 1930, are shown below:—

Particulars.	Railways.	Tramways.	Sydney Harbour Trust.	Water Supply and Sewerage Works.		Total Business Undertakings.
				Metro-politan.	Hunter District.	
Capital Expenditure to 30th June, 1930	£ 126,318,236	£ 11,764,978	£ 11,703,993	£ 37,179,493	£ 4,488,815	£ 191,405,515
Revenue, 1929-30—						
Earnings	17,826,692	3,903,470	1,017,934	2,753,690	311,631	25,813,417
Contribution from Consolidated Revenue for Developmental Lines	800,000	...	...	...	...	800,000
Total Revenue	18,626,692	3,903,470	1,017,934	2,753,690	311,631	26,613,417
Expenditure, 1929-30—						
Working Expenses	14,962,423	3,625,564	381,420	970,756	118,045	20,058,208
Interest	6,420,643	630,150	597,123	1,600,766	177,480	9,426,162
Sinking Fund ... ..	...	33,000	32,684	86,914	10,832	163,430
Total Expenditure	21,383,066	4,288,714	1,011,227	2,658,436	306,357	29,647,800
Net Revenue, 1929-30 ...	*2,756,374	*385,244	6,707	95,254	5,274	*3,034,383

* Net Expenditure.

The interest and sinking fund charges in respect of the railways and tramways, as shown above, are approximate amounts which are subject to alteration when the capital indebtedness of these undertakings has been determined finally. Under current legislation the railways are required to contribute a proportion of the sinking fund charges payable under the financial agreement between the Commonwealth and the States, but arrangements have been made so that the charges for the years 1928-29, 1929-30 and 1930-31 are met from Consolidated Revenue. The sum of £800,000 contributed from Consolidated Revenue towards the loss on the working and maintenance of non-paying developmental railways is the maximum amount payable in each year for this purpose; it is a charge against the Special Purposes (Revenue) Fund.

The following statement shows particulars of the financial transactions of various enterprises, other than the business undertakings, during the year 1929-30:—

Enterprise.	Loan Liability outstanding 30-6-30.	Revenue 1929-30.	Expenditure, 1929-30.			Net Revenue 1929-30.
			Working Expenses.	Interest, Sinking Fund, &c.	Total.	
Industrial Undertakings—	£	£	£	£	£	£
State Metal Quarries ...	88,155	117,413	109,483	6,900	116,383	1,051
State Brickworks ...	...	198,892	175,886	15,519	190,905	2,787
Building Construction ...	...	441,763	423,511	9,762	433,273	8,490
State Monier Pipe Works ...	...	76,136	56,580	18,005	74,585	1,551
Government Tourist Bureau and Resorts ...	105,457	161,495	164,953	5,092	170,045	(—) 8,550
Other Enterprises—						
Metropolitan Meat Industry Board ...	1,200,000	539,149	429,751	105,065	534,816	4,333
Government Dockyard, Newcastle ...	1,881,393	573,476	551,470	13,671	565,141	8,335
Port Kembla—						
Coal Loading and Shipping	81,841	42,023	32,670	3,440	36,110	5,013
Electricity Supply ...	515,194	67,612	65,951	21,942	87,893	(—) 20,281
Burrinjuck Hydro-Electric Supply ...	801,541	54,889	17,072	37,428	54,500	(—) 111
Observatory Hill Resumed Area ...	940,677	67,291	16,473	48,759	65,232	2,059
Dacey Garden Suburb ...	†182,675	19,385	9,145	9,242	18,387	998
Water Supply—						
Broken Hill ...	†539,447	62,778	38,174	4,283	42,457	20,321
Junee ...	†109,633	11,966	6,392	4,755	11,147	819
Government Grain Elevators	3,959,159	69,086	46,903	*	*	*
Government Insurance Office	...	379,370	204,951	34,851	239,802	139,568

* Not available. † Total capital expenditure from Loans, Profits, &c.

The expenditures of the activities classified as "industrial undertakings" and those of the Newcastle Dockyard and the Government Insurance Office include amounts equivalent to the State and Federal income taxes which would be payable if these concerns were liable to pay such taxes. These amounts were paid into the Consolidated Revenue Fund.

Certain Industrial Undertakings have been very profitable. In regard to the State Metal Quarries, which have been in operation since 1st September, 1911, profits amounting to £15,052 have been applied in reducing the capital, £165,731 in extending the works, and the credit balance of the Profit and Loss Accumulated Account at 30th June, 1930, was £84,932.

At the State Brickworks, capital expenditure from the funds of the undertaking to 30th June, 1930, was £176,178, repayments of capital £82,326, and reserves amounted to £42,927. The Building Construction Branch of the Public Works Department was established as an industrial undertaking on 1st October, 1913. The profits to 30th June, 1930, were £149,531, of which £26,663 were applied in the repayment of capital expenditure, and £6,691 in the purchase of additional plant. The State Monier Pipe and Reinforced Concrete Works were established as an industrial undertaking on 1st February, 1914. The total profits have amounted to £159,421. Repayments of capital from this source amount to £27,068, additions to buildings and plant £38,524.

The Government Tourist Bureau and Tourist Resorts were gazetted as an industrial undertaking as from 1st July, 1929. Previously their transactions were recorded in the Special Deposits Account. As at 30th June, 1930, surplus earnings amounting to £140,346 had been applied from that account to new works, and £656 to the repayment of capital.

Ten other industrial undertakings established in earlier years have been closed, leaving at 30th June, 1930, an unpaid loan liability of £303,874 (subject to further adjustment) and an unpaid capital liability of £58,119 to the Consolidated Revenue Fund.

The first sales of electricity by the Burrinjuck Hydro-Electric scheme were in 1928, and the project was still in the development stage in 1929-30.

SPECIAL DEPOSITS AND SPECIAL ACCOUNTS.

The Special Deposits and Special Accounts form a very important division of the public finances, not only from the nature and volume of the transactions, but also by reason of the manner in which they are used in connection with the general finances of the State. These funds are of great assistance in the banking operations of the Government, and they form a reserve on which the Treasurer may draw to meet temporary requirements. Although the Audit Act provides that the funds cannot be used except for the specific purpose for which they were deposited, it has been the custom for many years to draw on the balances for overdrafts of the Consolidated Revenue Fund and Loan Accounts if required. The great bulk of the funds bear interest, whether invested or not, and the power to use them enables the Government to effect a large saving in the interest which might otherwise be charged for accommodation from the banks. The following table shows the amount of the Special Deposits and Special Accounts in each of the last fourteen years:—

As at 30th June.	Amount.	As at 30th June.	Amount.	As at 30th June.	Amount.
	£		£		£
1918	5,957,608	1923	18,527,873	1928	22,738,617
1919	6,222,291	1924	19,666,636	1929	24,705,014
1920	9,848,520	1925	26,001,112	1930	24,544,829
1921	13,097,856	1926	25,069,338	1931	23,698,304
1922	17,491,833	1927	20,009,040		

The amount at the credit of each of these funds at 30th June, 1930, was: Special Deposits Account, £24,138,940, and the Special Accounts, £405,889.

The amount of the credit of the principal accounts is shown in the following table:—

Special Deposits Accounts.

	£		£
Government Savings Bank		Public Trustee—Unclaimed	
Deposit Accounts ...	6,930,050	Balances of Intestate Estates	195,510
Advances by Commonwealth—		Sydney Harbour Bridge Rate	
Settlement of Soldiers ...	8,465,983	Account ...	78,967
Other ...	943,059	Forestry—Transfers under Act	
Grafton-Kyogle-South Brisbane		of 1916 ...	40,655
Railway Working Account	12,449	Deposits lodged by Trustee	
Advance by Migration Com-		Companies ...	80,000
mission ...	264,970	Security Deposits—Workers'	
State Debt Commissioners		Compensation Act ...	702,917
Trust Accounts ...	269,772	Store Advance Accounts ...	450,731
Treasury Insurance Funds ...	1,071,663	Industrial Undertakings ...	368,813
Prickly Pear Destruction Fund	4,846	Sundry Working Accounts ...	132,696
Main Roads Board Funds ...	388,497	Fixed Deposit Account ...	1,510,000
Main Roads Account ...	128,978	Other ...	628,752
Liquor Act Compensation Fund	822,641	Deposits on Tenders ...	64,589
Family Endowment fund ...	582,402		
		Total ...	£24,138,940

Special Accounts.

	£		£
Master-in-Equity Account ...	242,361	Prothonotary Account ...	8,319
Master-in-Lunacy Account ...	7,384	Registrar of Probates Account	16,853
Public Trustee Account ...	130,972	Total ...	405,889

The total sum at the credit of the accounts on the 30th June, 1930, was £24,544,829, of which £1,456,888 were invested in securities; £17,993,570 were uninvested but used in advances and on public account at interest, the rates allowed ranging from 1 to 7½ per cent.; the remainder, £5,094,371, was similarly used, but without any interest allowance. In cases where interest was being paid by the Treasurer on the 30th June, 1930, the rate was 3 per cent., with the following exceptions:—

Crown Leases Security Deposit Account	... ..	5½ per cent.
Government Savings Bank of N.S.W. Account	... ..	2 to 5½ „
State Debt Commissioners' Trust Account, Municipal	... ..
Council of Sydney Sinking Fund	... ..	4 „
Commonwealth Advance re Settlement of Returned Soldiers...	... ..	5½ to 7½ „
Master-in-Equity Account	... ..	2½ „
Master-in-Lunacy Account	... ..	1 „
Workers' Compensation Commission, Trust Account	... ..	2 „
City of Sydney Sinking Fund	... ..	4 „
Main Roads Funds...	... ..	2 „
Grafton-Kyogle-Brisbane Railway Working Account	... ..	5½ „
Insurance Funds and Treasury Guarantee Funds	... ..	2½ and 5 „
Industrial Undertakings	... ..	5·17204 „
Sydney Harbour Bridge—		
Municipal and Shire Rate Account	... ..	5·17204 „
Architects' Fund	... ..	4 „

Some of the foregoing rates of interest were reduced in the latter part of 1931 in terms of the Interest Reduction Act.

The funds in the custody of the State Treasurer at credit of Special Deposits and Special Accounts, were held as follows:—

Funds.	30th June, 1928.	30th June, 1929.	30th June, 1930.
In Banks—	£	£	£
Special Deposits Account	21,028,649	22,395,883	22,660,953
Special Accounts	825,278	958,697	405,889
Commonwealth Government Inscribed Stock	...	...	94,320
New South Wales Funded Stock	152,500	561,509	571,509
Deposits on Tenders	55,950	66,520	63,690
Security Deposits	636,967	677,968	702,917
Miscellaneous Securities	39,273	33,721	24,452
Remittances in transit	...	10,716	21,099
Total	£ 22,738,617	24,705,014	24,544,829

STATE LOAN FUNDS.

In recent years the moneys raised on loans, with the exception of a revenue deficiency loan in 1929, and proceeds of Treasury Bills applied to revenue purposes have been credited to General Loan Account. Formerly other loan accounts were in existence for varying periods, but they have, in effect, been amalgamated into a combined account.

The whole of the loans outstanding, with the exceptions noted above, have been raised for capital expenditure on various works and services. Prior to the year 1900 loans not credited to General Loan Account were raised for defence works, for promoting immigration, etc., and some revenue deficits were met, temporarily, by the issue of special Treasury bills. The stocks issued in this way have been repaid from revenue.

The relationship between the loan liability of the State and the net expenditure on loan works and services was as follows as at 30th June, 1931:—

	£
Outstanding Loan Liability (see page 679)	288,108,753
Add Debt liability assumed by Commonwealth Government in respect of transferred properties	4,788,004
	<u>292,896,757</u>
Deduct Proceeds of Treasury Bills not yet brought to account ...	2,950,000
	<u>£ 289,946,757</u>
Deduct Amounts included in loan liability, but not in net loan expenditure statements—	
Commonwealth Advances—	
Returned Soldier Settlement	8,465,983
Grafton-South Brisbane Railway	1,419,593
Closer Settlement Debentures	908,450
Revenue Deficiency Loans	4,923,725
Advances to Settlers	120,050
True net expenses of Loan Flotations (including discounts on various issues)... ..	11,460,842
	<u>27,298,643</u>
	<u>262,648,114</u>
Add Redemptions from Revenue and Sinking Funds	9,558,297
General Loan Overdraft	3,278,994
	<u>£275,485,405</u>
Net Loan Expenditure on Works and Services...	

Loan Expenditure.

The specific services on which the above expenditure has been incurred and the amount expended as at 30th June, 1931, may be classified as follows:—

Work or Services.	Expenditure to 30th June, 1931.
	£
Railways	a137,477,649
Tramways	a12,282,428
Metropolitan Water Sererage, and Drainage Board	b26,060,788
Hunter District Water Supply and Sewerage Board	5,917,780
Sydney Harbour Trust	11,802,491
Industrial Undertakings	6,397,789
Murrumbidgee Irrigation Areas	c9,329,495
Water Conservation and Irrigation Commission	4,859,035
Country Towns Water Supply and Sewerage Services	4,909,819
Grain Elevators	4,044,667
Acquisition of land for Closer Settlement	8,707,778
Advances to Farmers and Settlers	5,979,939
Advances to Councils for Relief of Unemployment... ..	202,697
Roads, Bridges, Punts, Ferries, and Public Watering Places	14,940,946
Improvements to Harbours and Rivers (other than Sydney Harbour)	7,189,418
Public Buildings and Sites (other than those vested in business or industrial undertakings above)... ..	10,322,227
Commonwealth Services	d3,965,937
Miscellaneous	1,094,522
Total Loan Expenditure on Works and Services ...	£ 275,485,405

a Subject to transfer of certain capital expenditure from tramways to railways. b Exclusive of expenditure incurred by Board from other funds. c Inclusive of acquisition of land and advances to settlers. d Liability has been accepted by Commonwealth Government.

In addition, a liability of £11,460,842 has been incurred in connection with discounts allowed on loans, flotation expenses, etc., during the past eighty years.

The amounts shown above represent the net expenditure after deducting repayments and recoups. Expenditure from general loan overdraft is included. There was no loan expenditure in suspense at 30th June, 1931.

Annual Loan Expenditure (State).

The actual loan expenditure by the State Government and statutory bodies under its control was as follows in each of the past nine years:—

Year ended 30th June.	Actual Loan Expenditure.	Year ended 30th June.	Actual Loan Expenditure.	Year ended 30th June.	Actual Loan Expenditure.
	£		£		£
1923	10,769,298	1926	13,193,576	1929	19,663,889
1924	9,775,293	1927	16,344,094	1930	13,192,755
1925	11,269,571	1928	16,565,543	1931	7,714,000

A summary of the Loan Expenditure Accounts under State control is provided below, showing the actual loan expenditure during each of the past five years. Loan moneys expended by Federal and local bodies are not included.

Service.	1927.	1928.	1929.	1930.	1931.
	£	£	£	£	£
Gross amount charged to General Loan Fund in respect of works and services.*	12,700,014	15,633,605	14,930,854	11,492,917	6,605,707
Less Loan expenditure suspense of previous year included above.	633,046	2,002,887	129,646	1,941,829	453,240
Plus Loan expenditure suspense of year..	12,066,968 2,002,887	13,630,718 129,546	14,801,308 1,941,829	9,551,088 453,240	6,152,467
Actual expenditure from Treasury Loan Accounts.	14,669,855	13,760,204	16,743,137	10,004,328	6,152,467
Expended by Metropolitan Water Sewerage and Drainage Board.	1,943,650	2,406,686	2,698,924	3,008,139	1,548,513
Commonwealth advance for Grafton Kyogle-Brisbane Railway.	330,589	398,593	221,828	180,238	13,020
Actual Loan expenditure under State control.	16,344,094	16,565,543	19,663,889	13,192,755	7,714,000

* Excluding repayments to votes in respect of expenditure during the year shown.

The grand total of the foregoing table represents as nearly as may be the gross amount of loan moneys actually expended each year under State, as distinct from Federal and local authority. The figures include the total amount of advances to settlers and local bodies, irrespective of repayments. The amount of repayments to credit of previous years' votes, not deducted above, were:—£2,277,744 in 1926-27; £1,225,986 in 1927-28; £681,772 in 1928-29, besides £29,054 from Loans Repayment Account; £614,290 in 1929-30; and £654,218 in 1930-31.

Distribution of Annual Loan Expenditure.

The principal heads of the State loan expenditure on works and services during each of the past three years is shown below in summary form. Full

Details are shown in tabular form in the Public Accounts and Auditor-General's Reports:—

Work or Services.	Expenditure during year ended 30th June.		
	1929.	1930.	1931.
<i>State Loan Funds.</i>			
Railways and Tramways—	£	£	£
Railways	8,333,666	3,842,192	2,173,698
Tramways	142,202	31,495	792
	8,475,868	3,873,687	2,174,490
Water Supply, Sewerage, etc.—			
Metropolitan	441	...	...
Hunter District	601,150	498,955	216,901
Country Towns	555,620	504,360	457,340
	1,157,211	1,003,315	674,241
Irrigation, etc.—			
Murrumbidgee Irrigation Area	351,196	297,178	93,108
River Murray Commission	237,925	200,141	116,636
Wyangala Storage Reservoir	123,961	338,690	170,804
Other	216,350	105,170	76,416
	929,432	941,179	456,964
Harbours—			
Sydney Harbour Trust	289,636	169,381	70,890
Other Harbours and Rivers	311,645	145,545	75,523
	601,281	314,926	146,413
Roads and Bridges—			
Roads and Bridges	1,712,531	347,060	245,592
Sydney Harbour Bridge	1,371,790	1,386,325	1,458,853
	3,084,321	1,733,385	1,704,445
Land Settlement—			
Advances, etc.	57,598	290,176	604,933
Closer Settlement (Redemption of Debentures)	650,200	606,100	...
	707,798	896,276	604,933
Public Buildings—			
School Buildings	745,881	332,662	118,957
Hospital Buildings	399,215	241,836	41,670
Other Government Buildings	114,684	203,988	51,374
	1,259,780	778,486	212,001
Other Undertakings—			
Government Dockyard	260,839	92,764	2,376
Port Kembla Power	102,322	39,423	14,439
Grain Elevators	125,775	77,620	55,671
	488,936	209,807	72,486
Other—			
Advances to Councils, etc., to assist Unemployed ... ..	...	182,657	10,100
Other	38,510	70,610	96,394
	38,510	253,267	106,494
Total	£ 16,743,137	10,004,328	6,152,467
Expended by Metropolitan Water, Sewerage, and Drainage Board	2,698,924	3,008,139	1,548,513
Commonwealth Advances—Grafton—Kyogle—Brisbane Railway	221,828	180,288	13,020
Grand Total Expenditure on State Works and Services	£ 19,663,889	13,192,755	7,714,000

The amounts expended as shown under the various headings above represent the actual new expenditure during the year—that is, expenditure from

General Loan Account plus payments from and less receipts of Loan Expenditure Suspense Account. Repayments to credits of votes have not been deducted.

The State Government's net expenditure from General Loan Account on works and services (exclusive of redemptions, conversions, and renewals of loans, and after deducting repayments to credit of votes) is shown below for the period of thirty-nine years, 1842-1880, and in decennial periods from 1881 to 1930:—

Years.	During Each Period.		Total at end of Period.	
	Amount.	Per Inhabitant.	Amount.	Per Inhabitant.
	£	£ s. d.	£	£ s. d.
1842-1880	16,316,530	41 12 2	16,316,530	21 9 11
1881-1890	27,639,022	29 8 8	43,955,552	39 3 7
1891-1900	20,515,704	16 6 8	64,471,256	47 12 1
1901-1910	26,876,468	18 0 4	91,347,724	56 11 11
1911-1920	65,228,221	35 5 8	156,575,945	75 13 5
1921-1930	112,957,971	49 9 8	269,533,916	107 15 11
1930-1931	*5,951,489	*2 7 7	275,485,405	110 3 7

* One year.

The amount of expenditure shown above is the gross expenditure from General Loan Account less amounts repaid or recouped to the credit of votes and less the amount of discount, flotation charges, etc., on loans, viz., £11,460,842 at 30th June, 1931. On the other hand, the expenditure as shown has not been reduced by the amount of loans redeemed from revenue. A reconciliation between the public debt and the net expenditure on works and services from General Loan Account appears on page 663.

External Loans Maturing.

The amounts, rates of interest, and latest dates of maturity of the oversea loans of New South Wales outstanding in London and New York at 30th June, 1931, are shown below:—

Latest Date of Maturity.	Amount.	Rate of Interest.	Latest Date of Maturity.	Amount.	Rate of Interest.
<i>Repayable in London.</i>			<i>Repayable in London.</i>		
31 July, 1931	£ 4,502,524	per cent. 3½	1 Dec., 1965	£ 14,130,000	5
4 Aug., 1931	2,119,258	5	1 July, 1975	2,297,733	5
2 Sept., 1931	1,928,055	5 and 3	1 „ 1975	668,552	(a)
30 „ 1931	2,950,000	4	Indefinite ...	1,628,947	5
1 Nov., 1932	12,924,152	5½	Total, London..	£165,978,441	...
1 July, 1933	9,621,846	4	<i>Repayable in New York.</i>		
1 June, 1934	2,980,400	5½	1 May, 1956	\$19,090,900	4½
1 Jan., 1935	4,901,232	5½	(*\$3,922,922)		
1 Oct., 1935	12,420,113	3	1 Feb., 1957	\$24,074,500	5
1 Aug., 1940	6,427,465	6½	(*\$4,946,984)		
1 Nov., 1940	9,527,090	6	1 April, 1958	\$24,117,000	5
1 Sept., 1942	3,979,050	5	(*\$4,955,718)		
1 July, 1945	10,984,700	4½	Total, New York ...	\$67,282,400	...
1 „ 1950	12,067,428	3½	(*\$13,325,624)		
1 Oct., 1955	21,657,000	5			
1 July, 1957	17,870,500	5½			
1 „ 1962	10,392,396	4			

* Estimated equivalent at \$4·86 = £1.

(a) Variable rates under Migration Agreement.

NATIONAL DEBT CONVERSION LOAN.

As part of the plan (known as "The Premiers' Plan") to meet the economic crisis in Australia consequent on the world depression, the Premiers' Conference held in Melbourne in May and June, 1931, decided to invite holders of Government securities in Australia to convert them into new issues on terms involving reduced rates of interest and alternative dates of redemption.

A brief summary of the remainder of the plan and of the circumstances leading up to it is published on pages 757 to 765 of the Commonwealth Year Book for 1931 and detailed reports of the various conferences have been issued as printed documents by the Commonwealth Parliament.

The conversion was authorised in terms of the (Commonwealth) Debt Conversion Agreement Acts (July and November, 1931); the Commonwealth Debt Conversion Act (August, 1931); and the (State) Debt Conversion Agreement Act (July, 1931) as modified by supplementary and amending enactments. The terms and conditions are set out in the following copy of the prospectus issued to stock-holders:—

*The Government of the Commonwealth of Australia.**National Debt Conversion Loan.*

Issued under the authority of the Commonwealth Debt Conversion Act, 1931.

A Conference of Commonwealth and State Ministers was recently held to devise measures for meeting the grave financial emergency existing in Australia. The Conference agreed upon a plan for re-establishing the financial stability of the Commonwealth by means involving a common sacrifice, including amongst other things the conversion of the public debts of the Commonwealth and the States on the basis of a reduction of the rates of interest thereon.

The Commonwealth and State Parliaments having passed Acts authorising this Conversion, all persons who hold Commonwealth or State Government securities payable in Australia are invited to convert their securities into new Commonwealth securities in accordance with the following prospectus.

Prospectus.

This Prospectus shall be read subject to the Commonwealth Debt Conversion Act, 1931.

1. Conversion of existing securities will take effect from 31st July, 1931, up to which date the interest rates now in force on the existing securities will apply. After that date the interest rates payable on conversion will apply.

2. Conversion will be based on a reduction by $22\frac{1}{2}$ per cent. per annum of the interest rate payable on existing securities, and the amount of new securities issued on conversion will be determined where necessary by actuarial calculation in the manner set out in the schedule to this prospectus.

Applications for Conversion.

3. Applications for conversion shall be addressed as follows:—

- (a) As regards securities issued by the Commonwealth—to the Registrar of Stock at the Commonwealth Bank of Australia at either Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Launceston, Rockhampton, or Townsville; and

(b) As regards securities issued by a State—to the Registrar of Stock or Principal Officer of the Treasury of the State concerned: Provided that where the Commonwealth or State securities are held by a Bank or Savings Bank the application shall be addressed to the Bank or Savings Bank concerned.

4. Applications shall contain particulars of the relative securities. If the securities are held by a Bank or Savings Bank the receipt of that institution for the securities must accompany the application. If the securities are not held by a Bank or Savings Bank and are not in the form of Inscribed Stock they must be forwarded with the application.

Securities Subject to Commonwealth Income Tax.

Rates of Interest.

5. The rates of interest payable on the new securities will be—

- (a) 4 per cent. on securities issued in exchange for existing securities bearing interest at more than 5 per cent.;
- (b) $3\frac{3}{4}$ per cent. on securities issued in exchange for existing securities bearing interest at 5 per cent.;
(4 per cent. securities may be issued for an amount below par if the holder so desires.)
- (c) 3 per cent. on securities issued in exchange for existing securities bearing interest at less than 5 per cent.
(4 per cent. securities may be issued for an amount below par if the holder so desires.)

6. Where these rates do not correspond with the rates arrived at by the reduction of $22\frac{1}{2}$ per cent., the difference will be adjusted by increasing or decreasing the amount of the new securities by the actuarial equivalent of the difference. For the purpose of this adjustment securities having optional dates of redemption shall be deemed to mature upon the latest optional date; and securities which are interminable or redeemable on a specified date or thereafter, or on or after a date to be specified shall be deemed to be interminable.

Date Redeemable.

7. (a) (i) New 4 per cent. securities will be repaid at par either on—

15th December, 1938; or
15th November, 1941; or
15th October, 1944; or
15th September, 1947; or
15th August, 1950; or
15th July, 1953; or
15th December, 1955; or
15th November, 1957; or
15th October, 1959; or
15th September, 1961.

Provided that the Treasurer shall have the right to redeem in whole or in part, at any time after 31st December, 1950, any new securities expressed to be redeemable after that date.

(ii) New $3\frac{3}{4}$ per cent. securities will be repaid at par on 15th September, 1947.

(iii) New 3 per cent. securities will be repaid at par either on 15th December, 1938, or 15th October, 1944.

- (b) New 4 per cent. and 3 per cent. securities issued to any holder in exchange for any amount of existing securities shall, as nearly as practicable, be allotted equally among the several maturity dates specified for the new securities, but the Treasurer, in the case of any holder of existing securities of £1,000 or less, or in the case of securities held by Trustees, may approve of the new securities being allotted over a less number of maturity dates, and may in special circumstances with the consent of the Australian Loan Council vary the mode of allotment.

Form of New Securities.

8. The new securities will be issued either in the form of Australian Consolidated Inscribed Stock, or Australian Consolidated Treasury Bonds payable to bearer, as may be desired.

9. Bonds will be issued for £10, £50, £100, £500, and £1,000. Stock will be inscribed for £100 and multiples of £10 above £100.

10. Holders of Stock will have the right to exchange it for Bonds of the same issue and maturity date at par, and holders of Bonds will have the right to exchange them for Stock of the same issue and maturity date at par, at any time on application in writing to any Branch of the Commonwealth Bank of Australia.

11. Stock will be inscribed in accordance with the provisions of the *Commonwealth Inscribed Stock Act, 1911-1927*, and Inscription Books will be kept at the Commonwealth Bank of Australia at Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Launceston, Rockhampton, and Townsville.

Payment of Interest.

12. Interest accruing to 31st July, 1931, on securities that are converted will be paid by interest warrant on the date when the interest would have been paid if the securities had not been converted. Interest accruing to 31st July, 1931, that would have been paid on 15th August, 1931, however, will not be paid on that date, but within one calendar month from that date. The interest payable under this paragraph will be paid to the person who was on 10th August, 1931, the holder of the securities.

13. Interest (from 1st August, 1931) on the new securities will be paid by the Commonwealth and payment will be made half-yearly on dates corresponding with the dates on which the securities will mature. As regards new securities redeemable on 15th August, 1950, however, the first interest payment will be made on 15th February, 1932, covering interest due from 1st August, 1931, to 15th February, 1932.

14. Interest on the new securities will be paid as follows:—

In the case of Bonds—on production of the relative coupons attached to the Bonds.

In the case of Stock—by interest warrant which will be forwarded by post, or by payment of the amount to a Bank in Australia for credit to an account, at the option of the Stockholder.

15. Interest coupons will be payable free of exchange at any Bank in the Commonwealth. Interest Warrants will be payable at the Branch of the Commonwealth Bank of Australia named in the Warrant, and will be collected free of exchange by any Bank or Savings Bank in the Commonwealth.

Taxation.

16. Interest on new securities—

- (a) will not be subject to the special tax imposed by section 7A of the *Income Tax Acts*, 1930, or to income tax under Commonwealth law to a greater extent than that imposed by the other provisions of the *Income Tax Acts*, 1930; and
- (b) will not be subject to any income tax under the law of a State.

Fractions of £10 on Conversion.

17. Where the conversion of existing securities into new securities would result in the issue of an amount of new securities that is not a multiple of £10, any fraction of £10 may be paid off in cash, or, if the holder so desires, he may subscribe an amount of new cash to increase the amount of his new securities to some multiple of £10.

Tax-free Securities.

18. The following conditions govern the conversion of existing tax-free securities; that is, securities issued by a State before 1st January, 1924, the income from which has not been heretofore assessed for Commonwealth Income Tax:—

- (a) Interest on existing securities converted into new securities will be reduced by $22\frac{1}{2}$ per cent. per annum: Provided that where the holder of existing securities satisfies the Treasurer that he or the person whose executor, administrator, or trustee he is, acquired the securities before 4th August, 1914, the rate of interest on conversion shall not be reduced below 3 per cent.
- (b) Interest on the new securities will be free of Commonwealth and State Income Tax for the original period of duration of the existing securities, which shall be deemed to expire—
 - (i) In the case of securities which have been issued with optional dates of redemption—upon the latest date in respect of which the option of redemption of the securities may be exercised.
 - (ii) In the case of securities which have been issued as redeemable on a specified date or thereafter, or on or after a date to be specified—on the date upon which they are redeemed.
- (c) Interest accruing to 31st July, 1931, on securities that are converted will be paid on the date when the interest would have been paid if the securities had not been converted. The interest will be paid to the person who was on 10th August, 1931, the holder of the securities.
- (d) New securities will be issued only in the form of Inscribed Stock, and shall not be exchangeable for Commonwealth Bonds or any other form of Commonwealth security.
- (e) The new securities will conform with the conditions of the existing securities as regards duration, redemption, and dates of payment of interest: Provided that the new securities issued in exchange for securities maturing on or before 31st December, 1934, shall mature on the original maturity date of the existing securities, and shall then be reconverted at par into 4 per cent. securities maturing on 15th November, 1941, and the interest thereon shall be subject to Commonwealth taxation to the same extent as securities issued in exchange for existing securities subject to Commonwealth Income Tax.

- (f) Holders of existing tax-free securities may elect to convert such securities into new securities subject to Commonwealth Income Tax on the basis set out in paragraphs 5 to 17.

Dissent from Conversion.

19. Persons who wish to dissent from the conversion of their securities must do so in writing identifying the securities concerned. The notice of dissent must be addressed as follows:—

- (a) As regards securities issued by the Commonwealth—to the Registrar of Stock at the Commonwealth Bank of Australia at either Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Launceston, Rockhampton, or Townsville; and
- (b) As regards securities issued by a State—to the Registrar of Stock or Principal Officer of the Treasury of the State concerned.

Provided that where the securities are held by a Bank or Savings Bank the notice of dissent must be addressed to the Bank or Savings Bank concerned, which shall forthwith forward it to the appropriate officer.

20. (a) Where the existing securities are not in the form of Inscribed Stock and have not been lodged with a Bank or Savings Bank for safe custody or as security, they shall accompany the notice of dissent and shall thereupon be exchanged for Commonwealth Government Inscribed Stock.

(b) Where the existing securities are not in the form of Inscribed Stock and have been lodged with a bank or savings bank for safe custody or as security, they shall forthwith be exchanged for Commonwealth Government Inscribed Stock.

(c) Commonwealth Government Inscribed Stock exchanged for existing securities in respect of which notice of dissent has been given as provided in this prospectus shall conform with the conditions of the existing securities in respect of duration, redemption, rate of interest, and in all other respects, and shall not be deemed to be new securities within the meaning of the *Commonwealth Debt Conversion Act, 1931*. No interest due for any period after 31st July, 1931, will be paid on existing securities other than Inscribed Stock until such securities have been exchanged into Commonwealth Government Inscribed Stock.

(d) Commonwealth Government Inscribed Stock in respect of which notice of dissent has been given, and Commonwealth Government Inscribed Stock issued in exchange for existing securities in respect of which notice of dissent has been given, shall not, except as prescribed, be exchangeable for Commonwealth Bonds or any other form of Commonwealth security.

21. Notice of dissent may be given within 21 days after 10th August, 1931. In the case of persons who are absent from the Commonwealth from 6th August, 1931, to 10th August, 1931, dissent may be notified within six weeks after 10th August, 1931: Provided that in special circumstances the Treasurer may extend the time to any particular holder.

22. Where written dissent is not notified in the manner and within the period set out above, the relative securities will be deemed to be converted into new securities and holders will be entitled to exchange their existing securities for new securities in accordance with this prospectus. No interest due for any period after 31st July, 1931, will be paid until this exchange has been made.

General.

37. Bonds and transfers of Stock will be free of Commonwealth and State stamp duty.

38. Sinking Fund contributions on the Loan will be paid into the National Debt Sinking Fund in accordance with the requirements of Commonwealth law.

39. The issue is an investment authorised by the Trustee Acts of the several States, and Trustees are expressly authorised and empowered to convert, or withhold dissent from the conversion of, any existing securities into new securities and no action, suit, or other proceeding shall be commenced, prosecuted or maintained against any trustee upon the ground of any action taken by such trustee to convert, or upon the failure of such trustee to dissent from conversion of, existing securities into new securities in accordance with the prospectus.

40. New securities bearing interest at 4 per cent. or $3\frac{1}{2}$ per cent. per annum, and having fixed dates of maturity, will be accepted at par with accrued interest in payment of Commonwealth Estate Duty.

41. Both the principal of and the interest on this Loan will be a charge upon the Consolidated Revenue Fund of the Commonwealth.

42. War Savings Certificates or Peace Savings Certificates may not be converted into this new Loan, but shall be continued on the same conditions as heretofore, except that interest on Peace Savings Certificates will be reduced to $3\frac{1}{2}$ per cent. per annum from 1st February, 1932.

Closing of Registers.

43. Registers of Stock will be closed from 10th August, 1931, until 21st September, 1931, or such earlier date as is fixed by the Treasurer, as regards all transactions in respect of stock issued by the Commonwealth or a State, other than transactions provided for in this prospectus.

Dated at Commonwealth Treasury, Canberra, 10th August, 1931.

The Schedule.

Method of Determining the Actuarial Equivalent of New Securities to be issued in lieu of Existing Securities.

1. All actuarial calculations made hereunder shall be on an interest basis of four per centum per annum with half-yearly rests.

2. The period yet to elapse between the date of conversion, namely, the thirty-first day of July, one thousand nine hundred and thirty-one, and the date of maturity of an existing security shall be calculated in a whole number of half-years and for a broken period (if any) in calendar months in excess of such whole number of half-years.

If such broken period in calendar months amounts to three calendar months or more then for purposes of calculation hereunder such broken period shall be deemed to equal a full half-year and the period yet to elapse shall be increased accordingly.

If such broken period in calendar months is less than three calendar months then for the purposes of calculation hereunder such broken period shall be ignored.

3. The rate of interest on existing securities shall be deemed to be reduced as set out in the prospectus.

N.B.—For convenience in calculation the effect of the twenty-two and one-half per centum reduction in interest rates is set out in Table I appended hereto.

4. From the reduced rate of interest on an existing security determined as set out in paragraph 2 of the prospectus there shall be deducted the rate

of interest applicable to the new security (four per centum or three per centum, as the case may be) and the balance (plus or minus) shall be multiplied by the appropriate factor having regard to the number of half-years yet to elapse before the maturity date of the existing security as determined in accordance with paragraph 2 of this schedule.

The result of such multiplication shall determine, in respect of each £100 of existing securities—

- (a) if plus—the amount of additional principal above par for which the new security shall be issued; or
- (b) if minus—the reduced amount of principal below par for which the new security shall be issued.

N.B.—The appropriate factors for certain cases are set out in Table II.

5. When the calculations in respect of the various holdings of securities of any individual holder have been made in accordance with the provisions of this schedule, the total amount of new securities to be issued to such holder shall be computed and such new securities shall then be issued with various maturity dates, in accordance with paragraph 7 of the prospectus.

6. Where the rate of interest on an existing security is five per centum per annum the rate of interest as reduced shall be three and seven-eighths per centum per annum and the new security may be issued at such reduced rate at par.

Examples of Working.

Existing 6 per cent. Securities due 15 November, 1938.

Interest rate as reduced falls to 4.65 per cent. (£4 13s. 0d. per cent.).

Deducting conversion rate of 4 per cent. from 4.65 per cent. gives .65 per cent. (plus).

Period to elapse from conversion date of maturity of securities is 7 years 3½ months, which is deemed to be 7½ years (or 15 half-years).

Factor in Table II for 7½ years is 6.42463—6.42463 x .65 gives 4.1760095.

That is for each £100 of existing 6 per cent. securities the equivalent amount of new 4 per cent. securities will be £104.1760095 (approximately £104 3s. 6d.).

For £100,000 of existing 6 per cent. securities the equivalent amount of new 4 per cent. securities will be £104,176.

Existing 4 per cent. Securities due 15th May, 1940.

Interest rate as reduced falls to 3.1 per cent. (£3 2s. 0d. per cent.).

Period to elapse from conversion date to maturity date is 8 years 9½ months, which is deemed to be 9 years.

Factor in Table II for 9 years is 7.49602.

If converted into new 3 per cent. securities—

Difference between 3.1 per cent. and 3 per cent. is .1 per cent. (plus)
.1 x 7.49602 equals .749602.

For each £100 of existing 4 per cent. securities the equivalent amount of new 3 per cent. securities will be £100.749602 (approximately £100 15s. 0d.).

If converted into new 4 per cent. securities—

Difference between 3.1 per cent. and 4 per cent. is .9 per cent. (minus)
.9 x 7.49602 equals 6.746418.

£100 minus 6.746418 equals £93.253582.

For each £100 of existing 4 per cent. securities the equivalent amount of new 4 per cent. securities will be £93.253582 (approximately £93 5s. 1d.).

Table I.

Showing the effect of 22½ per cent. reduction in Interest Rates.

Nominal rate of Interest.	Reduction of 22½ per cent. on nominal rate of Interest.	New Rate of Interest after reduction by 22½ per cent.	Approximate amount of new rate of Interest expressed in pounds, shillings, and pence.	Nominal rate of Interest.	Reduction of 22½ per cent. on nominal rate of Interest.	New Rate of Interest after reduction by 22½ per cent.	Approximate amount of new rate of Interest expressed in pounds, shillings, and pence.
per cent.			£ s. d.	per cent.			£ s. d.
6½	1.4625	5.0375	5 0 9	4½	1.0125	3.4875	3 9 9
6¼	1.40625	4.84375	4 16 11	4¼	.95625	3.29375	3 5 11
6	1.350	4.650	4 13 0	4	.900	3.100	3 2 0
5¾	1.29375	4.45625	4 9 1	3¾	.84375	2.90625	2 18 1
5½	1.2375	4.2625	4 5 3	3½	.7875	2.7125	2 14 3
5¼	1.18125	4.06875	4 1 4	3¼	.73125	2.51875	2 10 4
5	1.125	3.875	3 17 6	3	.675	2.325	2 6 6
4¾	1.06875	3.68125	3 13 8				

Table II.

Factor for Discounting Future Half-yearly Interest Payments.

Factor to be multiplied by amount of difference in annual interest (*i.e.*, the difference between the rate of interest on existing securities as reduced and the nominal rate of interest on the new securities, 4 per cent. or 3 per cent. as the case may be).

Period to elapse to Maturity of existing Security.		Factor.	Period to elapse to Maturity of existing Security.		Factor.	Period to elapse to Maturity of existing Security.		Factor.
Half-years.	Years.		Half-years.	Years.		Half-years.	Years.	
1	½	.49020	21	10½	8.50560	41	20½	13.89974
2	1	.97078	22	11	8.82902	42	21	14.11740
3	1½	1.44194	23	11½	9.14610	43	21½	14.33078
4	2	1.90386	24	12	9.45696	44	22	14.53998
5	2½	2.35673	25	12½	9.76173	45	22½	14.74508
6	3	2.80072	26	13	10.06052	46	23	14.94616
7	3½	3.23600	27	13½	10.35345	47	23½	15.14329
8	4	3.66274	28	14	10.64064	48	24	15.33656
9	4½	4.08112	29	14½	10.92219	49	24½	15.52604
10	5	4.49129	30	15	11.19823	50	25	15.71180
11	5½	4.89342	31	15½	11.46885	51	25½	15.89392
12	6	5.28767	32	16	11.73417	52	26	16.07247
13	6½	5.67419	33	16½	11.99428	53	26½	16.24752
14	7	6.05312	34	17	12.24930	54	27	16.41914
15	7½	6.42463	35	17½	12.49931	55	27½	16.58739
16	8	6.78885	36	18	12.74442	56	28	16.75235
17	8½	7.14594	37	18½	12.98473	57	28½	16.91407
18	9	7.49602	38	19	13.22032	58	29	17.07261
19	9½	7.83923	39	19½	13.45129	59	29½	17.22805
20	10	8.17572	40	20	13.67774	60	30	17.38044

For securities deemed to be interminable the factor is 25.0.

RESULTS OF THE CONVERSION.

The conversion carried out in the terms of the foregoing completely altered the distribution of the State within Australia as regards dates of maturity and rates of interest. The tables published on page 680 in this connection are now inapplicable so far as internal debt is concerned, but the former distribution of debt in London and New York is unaffected.

Figures as to the total conversions in respect of New South Wales debt are not yet available, but the preliminary figures for Australia as a whole are as follow:—

						£
Total Internal Public Debt, 31st July, 1931	...	...	...	...	...	557,998,904
Conversion Applications made	...	...	...	...	...	510,331,153
Conversions automatically effected (without notification of either assent or dissent)	...	...	...	...	...	31,011,982
Dissents notified	...	...	...	...	...	16,655,769
Total	...	...	...	...	...	£557,998,904

COST OF RAISING AND MANAGING LOANS.

Operations incidental to the issue of loans in London were formerly conducted by the Bank of England, and more recently by the Westminster Bank. The former charged $\frac{1}{4}$ per cent. per £100 of stock on all loan issues, and £350 per million annually for the inscription and management of stock, including the payment of the half-yearly dividends, while the latter charged $\frac{1}{4}$ per cent. and £150 per million respectively for similar services. At 30th June, 1931, stock to the value of £22,061,959 was managed by the Bank of England, while the Westminster Bank held the remainder other than loans issued or converted subsequent to the Commonwealth Financial Agreement of 1927. These loans are arranged and managed under authority of the Loan Council by the Commonwealth Bank of Australia.

Since the conversion of the internal loans of Australia into Commonwealth Consolidated Stock in the latter half of 1931, the management of the internal debts of Australian Governments has been conducted by the Commonwealth authorities in accordance with the Commonwealth Inscribed Stock Regulations. As a matter of convenience, however, administrative arrangements in connection with certain tax-free securities are carried out by the respective States.

With the approval of the Loan Council Commonwealth securities may be sold at the State Treasury, the proceeds being applied as part of the loan proceeds allocated to the State in terms of the financial agreement. Such issues are not underwritten, and the price of flotation is usually par.

Commission paid for management expenses in connection with the public debt is a charge on the Consolidated Revenue Fund; expenses incurred in the negotiation of loans, such as brokerage, underwriting, printing, etc., are charged against the proceeds of the loans. The amount so charged, together with discounts allowed to subscribers at various issues, amounted to £11,460,842 at 30th January, 1931.

The following statement shows the charges for the negotiation of recent loans, inclusive of the accrued interest and discounts allowed to investors. Local Debentures and Treasury Bills have not been included, as in Sydney they are usually issued at par, and little expenditure, if any, is incurred,

while the securities under these headings negotiated in London are generally for short periods pending the flotation of long-dated loans. The statement includes both new loans and conversions:—

Year of Flotation.	Amount of Principal	Price of Issue per cent.	Gross Amount Raised.	Costs of Negotiation.	Net Amount Credited to General Loan Account.*	Date from which Interest Accrues.	Nominal Rate of Interest.	Year of Maturity.
Issued in London.								
1926-27	£ 4,000,000	97	£ 3,880,000	£ 73,859	£ 3,807,995	1-1-27	5	1965
"	10,995,100	99	10,885,149	158,476	10,734,914	1-7-27	5½	1957
1927-28	(a) 3,080,000	98	3,018,400	55,941	2,970,829	1-7-28	5	1975
"	7,000,000	99½	6,965,000	140,299	6,840,827	1-7-28	5½	1957
1928-29	3,212,000	98	3,147,760	49,498	3,090,634	18-1-29	5	1975
1929-30	(b) 150,320	98	147,314	2,322	144,792	26-8-28	(b)	1975
Issued in New York.								
1926-27	†5,136,986	96½	4,944,349	154,734	4,805,553	1-2-27	5	1957
"	†5,136,986	96½	4,944,349	143,796	4,810,225	1-4-27	6	1958
1927-28	(a) 3,955,615	90	3,500,053	14,653	3,545,400	1-5-28	4½	1956
Issued in Sydney.								
1926-27	\$13,715,158	100	13,715,156	8,034	13,707,122	§	5½	§
"	\$1,494,436	100	1,494,436	2,850	1,491,586	§	5½	§
"	200,000	99½	199,000	.....	199,000	27-1-27	5½	1942
"	50,000	98½	49,250	.....	49,250	§	5½	1942
1927-28	1,658,876	100	1,658,876	1,817	1,657,059	§	5½	1932 to 1942
"	62,840	100	62,840	.....	62,840	§	5½	1932 to 1942
"	2,646,876	98½	2,607,173	7,518	2,599,655	§	5½	1932 to 1943
"	500,000	100	500,000	.....	500,000	§	½	1928 to 1929
1928-29	\$1,196,945	98½	1,179,261	2,685	1,176,305	§	5½	§1933 to 1943
"	\$8,609,650	100	8,609,650	27,015	8,598,619	§	6½	§1935 to 1942
"	\$519,800	99	514,602	1,779	512,823	§	5½	§1935 to 1942
1929-30	250,000	100	250,000	...	250,000	30-6-30	£6 7s.	15-12-30
"	\$4,358,745	100	4,358,745	7,407	3,900,419	§	6	§1937 to 1938
"	\$1,102,390	100	1,102,390	2,500	1,099,890	§	5½	§1939 to 1943
"	\$157,500	99	155,923	500	155,426	§	5½	§1939 to 1943
"	\$2,410,060	98	2,361,859	24,990	2,341,369	§	6½	§1934 to 1943
1930-31	35,000	100	35,000	20,167	35,000	§	5½	15-9-35
"	\$102,970	100	102,970		102,880	§	5½	§1941 to 1950
"	1,552,790	100	1,552,790		1,551,423	§	6½	15-12-40
"	\$13,514,440	100	13,514,440		13,493,177	§	6	§1932 to 1939

* Allowing for adjustments from Consolidated Revenue Account and profits on exchange.
† \$25,000,000. § Various amounts at various dates. †† £5 11s. 10d. (a) Issued by Commonwealth Government. (b) Commonwealth Advances under Migration Agreement—Rate of interest variable.

THE PUBLIC DEBT.

Growth of Funded Debt.

The first loans raised by New South Wales were for the promotion of immigration. From 1831 to 1841 the expenses attached to immigration were met by the Land Fund, into which were paid the proceeds of land sales, but these proved insufficient for the purposes in 1841, and it became necessary to obtain additional funds.

It was, therefore, decided by the Governor to borrow on the security of the Territorial or Land Revenue, and a debenture loan of £49,000 was offered locally on the 28th December, 1841. The loan was issued during 1842 in two instalments, the nominal rates of interest being 5½d. and 4d. per cent., respectively, per diem. This was the first loan floated in Australia, as well as the first raised by an Australian Government. It was not until 1854 that a loan was placed on the London market.

The amount of public debt outstanding at the end of each year from 1842 to 1860 was published on page 423 of the Official Year Book for 1926-27. The amount of debt at the end of each subsequent year is shown on page 744 of the "Statistical Register" for 1925-26.

The Public Debt in November, 1855, when Responsible Government was proclaimed, was £1,000,800, distributed under the following heads:—

Raised on the Security of Territorial Revenue—		£
Immigration ... ..	...	423,000
Sydney Railway Company's Loan ... ..	...	217,500
Raised on the Security of General Revenue—		
Amount for Sydney Sewerage ... ..	...	54,900
„ „ Sydney Water Supply ... ..	...	28,000
„ „ Railways ... ..	...	256,400
„ „ Public Works ... ..	...	21,000
Total ... ..	...	£1,000,800

Since 1855 the Funded Debt has grown steadily by reason of the expenditure of loan funds on railways, water supply and sewerage, harbour works and other public services enumerated on a previous page.

The following table shows the amount of funded Public Debt outstanding at the end of each year named, the financial year ending on 30th June in 1895 and subsequent years:—

Year.	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£
1842	49,500	1880	14,903,919	1920	152,776,082
1845	97,700	1885	35,564,259	1925	201,702,327
1850	132,500	1890	48,383,333	1926	209,793,012
1855	1,000,800	1895	58,220,933	1927	227,724,466*
1860	3,830,230	1900	65,332,993	1928	240,415,886†
1865	5,749,630	1905	82,321,998	1929	256,791,944
1870	9,681,130	1910	92,525,095	1930	259,589,967
1875	11,470,637	1915	127,735,405	1931	272,747,526‡

* Excluding £10,995,100 proceeds of loans credited in following year.

† Excluding £4,832,021 loan proceeds due credited in following year.

‡ Excluding £2,950,000 loan proceeds due credited in following year.

The annual growth of the public debt cannot be traced accurately from the growth of funded debt outstanding. During recent years it has become increasingly the practice to finance loan expenditure by overdraft on the loan account against the security of special deposits which consist largely of funds made available on loan by the Commonwealth Government. In addition, since 1916, there have been in existence Closer Settlement Debentures and ministerial certificates issued in payment for some of the estates resumed for closer settlement. From time to time part of these debentures have been redeemed from loan funds.

In considering the rate of growth of the debt, attention should be paid to the effect of variations in the purchasing power of the money expended, the steady growth of population throughout the period, the economic development of the State, as measured by the growth of its wealth, income and productiveness, and the earning power of the works constructed from loan.

Furthermore, comparisons of the rate of growth of the State debt with that of other States of Australia should take into account the various distributions of governmental functions as between the State and local governments and the inclusion or non-inclusion of the capital debts of public utilities controlled by governmental authority.

Especial care should be taken in making international comparisons to make due allowance for the differing distributions of debt as between central, provincial and local governments and the existence or otherwise of reproductive assets acquired from loan funds. Superficial comparisons made without reference to these factors lead to very erroneous conclusions.

The following statement shows the amount of funded debt on each register at quinquennial intervals from 1900 to 1931. Stocks are transferable normally from London to Sydney:—

As at 30th June	Stock, Debentures and Treasury Bills Registered in—				Funded Debt.	
	London and New York.		Sydney.			
	Amount.	Proportion to Funded Debt.	Amount.	Proportion to Funded Debt.	Total.	Per head of Population.
	£	per cent.	£	per cent.	£	£ s. d.
1900	55,060,650	84.28	10,272,343	15.72	65,332,993	48 4 9
1905	64,007,550	77.75	18,314,448	22.25	82,321,998	56 12 2
1910	67,154,805	72.58	25,370,290	27.42	92,525,095	57 6 6
1915	86,167,288	67.46	41,568,117	32.54	127,735,405	67 10 11
1920	101,977,445	66.75	50,798,637	33.25	152,776,082	73 16 11
1925	136,064,505	67.45	65,637,822	32.55	201,702,327	88 14 4
1930	168,993,285*	65.10	90,596,682	34.90	259,589,967	104 7 10
1931	176,767,275†	64.12	98,930,254	35.82	275,697,529†	109 18 0

* Including £13,945,628 in 1930, and £13,825,624 in 1931 in New York.

† Includes £2,950,000 proceeds to be credited in 1931-32.

Formerly the State Government depended principally on the London money market for the flotation of its loans and more than 84 per cent. of the loans outstanding at 30th June, 1900, were registered in London. As the State developed, however, loanable funds became available on the local market and, despite huge borrowings by the Commonwealth Government in Australia for war purposes, the State's loan capital has been provided to an increasing extent from local resources. Thus of £210,364,536 added to the funded debt of the State between 1900 and 1931 no less than £88,657,911, or 42.1 per cent., were subscribed locally, and at 30th June, 1931, approximately 36 per cent. of the outstanding funded debt was registered locally. Owing to the stringency on the London money market in the early part of 1927 the State raised two 25,000,000 dollar loans in New York, the total amount of principal being £10,273,973. In the following year the State received £3,955,615, part of the proceeds of a 50,000,000 dollar loan raised in New York by the Commonwealth. The increased London borrowings in June, 1931, consisted principally of short-dated debentures and Treasury bills.

TOTAL PUBLIC DEBT OF STATE.

The total public debt of New South Wales consists of (a) funded debt; (b) unfunded debt, viz., the debit balances on general loan account and on loan expenditure suspense account and advances by the Commonwealth Government for various purposes; and (c) the amount of debentures and ministerial certificates issued in payment for estates acquired for purposes of Closer Settlement adjusted in accordance with the balance at debit or credit of the Closer Settlement Fund.

Since the commencement of the Commonwealth Financial Agreement on 1st July, 1928 (see page 682), it has been necessary to introduce a new classification of items comprised in the public debt. These are shown in the following table:—

	Amount of Debt as at 30th June,—		
	1929.	1930.	1931.
	£	£	£
Funded Debt*	256,791,944	259,589,967	275,697,529
Advances by Commonwealth Government—			
Returned Soldier Settlement	8,465,983	8,465,984	8,465,984
Silo Construction	250,000	...	...
Migration	150,320	275,071	...
Grafton-South Brisbane Railway	1,226,285	1,406,573	1,419,593
Closer Settlement Debentures	1,751,350	1,170,450	908,450
Advances by Commonwealth Bank ... ..	...	...	1,617,197
Gross Debt taken over by Commonwealth	268,635,882	270,908,045	288,108,753
Deduct—			
Value of properties transferred in 1929-30	4,788,005	...	...
Sinking Fund Balances	428,232	145,739	174,663
	5,216,237	145,739	174,663
Net Debt as defined by Financial Agreement... ..	263,419,645	270,762,306	287,934,090
Closer Settlement Debentures external to Agreement	97,300	131,700	131,700
General Loan Overdraft	10,684,964	13,603,220	3,278,994
Loans Expenditure Suspense Overdraft	1,941,829	453,240	...
	276,143,738	284,950,466	291,344,784
Less Loan Proceeds due, credited following year ... ..	...	...	2,950,000
	276,143,738	284,950,466	288,394,784
Less Advances from Commonwealth Government in Special Deposits Account	8,866,303	8,741,054	8,465,984
Public Debt*	267,277,435	276,209,412	279,928,800

* Funded Debt embraces outstanding Debentures, Stock and Treasury Bills at face value.

The item £4,788,005 (value of transferred properties) is offset in 1929 in order to validate comparison with succeeding years, when the liability had been actually transferred to the Commonwealth.

Debit balances on revenue accounts have been excluded from the foregoing statement since October, 1930. Treasury bills have been issued in respect of these.

Domicile and Rates of Interest on Public Debt.

The following tables show the amount of New South Wales public debt taken over by the Commonwealth in the various registers, the rates of interest, and the latest dates of maturity as at 30th June, 1931. It should be noted that the rates of interest and the dates of maturity of the debt

registered in Australia were altered in the latter part of 1931 in terms of the Commonwealth Debt Conversion Loan, and that these alterations are not reflected in the tables here shown:—

Rate per cent.	Payable in—			Total.	Annual Interest Payable.
	London.	New York.	Australia.		
	£	£	£	£	£
1*	668,552	...	...	668,552	6,686
3	12,420,113	...	4,176,302	16,596,415	497,892
3½	16,569,952	...	1,766,428	18,336,380	641,772
3¾ ... ..	...	...	1,911,650	1,911,650	71,686
4	22,964,242	...	704,447	23,668,689	946,748
4½	10,984,700	3,922,922	76,200	14,983,822	674,270
5	45,801,437	9,902,702	11,818,336	67,522,475	3,376,125
5½	17,870,500	...	36,147,684	54,018,184	2,835,956
5¾	2,980,400	...	20,974,268	23,954,668	1,317,508
5½	17,825,385	...	1,654,723	19,480,108	1,120,107
6	9,527,090	...	29,069,415	38,596,505	2,315,790
6½	6,427,465	...	3,035	6,430,500	417,982
Various† ...	1,928,055	...	...	1,928,055	61,813
Matured ...	10,550	...	2,200	12,750	...
Total	£ 165,978,441	13,825,624	108,304,688	288,108,753	14,284,335

* Advance from Commonwealth Government under Migration Agreement.

† Treasury Bills discounted at various rates.

The whole of the loans on which the interest rate was 4 per cent or less were floated prior to 1915, mainly in London.

Domicile and Term of Public Debt.

The dates of repayment of the debt extend to 1976, and the sums falling due for redemption each year vary considerably, as will be seen from the following table, which shows the latest due dates and the amount repayable in London, in New York and in Sydney at 30th June, 1931:—

Due Date.	Registered in—					Grand Total.
	London.	New York.	Australia.			
			General Loan.	Closer Settlement.	Total.	
Min. date expired ...	£	£	£	£	£	£
Matured	10,550	...	7,361,771	...	7,361,771	7,361,771
1931-32	11,499,838	...	1,700	500	2,200	12,750
1932-33	12,924,152	...	11,403,244	180,100	11,583,344	23,063,180
1933-34	12,924,152	...	17,415,066	113,700	17,528,766	30,452,858
1934-35	12,602,246	...	3,464,801	75,300	3,540,101	16,742,347
1935-36	4,901,233	...	18,339,052	98,850	18,437,902	23,339,185
1936-37	12,420,113	...	4,251,384	137,950	4,389,334	16,809,447
1937-38 ... ..	...	...	4,446,502	135,200	4,581,702	4,581,702
1938-39 ... ..	...	...	218,048	86,160	304,798	304,798
1939-40 ... ..	...	...	3,649,050	3,300	3,652,350	3,652,350
1940-41	15,954,555	...	5,700,850	6,400	5,707,250	5,707,250
1941-42 ... ..	...	...	1,988,735	5,900	1,994,635	17,949,190
1942-43	3,979,050	...	14,125,235	4,900	14,130,135	14,130,135
1943-44 ... ..	...	...	4,960,104	17,300	4,977,404	8,966,454
1944-45 ... ..	...	...	915,237	3,300	918,537	918,537
1945-46	10,984,700	...	...	6,400	6,400	6,400
1947-48 ... ..	...	...	300	800	1,100	10,985,800
1948-49 ... ..	...	...	...	8,100	8,100	8,100
1949-50 ... ..	...	...	...	3,300	3,300	3,300
1950-51	12,067,428	...	...	6,200	6,200	6,200
1952-53 ... ..	...	...	49,342	800	50,142	12,117,570
1953-54 ... ..	...	...	...	8,000	8,000	8,000
1954-55 ... ..	...	...	...	3,300	3,300	3,300
1955-56	21,657,000	3,922,922	...	2,700	2,700	2,700
1956-57 ... ..	...	4,946,984	...	...	...	25,579,922
1957-58	17,870,500	4,955,718	...	...	...	4,946,984
1962-63	10,392,396	...	107,604	...	...	22,826,218
1965-66	14,130,000	...	...	...	107,604	16,500,000
1975-76	2,966,285	...	...	...	...	14,130,000
Indeterminate ...	1,617,197	...	8,465,983	...	8,465,983	2,966,285
Interminable ...	1,200	...	531,690	...	531,690	10,083,180
Total	£ 165,978,441	13,825,624	107,396,238	908,450	108,304,688	288,108,753

The due dates of repayment of debt registered in Australia were varied in accordance with the Commonwealth Debt Conversion Loan in the latter half of 1931. The dates of repayment in London and New York remain unchanged.

THE INTEREST BILL OF THE STATE.

The annual interest payable on the debt outstanding at 30th June, 1931 is quoted on page 680 at £14,284,335, which represents a full year's interest calculated on the various securities outstanding and advances from the Commonwealth Government at each of the respective rates of interest. The amount of interest actually paid during the year 1930-31 was £13,997,894, inclusive of £12,987,763 on funded debt, £838,424 on moneys in temporary possession and £171,707 on advances by banks. Part of this interest was due in respect of overdrafts on revenue accounts.

The total amount and average rate of interest payable on the gross loan liability to the Commonwealth outstanding as at 30th June, 1930 and 1931, are shown below distinguishing between the various registers:—

Registered in—	As at 30th June, 1930.		As at 30th June, 1931.	
	Annual Interest Payable on Outstanding Loans.	Average Rate.	Annual Interest Payable on Outstanding Loans.	Average Rate.
	£	per cent.	£	per cent.
Australia	5,343,585	5.33	5,772,171	5.33
London	7,462,871	4.76	7,840,497	4.72
New York... ..	677,667	4.86	671,667	4.86
Total	13,484,123	4.98	14,284,335	4.96

The amounts of interest are payable in the currencies of the respective countries, the amount due in New York being payable in dollar equivalent at par. Cost of oversea exchange in remitting interest is not included in the figures shown.

In the latter part of 1931 the rate and amount of interest due on loans registered in Australia were reduced in terms of the Conversion Loan.

The difference between the rates of interest on local and oversea loans does not represent the relative interest cost of borrowing in the respective markets. It is due largely to the fact that considerable amounts were borrowed in London years ago when interest rates were lower than they have been latterly.

Average Rate of Interest.

The average rate of interest on the public debt is calculated in two ways, showing the average nominal rate payable and the effective rate or actual rate paid.

The average nominal rate of interest payable on the debt outstanding at 30th June, 1930 and 1931, are shown above.

The average effective rate of interest is calculated each year to determine the amount of interest properly chargeable to the various undertakings and enterprises. The rates calculated in recent years have been 5.144 per cent. in 1925-26; 5.1312 per cent. in 1926-27; 5.12027 per cent. in 1927-28; 5.14062 per cent. in 1928-29; 5.17204 in 1929-30; and 5.14421 in 1930-31. Interest at the rates shown was charged to business undertakings in respect of loan capital used by them.

REDEMPTIONS AND SINKING FUNDS.

An account of the debt redemptions and sinking funds of New South Wales prior to the transfer to the National Debt Commission in terms of the Financial Agreement, was published on pages 170 and 171 of the official Year Book for 1929-30. The present sinking fund is described on page 685 hereof.

FINANCIAL RELATIONSHIP BETWEEN COMMONWEALTH AND STATES.

The history of the financial relationships existing between the Commonwealth and States since federation in 1901 has been sketched in earlier issues of this Year Book, and the trend of recent discussions on proposals for the readjustment of these relationships was outlined on page 284 of the Year Book for 1925-26.

Financial Agreement, 1927.

All the matters under discussion were incorporated in a comprehensive scheme propounded by the Commonwealth and placed before conferences of Premiers in Melbourne in May, 1927, and in Sydney in July, 1927. After amendment the scheme was accepted by all the States and by the Commonwealth, and, except in certain minor matters, it was brought into operation as from 1st July, 1927.

The agreement has provided a settlement of the question of (i) the distribution amongst the States of a share of the Commonwealth revenue, a problem which arose when, upon federation, the States relinquished the right to levy customs and excise duties and it became an exclusive power of the Commonwealth; (ii) the creation of an effective Australian Loan Council to co-ordinate public borrowing; and (iii) the liability of the Commonwealth to the States in respect of transferred properties. In addition it has provided for the creation of a uniform sinking fund in respect of the public debts of the Commonwealth and the States.

From 1st July 1910 to 30th June, 1928, the Commonwealth had contributed a share of its revenue to the States on a per capita basis at the rate of 25s. per head of population. Under the agreement of 1927 the Commonwealth will contribute a fixed sum annually to be applied towards the payment of interest on the States' debts.

Australian Loan Council.

The Australian Loan Council consists of a Minister of the Commonwealth appointed by the Prime Minister, and one Minister of each State appointed by the Premiers of the respective States. All borrowings are arranged by the Commonwealth in accordance with the decisions of the Loan Council, which determines the amount, rates and conditions of loans to be raised. The Commonwealth and each State submit annual programmes showing

the amounts desired to be raised by loan for expenditure each year, and the amounts of repayments estimated to be available towards meeting that expenditure. Should these loan programmes exceed in the aggregate the amount which the Loan Council decides can be borrowed at reasonable rates and conditions in the year in question, the amount raised is apportioned in accordance with the unanimous decisions of the Loan Council, and, failing unanimity, the Commonwealth is entitled to one-fifth of the total amount raised and each State to a proportion of the remaining four-fifths equal to a ratio of their respective net loan expenditures to the total loan expenditure of the States in the preceding five years. Questions other than the apportionment of loans are determined by majority vote of the Council, the Commonwealth representative having two votes and a casting vote, and each State representative one vote. Loans (other than for temporary purposes) raised by a State or by the sale of securities from Governmental institutions, including Savings Banks, are within the jurisdiction of the Loan Council, but loans for defence approved by the Commonwealth Parliament are excluded from it.

Subject to the decisions of the Loan Council, the Commonwealth arranges for all borrowings on behalf of the Commonwealth and the States, and for all conversions, renewals, redemptions and consolidations of the Public Debts of the Commonwealth and States.

If, however, the Loan Council unanimously decides, a State may borrow money outside Australia in its own name, such loans being guaranteed by the Commonwealth. Only in this case may a State invite loan subscriptions by the issue of a public prospectus.

Within its own territory the Commonwealth or any State may borrow money from any Government institution or from the public by sales of securities over the counter, or may use any available public moneys for any purpose provided that any securities issued are Commonwealth securities on terms approved by the Loan Council. Where such borrowings are not solely for temporary purposes they are treated as loans under the agreement, and if their amount, added to the amount of loan money raised for the Government concerned by the Loan Council, exceeds the limit (if any) of the amount to be raised for or by the Government in question, the excess is to be deducted from that Government's quota of borrowed money in the ensuing year.

Where such borrowings are for temporary purposes only the conditions as to sinking fund, etc., do not apply. Any Government may borrow for temporary purposes by way of overdraft or fixed or other deposit, subject to terms approved by the Loan Council.

Transfer of States' Debts to Commonwealth.

On 1st July, 1929, the Commonwealth took over, in terms of the financial agreement, the debts of the States, and assumed, as between the Commonwealth and States, the liabilities of the States to bondholders. The debts taken over consisted of the following:—

- (i) the balance then unpaid of the gross public debt of each State existing on 30th June, 1927; and
- (ii) all other debts of each State existing on 1st July, 1929, other than for temporary purposes.

The net public debt of each State existing on 30th June, 1927, and embraced within the agreement, is shown in the following statement:—

	£
New South Wales	234,088,501
Victoria	136,949,942
Queensland	101,977,855
South Australia	84,834,364
Western Australia	61,060,675
Tasmania	22,434,060
Total	£641,345,397

These amounts represent the gross debt less (1) the value of properties transferred to the Commonwealth, as shown below, and (2) the balances of the States' sinking funds at 30th June, 1927.

Transferred Properties.

The Commonwealth had been paying to the various States interest at the rate of $3\frac{1}{2}$ per cent. on the value of properties transferred to the Commonwealth after federation. For the purposes of the financial agreement new valuations were agreed upon, and on these values the Commonwealth paid to the States during the two years 1927-28 and 1928-29 interest at the rate of 5 per cent. At the end of this period the Commonwealth, on 1st July, 1929, relieved the States of the liability for principal, interest and sinking fund on an amount of debt equal to the value of the properties, each State having agreed to issue to the Commonwealth freehold titles to the properties consisting of land or interests in land.

The value of the transferred properties in each State, according to the terms of the agreement, is shown below:—

	£
New South Wales	4,788,005
Victoria	2,302,862
Queensland	1,560,639
South Australia	1,035,631
Western Australia	736,432
Tasmania	500,754
Total	£10,924,323

Payment of Interest on Public Debt.

The Commonwealth, as agent for the States, has agreed to pay to bondholders interest due on the public debt of the States and, for a period of fifty-eight years from the 1st July, 1927, to contribute £7,584,912 per annum towards the interest, the States paying the balance to the Commonwealth. After that period the whole of the interest due will be paid by the States to the Commonwealth.

The distribution amongst the States of the Commonwealth contribution is shown below:—

	£
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
Total	£7,584,912

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.

National Debt Sinking Fund.

A national debt sinking fund was established in terms of the agreement. The annual payments to the fund are contributed partly by the Commonwealth and partly by the States. Contributions in respect of the net debts of the States as at 30th June, 1927, and on conversions thereof, are at the rate of 7s. 6d. per cent. per annum, the Commonwealth contributing 2s. 6d. per cent. and the States 5s. per cent. for a period of fifty-eight years commencing on 1st July, 1927, as regards all States except New South Wales, whose period commenced on 1st July, 1928.

On new borrowings after 1st July, 1927 (except those for redemptions or conversions, or for funding a State deficit), contributions are at the rate of 10s. per cent. per annum contributed in equal shares by the Commonwealth and the States for a period of fifty-three years from 1st July, 1928, in the case of New South Wales and from 1st July, 1927, in the case of the other States.

Contributions in respect of loans raised to meet revenue deficits accruing after 1st July, 1927, are to be made by the State concerned, at a rate not less than 4 per cent., for a period sufficient to provide for the redemption of those loans, the contributions being deemed to accumulate at the rate of $4\frac{1}{2}$ per cent. compound interest.

In addition, contributions are paid at the rate of £3 per cent. per annum in respect of loan moneys expended by the States in terms of the Federal Aid Roads Act which is described in the chapter relating to Local Government. These contributions are to be paid by the Commonwealth until 1936, then the States are to pay similar contributions until the loans are repaid.

Any State may increase its contribution in respect of loan funds expended on wasting assets, and when such loans are extinguished the State contribution in respect thereof shall cease, but the Commonwealth contribution shall continue and be treated as part of the State contribution in respect of other loans. Repayments made to a State in respect of recoverable advances made by it may be credited either to loan account or to sinking fund, and the sinking fund contribution from revenue in respect thereof continues. Advances repaid to the State from the revenue of public or local authorities may be used by the State to meet sinking fund contributions in respect of the loans concerned.

The sinking funds are controlled by the National Debt Commission. The contributions to sinking fund are not accumulated but must be applied, whenever expedient, to the redemption and repurchase of loan securities. Such redeemed or repurchased securities are cancelled, and the State concerned pays to the National Debt Commission interest at the rate of $4\frac{1}{2}$ per cent. per annum in addition to sinking fund contribution in respect of such cancelled securities.

Separate accounts are kept by the Commonwealth for each State in respect of debt, interest, and sinking funds. The operations of the National Debt Sinking Fund in regard to the debts of the State of New South Wales during the three years ended 30th June, 1931, are shown below:—

Heading.	1928-29.	1929-30.	1930-31.	Total, three years.
Contributions by—	£	£	£	£
Commonwealth	637,175*	375,418	402,441	1,415,034
New South Wales	608,288	755,987	871,432	2,235,707
Contributions in terms of Federal Aid				
Roads agreement.	19,864	28,561	26,866	75,291
Interest	15,885	32,609	11,148	59,642
Total	£ 1,281,212	1,192,575	1,311,887	3,785,674
Cost of Repurchases—				
In London	415,415	671,417	423,273	1,510,105
In New York	180,815	82,235	87,270	350,320
In Australia	172,452	...	...	172,452
Redemptions in Australia	114,360	721,416	681,099	1,516,875
Total	£ 883,042	1,475,068	1,191,642	3,549,752

* For two years.

The face value of securities repurchased or redeemed during this period was £1,765,052 in London, £404,315 in New York and £1,688,905 in Australia—a total of £3,858,272, excluding debentures £40 redeemed in June, 1931, to be brought into account in 1931-32. The balance at credit of the sinking fund as at 30th June, 1931, was £174,703.

PRIVATE FINANCE

CURRENCY.

CURRENCY matters in Australia are under the supervision of the Commonwealth Government. Matters relating to the metallic currency are administered in terms of the Coinage Act, 1909, and the paper currency is controlled by the Commonwealth Bank Act, 1911-1931, and the Bank Notes Tax Act passed in 1910.

During the war period restrictions were placed upon the use of gold. The banks and the Mint ceased to issue gold coins to the public, and paper money came into general use. The removal of restrictions on the export of gold re-established the gold standard in international transactions in April, 1925, but the use of notes for internal currency was continued. In order to protect the currency and public credit of the Commonwealth, the Commonwealth Bank Act was amended in December, 1929, to provide that the Bank Board might (with the authority of the Commonwealth Treasurer) require any persons to furnish particulars of gold coin and bullion held by them and might require them to exchange any gold coin or bullion for its equivalent in Australian notes, such equivalent of gold coin and bullion being the nominal value, £3 17s. 10½d. per oz. of standard gold content, standard gold being eleven-twelfths fine gold. In addition it was made an offence to export gold overseas except with the concurrence of the Commonwealth Treasurer after recommendation of the Commonwealth Bank Board. Any person travelling overseas was allowed to take with him Commonwealth gold of a value not exceeding £25.

The face value of coins held by banks in New South Wales at 30th June, 1931, was: Gold £20,362, silver £799,587, and copper £56,307. In addition, the Note Issue Department of the Commonwealth Bank held, in Sydney, gold coin to the value of £3,284,500. The corresponding figures as at 30th June, 1930, were: Gold coin £89,638, silver £1,066,470, copper £59,242, and gold coin in Note Issue Department, Sydney, £9,252,000.

An estimate of the face value of the currency of New South Wales at five-year intervals between 1901 and 1921 was published in the 1921 issue of this Year Book in the chapter relating to Valuation of Wealth, details being given regarding the sources of data and the method used in formulating the estimate.

COINAGE.

British or Australian gold coins are legal tender in New South Wales for the payment of any amount, silver coins up to forty shillings, and bronze up to one shilling, but in recent years British coins have practically disappeared from circulation.

A branch of the Royal Mint, London, was opened in Sydney on 14th May, 1855, for minting gold, and operated until 18th November, 1926. Branches are in operation in Melbourne (Victoria), and in Perth (Western Australia). The Commonwealth Coinage Act, 1909, empowers the Federal Treasurer to make and issue silver and bronze coins of specified denominations. A nickel coinage also was authorised, but it has not been issued.

For gold coins the standard fineness is $\frac{11}{12}$ fine gold, $\frac{1}{12}$ alloy; for silver coins $\frac{37}{40}$ fine silver, $\frac{3}{40}$ alloy; bronze coins are of mixed metal—copper, tin, and zinc. Thus, standard or sovereign gold has a fineness of 22 carats, and the gold contained in deposits sent to the Mint for melting, assaying, and coining is accounted for at the rate of £3 17s. 10½, or 3.8937 sovereigns per standard oz. equivalent to £4 4s. 11½d. per oz. fine.

Early in 1930 the price of gold in Australia rose to a premium, and a further advance occurred after the gold standard was suspended in England in September, 1931. Subsequently arrangements were made by which the price for gold lodged at the Mint in Australia is fixed each Tuesday by the Commonwealth Bank on the basis of the forward open market price in London, plus the ruling rate of exchange for telegraphic transfers, Australia on London, less an allowance of about 25s. per cent. for realisation charges. The principal variations in the price of gold in Australia since March, 1930, are shown below:—

Date.	Premium.	Price per Standard oz.	Date.	Premium.	Price per Standard oz.
1930.	Per cent.	£ s. d.	1932.	Per cent.	£ s. d.
March 12	2½	4 0 1	January 18	75	6 16 3
„ 24	5½	4 2 0	„ 25	74	6 15 6
October 9	7½	4 3 11	February 22... ..	72	6 13 11
1931.			„ 29... ..	70½	6 12 9
January 6	14½	4 9 0	March 7	65	6 8 6
„ 13	17½	4 11 2	„ 14	64	6 7 9
„ 17	24½	4 16 9	„ 21	57½	6 2 8
„ 28	29½	5 0 8	„ 29	58	6 3 1
October 20	58½	6 3 6	April 4	57½	6 2 8
„ 26	52½	5 18 9	„ 11	59	6 3 10
November 9... ..	52	5 18 4	„ 18	60	6 4 7
„ 30... ..	70	6 12 5	„ 25	64	6 7 9
December 21... ..	75	6 16 3	May 2	63½	6 7 4
„ 28... ..	78	6 18 7	„ 16	63	6 6 11
1932.			„ 23	62	6 6 2
January 4	76	6 17 1	„ 30	61½	6 5 9
„ 11	72	6 13 11	June 6	62½	6 6 7
			„ 13	65	6 8 6
			„ 20	65½	6 8 11
			„ 27	67½	6 10 5

The nominal value of one ounce of standard silver ($\frac{37}{100}$ fine) is approximately 5s. 6d., and of one pound (avoirdupois) of bronze coined into pence 4s., and into half pence 3s. 4d.

A substantial profit is usually made on the silver and bronze coinage, after the minting and other expenses have been deducted. Under normal conditions, and subject to exchange and incidental costs, the Australian price of silver is determined by transactions in the London market, and the average of the London prices ruling (English currency) in recent years is shown below:—

Year.	Price of Silver per standard oz. (London.)	Year.	Price of Silver per standard oz. (London.)
	s. d.		s. d.
1920	5 1·6	1926	2 4·7
1921	3 0·9	1927	2 2
1922	2 10·4	1928	2 2·7
1923	2 7·9	1929	2 0·5
1924	2 9·9	1930	1 5·7
1925	2 8·1	1931	1 2·6

In 1918 the price of silver in London was subject to regulation by the Imperial Government. It was decontrolled in May, 1919. In the latter part of the year it commenced to rise, and in February, 1920, the average

price was 7s. 6d. per oz. Thereafter it declined rapidly, and in June of the same year the price was 3s. 4d. per oz. The annual average was relatively stable between 1922 and 1925. It declined in the latter half of 1926, and in December was 24½d.—lower than at any time since 1915. The price rose by 1½d. early in 1927, and remained fairly constant throughout 1927 and 1928. In 1929 there was a slow decline from 2s. 2½d. in January to 1s. 10½d. in December. The downward movement then accelerated, the average being 1s. 3½d. in December, 1930, and 12½d. in August, 1931.

PAPER CURRENCY.

Bank Notes.

Prior to 1910 the right to issue paper currency in New South Wales was vested in private banking institutions which had acquired the right by Royal charter or by special Act of Parliament, the bank notes being subject to a tax of 2 per cent. per annum imposed by the State. In 1910 the Federal Parliament, having authorised the issue of Australian notes, imposed a tax of 10 per cent. on the notes of the trading banks, with the object of forcing them out of circulation. Consequently the value of the bank notes current dropped from £2,213,128 in December quarter, 1910, to £400,784 in the following year. In June quarter, 1931, the amount was £63,366.

Australian Notes.

The Australian Notes Act, 1910, passed by the Commonwealth Parliament, prohibited the circulation of notes by any of the States and authorised the Federal Treasurer to issue Australian notes, in denominations of 10s., £1, £5, £10, and multiples of £10, to be legal tender throughout the Commonwealth, and to be payable on demand at the seat of Federal Government. Five-shilling notes were authorised, but have not been issued. The denominations which had been issued as at the end of 1931 were 10s., £1, £5, £10, £20, £50, £100, and £1,000.

In December, 1920, control of the Australian note issue was transferred to the Commonwealth Bank, in which a Note Issue department was established. Since the transfer the notes have been issued by the Commonwealth Bank and are payable at the head office of the Bank. Under the Act of 1920, the management of the note issue was entrusted to a Board, consisting of the Governor of the Bank as chairman, and three other directors appointed by the Governor-General, one being an officer of the Commonwealth Treasury. Under the provisions of the Commonwealth Bank (Amendment) Act of 1924 the note issue was placed under the control of the Board of Directors of the Bank, but a decision affecting the issue is not effective unless six of the eight directors vote for it at a meeting at which all the directors are present, or five vote for it when any of the directors is absent.

The Act of 1924 authorises the Board to issue Australian notes to banks in Australia in exchange for money or securities lodged with the London branch of the Commonwealth Bank. This provision was made to obviate monetary difficulties arising from market fluctuations in rates of exchange between Australia and London.

Of the net profits of the note issue, after paying working expenses and commission to the Commonwealth Bank for the purpose of its general business, 25 per cent. is to be paid into the Rural Credits Department of the Bank in terms of an amending Act passed in 1925—until the amount so paid reaches a total of £2,000,000. The balance of the net profits is paid to the Treasury of the Commonwealth. The money derived from the issue,

apart from the reserve, may be invested on deposit with any bank; in securities of the United Kingdom, of the Commonwealth, or of a State; or in trade bills with a currency of not more than 120 days.

The gold reserve in respect of the notes was fixed in 1910 at an amount not less than one-fourth of the notes issued up to £7,000,000, and £ for £ in excess of that amount, but in the following year the Act was amended and the reserve was fixed at one-fourth of the issue. In 1931 an Act was passed reducing the statutory limit of gold reserve to 15 per cent., but making provision for restoration of the 25 per cent. reserve within four years.

In May, 1932, the law was amended to provide that the reserve may be held either in gold or in English sterling or partly in both. The part in English sterling must consist of (a) balances with the Bank of England or other banks in London; (b) bills of exchange payable in English sterling maturing in not more than three months; or (c) Treasury bills or other securities of the United Kingdom not exceeding three months' maturity. Any sum accruing by reason of the sale of gold in the reserve must be transferred to a special reserve account for use in stabilising exchange or for the purposes of the Note Issue Department.

The total value of the Australian notes in circulation in New South Wales and elsewhere, and the gold reserve held by the Notes Issue Department, in various years since 1914, are shown below. The figures for June, 1914, are as at the last Wednesday and those for later years relate to the last Monday of the month:—

End of June.	Notes in Circulation.			Gold Reserve.	
	Held by Banks.	Held by Public.	Total.	Total.	Proportion of Note Circulation.
	£ *	£ *	£	£	Per cent.
1914			9,573,738	4,106,767	42·90
1921 ...	34,303,806	23,924,174	58,228,070	23,478,128	40·32
1926 ...	30,254,500	23,635,726	53,890,226	28,182,387	52·30
1927 ...	23,479,995	24,913,231	48,393,226	22,065,071	45·60
1928 ...	19,540,226	24,913,000	44,453,226	22,485,972	50·58
1929 ...	17,805,812	24,452,414	42,258,226	22,151,497	52·42
1930 ...	22,342,161	22,572,165	44,914,326	19,931,102	44·38
1931 ...	25,302,258	25,351,168	50,653,426	15,226,530	30·06

* Banks held £5,032,149 and public £4,822,774 at 3rd August, 1914 (earliest figures available).

The note issue expanded under war conditions until it amounted to £59,676,401 in October, 1918. This is the maximum since the commencement of the issue, though, after a decline of £5,000,000 in the following year, increases between November, 1920, and March, 1921, brought it to the high level of £59,462,000. By October, 1922, it had fallen below £52,000,000 and remained fairly constant until March, 1924, when notes to the value of £4,200,000 were issued to the banks to discharge certain liabilities incurred by the Federal Government in connection with the

war. The amount of the issue increased in this manner, was £56,890,226 in May, 1924, and no change was made until notes to the value of £3,000,000 were cancelled twelve months later. Cancellations in July and August, 1926, reduced the issue to £49,890,226 and in March, 1927, to £48,393,226. It was increased temporarily by £3,400,000 in December, 1927, to meet seasonal demand and to facilitate the flotation of a federal conversion loan which the banks had underwritten. Before the end of the following month, the issue had contracted to £47,893,226 and thereafter the general trend was downwards. The value of the notes in circulation was £44,103,226 at the end of July, 1928, and twelve months later it had fallen to £41,608,226—the lowest amount since 1915. At that time, however, its distribution between the banks and the public was dissimilar to that in recent years, as in 1915 the banks held nearly £29,000,000 and the public £11,000,000, and in July, 1929, the banks held less than £18,000,000 and the public £24,500,000.

The reduction in the notes held by the banks was a result of a change in the method of settling interbank clearings which was introduced in 1925 when the bank began to settle these transactions by means of cheques drawn on the Commonwealth Bank, which replaced notes of large denomination formerly used for the purpose. Later it became the policy of the Board of Directors to restrict the note circulation to immediate requirements and to provide additional currency when required to meet seasonal demands of trade and industry. Consequently the banks found it unnecessary to hold notes in excess of those required as till money and the surplus notes were deposited with the Commonwealth Bank and cancelled. Normally the seasonal demand for currency is at a minimum in July and August, increasing during the later months of the year owing to the requirements of the rural industries for shearing, harvesting, etc., and rising to a maximum in December under the additional influence of the Christmas holiday period. The latter influence is short-lived and a marked reduction occurs in January, then the demand declines gradually as the wool, wheat, and other products are sold.

During 1930 the movement in the issue did not follow the normal course. The Commonwealth Bank under the authority of legislation passed in December, 1929, was mobilizing the gold in Australia and in exchange for their reserves the banks received notes or the right to notes on demand. As a result the notes held by the banks increased from £17,188,000 in January to £22,342,000 in June, 1930, and the total issue expanded from £42,639,000 to £44,914,000. During this period the amount of gold held in the Note Issue Department increased as it was requisitioned from the banks, and declined when it was exported overseas. Nevertheless the value of the gold reserve held by the Department is considerably above the proportion of 25 per cent. required by law, the excess in June, 1930, being £8,702,621. In 1931 the issue was increased from £45,653,426 in January to £52,153,426 in August, and in January, 1932, was £52,303,426, the ratio of gold reserve being 20.08 per cent. and the value of notes in the hands of the public £25,721,616.

Money Orders and Postal Notes.

Exchange by means of money orders and postal notes is conducted by the Post Office. The maximum amount which may be transmitted by a single money order is £20, if the place of payment is within the Commonwealth; to places outside the Commonwealth the maximum is £10, £20, or £40, as

fixed by arrangement with the country concerned. The following table gives particulars of the money orders issued and paid in New South Wales during the last five years:—

Year ended 30th June.	Money Orders issued in New South Wales for payment in—				Money Orders issued elsewhere, paid in New South Wales.		
	New South Wales.	Other Australian States.	Other Countries.	Total.	In other Australian States.	Beyond the Commonwealth.	Total.
	£	£	£	£	£	£	£
1927 ...	6,237,444	876,821	438,340	7,532,605	905,601	274,447	1,180,048
1928 ...	6,461,496	892,412	498,209	7,852,117	919,796	285,860	1,205,656
1929 ...	6,554,752	878,158	492,359	7,925,269	869,859	294,892	1,164,751
1930 ...	6,791,331	871,723	492,530	8,155,584	831,657	308,171	1,139,828
1931 ...	6,412,620	686,001	394,686	7,493,307	747,655	287,833	1,035,488

The amount of the money orders issued in other Australian States for payment in New South Wales exceeds the amount sent from this State, but in the international money orders the balance is against New South Wales.

The maximum amount for which a single postal note is issued is £1, and particulars regarding them are shown below:—

Year ended 30th June.	New South Wales Postal Notes paid in—			Postal Notes of other Australian States paid in New South Wales.
	New South Wales.	Other Australian States.	Total.	
	£	£	£	£
1927 ...	1,617,272	651,980	2,269,252	193,301
1928 ...	1,747,175	712,123	2,459,298	207,031
1929 ...	1,804,395	728,291	2,532,686	212,860
1930 ...	1,828,878	724,906	2,553,784	192,140
1931 ...	1,710,193	566,987	2,277,180	182,298

The amount of money sent by postal notes to the other States is more than three times the aggregate value of the interstate postal notes paid in New South Wales.

The number of New South Wales postal notes paid in the State during the year ended June, 1931, was 4,389,826, and 1,772,333 were paid in other Australian States. The postal notes issued in other States and paid in New South Wales numbered 505,260.

BANKS.

Institutions which transact banking business in New South Wales are required under the Banks and Bank Holidays Act to furnish to the Chief Secretary in New South Wales quarterly statements of their assets and liabilities; also, when required, to furnish special statistical returns under the State Census Act of 1901. From these returns, and from the periodical balance-sheets issued by the banking companies, the information contained in the following tables has been prepared. Under the Commonwealth Bank Act the banks are required to supply weekly statements of their Australian business to the Commonwealth Bank.

The banking institutions which transact business in New South Wales were sixteen in number at 30th June, 1931, but only twelve had more than one office in the State. All of these transact practically the whole of their business in Australia, and all except three are controlled in Australia.

The location of the head offices and the distribution of the branches of the sixteen banks operating in New South Wales at 30th June, 1931, are shown in the following table:—

Banks Operating in New South Wales.	Number of Offices in—										Total.
	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Federal Capital.	New Zealand.	London.	Elsewhere.	
Head Office in N.S.W.—											
Commonwealth of Australia	24	17	31	5	10	4	1	...	2	1	95.
Rural	191	...	...	...	...	...	1	...	...	...	192
New South Wales	208	62	63	8	80	3	1	69	1	8	503.
Commercial of Sydney	223	122	33	5	...	...	1	...	1	...	385.
Australian Bank of Commerce	123	1	23	1	1	...	...	...	1	...	150.
Primary Producers	11	15	10	9	8	3	...	...	1	...	57
Head Office in Victoria—											
Commercial of Australia	99	192	91	87	39	43	1	47	1	...	600.
National of Australasia	46	149	41	47	48	2	...	...	2	...	335.
Head Office in Queensland—											
Queensland National	7	1	92	...	...	...	1	...	1	...	102.
Head Office in South Australia—											
Adelaide	1	1	1	11	2	...	...	...	1	...	117
Head Office in New Zealand—											
New Zealand	1	1	...	...	...	...	...	230	1	3	236.
Head Office in London—											
Australasia	59	72	19	9	16	11	1	50	2	...	239.
Union of Australia... ..	54	51	18	15	25	3	...	48	1	...	215.
English, Scottish, and Australian	109	170	58	48*	12	27	...	...	1	...	425.
Head Office in France—											
Comptoir National... ..	1	1	...	...	...	...	...	...	2	566	570.
Head Office in Japan—											
Yokohama Specie	1	...	...	...	...	...	...	...	1	39	41
Total	1,158	855	480	345	241	96	7	444	19	617	4,262.

* Includes one in Northern Territory.

The foregoing statement shows the total number of branches of trading banks in New South Wales as at 30th June, 1931, but not the total number of bank offices in other States, because banks which have no offices in New South Wales are not included.

The Commonwealth Bank of Australia is controlled by the Federal Government, and it functions partly as a trading bank and partly as a central bank, besides handling the business of the Federal Government, floating its local loans, and managing the note issue. The Rural Bank, a department of the Government Savings Bank of New South Wales, since amalgamated with the Commonwealth Savings Bank, receives deposits and operates cheque accounts for customers, besides making advances to and conducting ordinary banking business for persons engaged in rural industries.

The Primary Producers' Bank suspended operations as from 28th September, 1931, the Australian Bank of Commerce was amalgamated with the Bank of New South Wales as from 17th November, 1931, and the Rural Bank was combined with the Commonwealth Bank as from 15th December, 1931.

Capital and Profits of Trading Banks.

Particulars relating to the aggregate capital and profits of the Australasian banks operating in New South Wales, as listed in the foregoing statement, are shown in the following table. The particulars relate to the whole of the business of the banks in New South Wales and elsewhere. The French and Japanese banks are not included, as they have only one branch, each doing a small business in the State.

Year.	Number of Banks.	Capital paid up.	Reserve fund and balance of Profit and Loss.	Net profits.	Dividends.†	
					Total.	Percentage to paid-up capital.
		£	£	£	£	
1895	13	19,704,957	4,338,861	750,755	540,409	2·74
1900	13	16,807,069	4,742,026	1,257,403	689,969	4·10
1910-11	14	16,193,550	9,292,715	2,085,004	1,297,885	8·01
1920-21	13	27,040,770‡	17,057,163‡	4,389,157‡	2,735,923	10·11
1925-26	15	47,893,382	31,292,248	6,199,057	4,201,372	11·11
1926-27	14	50,256,627	34,088,603	6,701,708	4,410,981	11·06
1927-28	14	54,781,602	36,866,228	7,012,143	4,898,349	11·10
1928-29	14	55,934,738	39,145,399	7,052,829	5,080,468	11·28
1929-30	14	56,517,689	40,486,484	6,545,633	4,817,062	10·61
1930-31	14	54,871,079	37,173,471	5,148,551	2,548,920	5·82

‡ Private trading banks only.

‡ Excluding Commonwealth Bank.

The Commonwealth Bank and the Rural Bank are conducted under the auspices of the Federal and State Governments respectively, consequently they do not pay dividends. The amount of capital included in respect of the Commonwealth Bank (including the Rural Credits Department) in 1930 was £5,308,292, and for the Rural Bank £5,822,169, the latter amount being interest-bearing stock and debentures issued to the Government Savings Bank of New South Wales and the general public. For 1931 the corresponding amounts were £5,458,128 and £5,630,277 respectively.

The total paid-up capital has more than doubled since 1921, a sum of £27,830,309, having been added since that year. The increases include stock and debentures issued by the Rural Bank, and the capitalised reserve funds of the Commonwealth Bank. The reserve funds of the banks have been built up steadily in recent years, and have been augmented by £20,116,308 since 1921.

Liabilities within New South Wales.

The following statement shows the average liabilities of all the banks within New South Wales, exclusive of those to shareholders. From 1921 to 1928 the interest-bearing deposits include savings bank deposits in the Commonwealth Bank of Australia. In consequence of the separation of the

Savings Bank department from the general bank in 1928, the particulars relating to that department are not included in the figures for 1929 and subsequent years:—

June Quarter.	Bank Notes.	Deposits.				Other Liabilities.	Total Liabilities, within N.S.W. (exclusive of liabilities to shareholders).
		Bearing Interest.		Not Bearing Interest.	Total Deposits.		
		In Commonwealth Savings Bank.	Other.				
	£	£	£	£	£	£	£
1895*	1,223,864	...	20,406,822	10,222,437	30,629,259	183,929	32,037,052
1900*	1,447,641	...	20,009,081	12,224,510	32,233,591	288,499	33,969,731
1911	1,819,180	...	29,341,683	25,985,355	55,327,038	608,941	57,755,159
1921	71,654	6,308,826	48,322,625	53,044,965	107,676,416	3,661,412	111,409,482
1926	64,990	8,928,872	62,027,815	59,255,212	130,211,899	5,332,475	135,609,364
1927	64,681	9,890,238	66,177,679	56,468,226	132,536,143	5,124,571	137,725,395
1928	64,398	10,434,395	72,721,481	55,357,004	138,512,880	6,050,474	144,627,752
1929†	64,115	...	78,040,307	56,283,642	134,323,949	6,845,864	141,233,928
1930†	63,870	...	82,130,753	48,287,572	130,418,325	9,509,149	139,991,344
1931†	63,366	...	80,109,505	41,243,590	121,353,095	9,576,943	130,993,404

* December quarter.

† Commonwealth Savings Bank excluded.

The decline in the value of private bank notes in circulation is the result of their replacement by Australian notes. The remarkable growth of deposits between 1911 and 1921 was largely due to the war expenditure and increase in prices. Since 1921 the rise and fall of deposits have been determined mainly by fluctuations in the volume and value of production. The deposits include Government deposits which in June quarter, 1930, consisted of £4,136,454 at interest and £2,144,837 on current account, and in 1931, of £1,992,431 and £1,110,286, respectively.

Assets within New South Wales.

The following table shows the average assets within New South Wales of all banks operating in the State. In order to institute a comparison between the figures of the various banks, necessary adjustments have been made by excluding from the assets the balances due from branches and agencies outside New South Wales:—

June Quarter	Coin and Bullion.	Australian Notes.	Advances (including Government Securities), etc.	Landed Property.	Other Assets.	Total Assets within N.S.W.
	£	£	£	£	£	£
1895†	7,516,278	...	35,707,153	1,919,017	479,881	45,622,329
1900†	6,126,126	...	34,385,388	1,874,099	650,814	43,036,427
1911	14,524,960	1,770,751	42,456,515	1,871,811	1,282,787	61,906,824
1921	10,151,949	11,812,417	104,709,314	2,573,628	3,186,625	132,433,933
1926	14,659,610	16,114,987	123,950,187	3,112,343	3,924,044	161,761,171
1927	12,243,797	10,762,818*	135,439,590	3,025,719	4,813,069	166,284,993
1928	12,132,148	10,374,870*	140,690,523	2,987,197	4,756,964	170,941,702
1929†	11,984,120	11,046,465*	143,822,569	3,187,582	3,787,975	173,828,711
1930†	2,254,799	15,767,082*	151,023,652	3,472,418	5,513,234	178,031,185
1931†	908,255	15,922,237*	136,353,383	3,653,313	3,286,699	160,123,887

* Includes cash deposited with the Commonwealth Bank by other banks. † December Quarter.

† Commonwealth Savings Bank excluded.

The cash reserves of the banks consist of coin and bullion and Australian notes. The amount of notes increased very rapidly during the war period when the banks transferred a large amount of gold to the Federal Treasury and rendered assistance to the Government in other ways in connection with war loans, etc., receiving in exchange Australian notes, or the right to obtain notes on demand.

There was a decline in 1927 when, as a result of arrangements with the note issuing authority, the banks discontinued a former practice of holding large amounts of notes. There was an increase in 1930 when the banks transferred a considerable quantity of gold to the Commonwealth Bank for export.

By reason of these arrangements there has been a marked decline in the proportion of coin, bullion and Australian notes to liabilities and to deposits, but the significance of the ratios has been diminished, as the cash resources available to the banks in recent years have been greater than the amount of cash actually held. Moreover an extension of interstate banking operations affects the conclusions which might be drawn from the consideration of ratios for only one State.

Under the head of advances are included overdrafts and loans of all kinds, notes and bills discounted, sums invested in Government and municipal securities and all other debts due to the banks. The bulk of the advances are secured by the mortgage of real estate, or by the deposit of deeds over which the lending institutions acquire a lien, but the extent to which trade bills are discounted is not disclosed. The funds invested in Government and municipal securities in June quarter of the successive years from 1926 to 1928 amounted to £24,425,503, £26,959,511 and £34,235,388 respectively. The amounts in 1929, 1930 and 1931, being exclusive of the Commonwealth Savings Bank, were £24,248,272, £22,172,392, and £9,346,250.

The amounts advanced to Governments other than those for which securities were issued cannot be stated.

The following table shows the ratio of advances to deposits, and to total assets, at various dates from 1895, the figures being for the June quarter of each year from 1911. Owing to the incidence of shearing and harvesting operations, deposits are usually at a maximum and advances at a minimum in the first half of the year.

June Quarter.	Deposits. †	Advances, etc. (including Govern- ment Securities).	Ratio of Advances, etc.		Amount of Deposits per head of Popu- lation.‡
			To Deposits.	To Total Assets.	
	£	£	per cent.	per cent.	£ s. d.
1895*	30,620,258	35,707,153	116·6	78·3	24 5 4
1900*	32,233,591	34,385,388	101·2	79·9	23 12 5
1911	55,327,038	42,456,515	76·7	68·6	33 5 11
1921	107,676,416	104,709,314	97·2	79·1	51 3 8
1926	130,211,899	123,950,187	95·2	76·6	56 2 10
1927	132,536,143	135,439,590	102·2	81·4	56 17 5
1928	138,512,880	140,690,523	101·6	82·3	57 2 6
1929	134,323,949	143,822,569	107·1	82·7	54 10 3
1930	130,418,325	151,023,652	115·8	84·8	57 8 11
1931	121,353,095	136,353,383	112·4	85·2	48 7 6

* December quarter.

† Including deposits in Commonwealth Savings Bank in years 1921 to 1928.

The deposits shown above include Government deposits, which amounted to £16,375,313 in June quarter, 1926, to £9,507,823, £7,239,150, £7,454,818, £6,281,291, and £3,102,717 in the succeeding years. Between 1921 and 1928

they include also deposits in the Commonwealth Savings Bank incorporated in the accounts of the Commonwealth Bank of Australia, viz., £8,928,872 in 1926, £9,890,238 in 1927, and £10,434,395 in 1928.

Deposits and advances fluctuate from year to year with changes of seasonal and industrial conditions. Deposits increased during the post war period under the stimulus of bountiful production and high prices in favourable seasons. At the same time an active investment market and industrial and commercial expansion caused a heavy demand for advances.

During 1929-30 and 1930-31, however, deposits decreased and advances increased in an unusual degree owing to a steep decline in the values and the smaller realisations of the principal primary products, and consequent reactions upon business generally.

Banking Statistics in relation to general business activities.

A statement of the liabilities and assets of the trading banks would indicate more clearly their relation to general business conditions in New South Wales if the particulars of the Commonwealth Bank were excluded, on account of the special nature of its activities, *e.g.*, savings bank and Federal Government business, the control of the note issue and other functions of central banking. For this purpose the following statement has been prepared to show the liabilities, exclusive of shareholders' capital, and assets within New South Wales of the trading banks, other than the Commonwealth Bank, in June quarter of the seven years 1925 to 1931:—

Liabilities in New South Wales (excluding Commonwealth Bank).

June Quarter	Deposits Bearing Interest.		Deposits not Bearing Interest.		Total Deposits.	Bank Notes and Other Liabilities.	Total Liabilities in N.S.W.
	Government.	Other.	Government.	Other.			
	£	£	£	£	£	£	£
1925	9,388,218	46,400,631	679,550	45,866,777	102,335,176	2,382,071	104,717,247
1926	8,177,574	52,265,323	813,016	47,686,308	108,942,221	2,562,105	111,504,326
1927	4,703,083	59,070,042	600,303	48,325,414	112,698,842	2,890,296	115,589,138
1928	4,916,303	65,168,475	825,204	49,250,191	120,160,173	3,168,638	123,328,811
1929	5,081,115	70,168,028	770,249	49,799,056	125,818,448	3,245,881	129,064,329
1930	4,128,824	74,049,084	559,201	42,347,990	121,085,099	3,478,735	124,563,834
1931	1,980,849	72,848,629	609,099	36,143,496	111,582,073	2,064,047	113,646,120

* Excluding liabilities to shareholders.

Assets in New South Wales (excluding Commonwealth Bank).

June Quarter	Coin, Bullion, Australian Notes, and Cash with Commonwealth Bank.	Advances, etc.			Landed and House Property.	Other Assets.	Total Assets in N.S.W.
		Government and Municipal Securities.	Other Advances, etc.	Total Advances and Securities.			
	£	£	£	£	£	£	£
1925	23,645,947	7,537,352	86,598,289	94,135,641	2,714,704	2,264,317	122,760,609
1926	22,751,383	9,460,449	94,464,624	103,925,073	2,796,691	2,231,764	131,704,911
1927	20,683,686	8,820,165	101,808,395	110,628,560	2,730,849	3,589,396	137,632,491
1928	21,361,627	12,703,705	100,359,352	113,063,057	2,702,948	3,963,368	141,091,000
1929	21,776,941	12,005,592	113,797,228	125,802,820	2,944,229	3,722,326	154,246,316
1930	15,508,329	8,223,290	121,884,348	130,107,638	3,286,047	5,404,703	154,306,717
1931	15,316,138	6,433,884	112,443,671	118,877,555	3,438,339	3,200,403	140,832,435

The statement shows that there was a fairly steady expansion of non-governmental deposits between 1925 and 1929, followed by a marked decrease in the two years ended June, 1931. The increase occurred for the most part in the deposits at interest. In 1930 the increase in interest-bearing deposits continued, while there was a substantial decline in non interest-bearing deposits. In 1931 there was a slight decline in interest-bearing deposits and a substantial decline in non-interest-bearing deposits.

The increase in public securities in 1928 was a result of the underwriting by the banks of the Federal loan raised at the end of 1927. The distribution in November, 1927, of £8,000,000 to Australian wool-growers in respect of Bawra operations had the effect of increasing deposits and lessening the demand for advances. Between 1929 and 1931 the banks apparently disposed of some of their investments in public securities in order to meet the demand for other advances.

The following statement shows the ratio of advances, etc., to deposits and to total assets and of cash to deposits at call on the basis of the figures in the preceding table, that is excluding particulars of the Commonwealth Bank:—

June Quarter.					Ratio of Advances to Deposits.	Ratio of Advances to Total Assets.	Ratio of Cash, etc., to Deposits at Call.
					per cent.	per cent.	per cent.
1925	...	...	...	...	92.0	76.7	50.8
1926	...	...	...	...	95.4	78.9	46.9
1927	...	...	...	...	98.2	80.4	42.3
1928	...	...	...	...	94.1	80.1	42.7
1929	...	...	...	...	100.0	81.6	43.1
1930	...	...	...	...	107.5	84.3	36.1
1931	...	...	...	...	106.5	84.4	41.7

Size of Depositors' Accounts.

A classification of accounts according to the amount of deposit at or about 30th June, 1931, is shown below, the figures being exclusive of particulars of the Commonwealth Bank, which are not available.

Classification.	Current Accounts.		Fixed Deposit Accounts.		Current and Fixed Deposit Accounts.	
	Number.	Amount at Credit.	Number.	Amount at Credit.	Number.	Amount at Credit.
		£		£		£
£200 and under ...	207,194	7,806,654	57,809	6,154,400	265,003	13,961,054
£201- £500 ...	17,933	5,553,171	33,742	12,557,931	51,675	18,111,102
£501- £1,000 ...	6,491	4,466,717	18,816	14,926,412	25,307	19,393,129
£1,001- £2,000 ...	2,736	3,753,296	7,787	11,371,558	10,523	15,124,854
£2,001- £3,000 ...	803	1,954,443	1,975	5,061,645	2,778	7,016,088
£3,001- £4,000 ...	366	1,254,233	769	2,794,156	1,135	4,048,389
£4,001- £5,000 ...	184	826,911	522	2,494,857	706	3,321,768
£5,001-£10,000 ...	288	1,902,493	664	4,732,862	952	6,635,355
£10,001-£15,000 ...	80	938,957	125	1,580,381	205	2,519,338
£15,001-£20,000 ...	38	665,455	62	1,141,389	100	1,806,844
Over £20,000 ...	76	5,782,073	204	10,840,176	280	16,622,249
Total ...	236,189	34,904,403	122,475	73,655,767	358,664	108,560,170

Accounts with balances not exceeding £500 represented 88.3 per cent. of the total number of accounts and 29.6 per cent. of the deposits. Accounts of £2,000 and under represented 98.2 per cent. of the total accounts and 61.4 per cent. of the deposits, 38.6 per cent. of the aggregate amount of the deposits being held in 1.8 per cent. of the accounts. Small deposits were more numerous in current accounts, as persons wishing to place small sums of money at interest generally avail themselves of the facilities offered by the savings banks. The number of accounts does not represent the number of individual persons who have accounts with the banks.

The proportion of accounts and of deposits in each group as at 30th June, 1931, are shown below:—

Classification.	Proportion of Accounts in each Group.			Proportion of Deposits in each Group.		
	Current Accounts.	Fixed Deposit Accounts.	Total.	Current Accounts.	Fixed Deposit Accounts.	Total.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
£200 and under ...	87.7	47.2	73.9	22.4	8.4	12.9
£201— £500 ...	7.6	27.6	14.4	15.9	17.0	16.7
£501— £1,000 ...	2.7	15.4	7.0	12.8	20.3	17.9
£1,001— £2,000 ...	1.2	6.4	2.9	10.7	15.4	13.9
£2,001— £3,000 ...	0.3	1.6	0.8	5.6	6.9	6.5
£3,001— £4,000 ...	0.2	0.6	0.3	3.6	3.8	3.7
£4,001— £5,000 ...	0.1	0.4	0.2	2.4	3.4	3.0
£5,001—£10,000 ...	0.1	0.5	0.3	5.4	6.4	6.1
£10,001—£15,000 ...	0.1	0.3	0.2	2.7	2.1	2.3
£15,001—£20,000 ...				1.9	1.6	1.7
Over £20,000 ...				16.6	14.7	15.3
Total ...	100.0	100.0	100.0	100.0	100.0	100.0

Banks' Exchange Settlement.

The Banks' Exchange Settlement Office was established in Sydney on the 18th January, 1894.

Exchanges are effected daily between the metropolitan banks. The results of the operations are notified to the secretary of the Banks' Exchange Settlement, who notifies each institution daily of the amount of its balance. The Commonwealth Bank Act of 1924 provided that, after a date to be proclaimed, the exchange balances between the banks must be settled by cheques drawn on and paid into the Commonwealth Bank. Pending the issue of the proclamation, the banks inaugurated the system voluntarily as from 27th April, 1925, and for this purpose established

accounts with the Commonwealth Bank through which settlements are made in full daily. The daily clearances are still made through the Settlement Office, and since 27th April, 1925, the amount of the cheques drawn on the Commonwealth Bank is included in the exchanges.

The following table shows the growth in the volume of exchanges made through the Settlement Office. The figures represent the aggregate value of cheques drawn on one bank and paid by another in the metropolitan area and the net balances of transactions at country interbank clearings:—

Year.	Amount of Exchanges.	Year.	Amount of Exchanges.
	£		£
1896	117,718,862	1927	1,034,894,890
1901	167,676,707	1928	1,033,511,119
1911	304,488,435	1929	1,043,324,614
1921	709,734,554	1930	†872,387,876
1926	954,253,166	1931	†690,521,592

† Adjusted by excluding abnormal transactions on Government accounts.

These exchanges do not represent all the cheque operations of the banks, but may be considered an indication of variations in the volume of business activity from year to year, provided due allowance is made for normal growth and changes in price levels.

Index of Bank Clearings.

The principal statistical application of data as to bank clearings is in measuring variations in business activity over relatively short periods of time. In this connection due allowance has to be made for the facts that bank clearings (as indicated above) embrace only a proportion of the cheques drawn, that the amount of clearances is affected from time to time by banking amalgamations and by changes of banking procedure, and that seasonal influences cause fluctuations from month to month in the amount of recorded clearings. Again, from time to time, occurrences such as large conversion loans or heavy governmental transactions swell the amount of clearings to abnormal proportions. Careful inquiry and due allowances are necessary in respect of all these factors before an index of bank clearings can be compiled, and such an index is necessarily an approximation. The data relates substantially to inter-bank clearings in the city and suburbs.

Owing to the change in the method of recording clearing-house transactions, valid comparison is possible only subsequent to May, 1925. In compiling the following index the years 1926 to 1930 (inclusive) are taken as base, and the monthly index represents the ratio per cent. of the actual amount of clearings for each month to the average amount of clearings for that month in the base years. By this means seasonal fluctuations are virtually eliminated. In order to smooth out casual fluctuations the index

as published below for each month represents a three months' moving average. That is, the index number for each month is the average of the actual indexes for that month and the two preceding months.

INDEX OF BANK CLEARINGS.

Month.	Average monthly clearings, 1926-1930.	1926.	1927.	1928.	1929.	1930.	1931.
£ million.							
January ...	80.0	92.0	97.5	107.0	103.8	99.0	80.9
February ...	81.6	91.0	97.7	108.0	104.7	95.8	80.8
March ...	88.3	91.6	100.7	106.9	105.8	95.0	80.7
April ...	75.9	92.3	101.8	104.0	109.3	92.6	81.1
May ...	84.6	94.4	101.5	103.5	108.7	92.0	76.8
June ...	82.7	97.5	102.5	101.8	108.9	89.3	74.1
July ...	80.9	98.2	103.7	102.8	106.1	89.5	66.3
August ...	75.6	98.1	105.7	103.3	107.8	85.0	64.8
September ...	78.0	98.3	106.0	105.9	107.3	92.5	64.3
October ...	84.9	99.7	105.9	108.5	105.7	80.2	65.5
November ...	83.9	101.2	108.3	107.2	102.6	80.6	65.8
December ...	86.0	99.0	108.0	104.2	101.4	80.3	63.5

The averages for respective months in the period 1926-1930 are taken as base and represented by 100.0. It should be noted that no allowance has been made for normal growth nor for changes of price levels. It is possible that the net effect of these would not be large, because as the decrease in prices began in 1929 the respective movements would be in opposite directions. Over that period prices of non-rural products have shown very little variation, and although prices of such things as stocks, shares, and real estate declined very heavily in the latter part of 1929 and during 1930. The variations during 1931 were not substantial.

Interest and Discount Rates.

The rates of interest paid on fixed deposits and the discount rates are uniform throughout the trading bank system of the State, and variations are usually made simultaneously by all banks. The rates of interest on fixed deposits with trading banks in New South Wales and Victoria have varied as follow in recent years:—

Period of Deposit.	Fixed Deposit Rates.—Dates of Alteration.					
	July, 1920.	28 Jan., 1930.	26 June, 1931.	27 Nov., 1931.	8 Mar., 1932.	10 Mar. to 8 June, 1932. (Various Dates.)
Months.	Rate of Interest, per cent. per annum.					
3	4	4½	3½	3	2½	2½
6	4	4½	3½	3½	3	3
12	4½	5	4	3½	3½	3½
24	5	5½	4½	4	4	3½

The increase in rates on 28th January, 1930, synchronised with the onset of depression when banking deposits began to decrease, with the result that though deposits at current account declined very heavily, fixed deposits were substantially maintained. The reduction on 26th June, 1931, followed upon undertakings entered into at the Premiers' Conference in that month

and the subsequent reductions have been brought about by the continued relative accumulation of fixed deposits. It should be noted that the alterations in rates apply to deposits lodged or renewed after the date of change and not to deposits accepted at previous rates.

The dates of change and the altered rates of interest on overdrafts and discounts charged by the trading banks during the period covered by the foregoing table are as follow:—

Date.	Overdraft rates.	Rates of Discount on Bills at—	
		Three months.	Over three months.
	Per cent.	Per cent.	Per cent.
July, 1920	6 to 8	5 to 6	6 to 7
January, 1924	6 to 8	5½ to 7	5½ to 7
January, 1925	6 to 8	5½ to 7	6 to 7
August, 1927	6½ to 8	6 to 7	6½ to 7
March, 1930	6½ to 8½	6 to 7½	6½ to 7½
July, 1931	5 to 7	5 to 7	5 to 7

The rates are quoted as a range between the minimum and maximum rates charged.

Reduction of Interest Act, 1931.

As one of the financial measures arranged by the Premiers of the States and the Commonwealth for rehabilitating the economic position of Australia, the Interest Reduction Act, 1931, was passed by the Parliament of New South Wales to effect a reduction of 22½ per cent. in rates of interest on private debts. The Act applies to the Crown where the debtor is the Crown, but does not apply where the Crown is entitled to receive interest, and it is provided that it may not have the effect of reducing the rate of interest on mortgages or hire purchase agreements below 5 per cent., the rate on mortgages to the Government Savings Bank on advances for homes from funds made available by the Commonwealth Savings Bank below 5½ per cent., or the rate payable under any debenture below 4 per cent. Where the rate of interest has been already reduced under the Moratorium Act, which is described on a later page, the reduction is taken into account in applying the provisions of this Act, and provision was made whereby creditors might apply to a court within three months of the commencement of the Act for an order modifying or excluding the operation of the reduction. Every reduction of interest made by the Act continues in force during the continuance of the obligation affected.

Oversea Exchange.

The relationship of Australian currency to that of the rest of the world is determined substantially by its value in relation to British currency and by the value of British currency relative to the currencies of the respective nations of the world. These relationships in turn are determined largely by the balance of international payments and by purchasing power parity, although, within limits, policy and other factors may have a modifying effect.

On 29th April, 1925, the Commonwealth Government withdrew the embargo on the export of gold, thus restoring the gold standard of exchange concurrently with Great Britain, and the exchange rates quoted by the Australian banks were revised. The discount on English currency

was substantially reduced, and in August, 1926, it went to par. Early in April, 1927, it went to a small premium, and rose progressively and steadily until towards the end of 1929, when a steep and unprecedented rise commenced, culminating in a premium of £30 per cent. in the telegraphic transfer buying rate at the end of January, 1931. The movement was due to the influence of a sudden shrinkage in the value of export commodities, a cessation of oversea borrowing and restrictions on the export of gold.

Toward the end of 1930 a scheme was formulated for the pooling of the London funds of the Australian banks for the purpose of meeting national interest obligations, and it has been arranged by the trading banks and the Loan Council that the Governments are to have first call upon the funds. Formerly it had been the practice of the Australian Governments to use loan moneys to pay interest accruing abroad and to apply an equivalent amount of revenue to loan expenditure in Australia.

The variations in the rates of exchange, Australia on London since October, 1924, are shown below. The rates are the amount of discount or premium payable in Australian currency per £100 payable in British currency in London. Except where marked par or "p" to indicate premium, the rates are discounts.

Date,	Buying.				Selling.			
	T.T.	O.D.	30 days.	60 days.	T.T.	O.D.	30 days.	60 days.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1924—15 October ...	70 0	77 6	85 0	92 6	50 0	55 0	60 0	65 0
1925— 6 May ...	15 0	30 0	40 0	50 0	10 0	17 6	27 6	37 6
10 June ...	5 0	17 6	27 6	37 6	par.	7 6	15 0	22 6
4 December ...	5 0	20 0	30 0	40 0	par.	7 6	15 0	22 6
1926— 9 June ...	5 0	17 6	27 6	37 6	2 6p	5 0	12 6	20 0
12 July ...	2 6	15 0	25 0	35 0	5 0p	2 6	10 0	17 6
5 August ...	par.	12 6	22 6	32 6	7 6p	par.	7 6	15 0
1 October ...	5 0	17 6	27 6	37 6	2 6p	5 0	12 6	20 0
1927—20 April ...	2 6p	10 0	20 0	30 0	10 0p	2 6p	5 0	12 6
27 June ...	5 0p	7 6	17 6	27 6	12 6p	5 0p	2 6	10 0
25 July ...	7 6p	5 0	15 0	25 0	15 0p	7 6p	par.	7 6
7 Nov. ...	7 6p	7 6	17 6	27 6	15 0p	7 6p	par.	7 6
1928—19 March ...	10 0p	5 0	15 0	25 0	20 0p	12 6p	5 0p	2 6
4 October ...	10 0p	5 0	16 3	26 3	20 0p	12 6p	5 0p	2 6
1929—22 July ...	15 0p	par.	11 3	21 3	25 0p	17 6p	10 0p	2 6p
3 September...	20 0p	5 0p	6 3	16 3	30 0p	22 6p	15 0p	7 6p
10 October ...	25 0p	10 0p	2 6	13 9	35 0p	26 3p	17 6p	8 9p
18 December...	32 6p	17 6p	5 0p	6 3	42 6p	33 9p	25 0p	16 3p
1930—28 January ...	40 0p	25 0p	12 6p	1 3p	52 6p	43 9p	35 0p	26 3p
17 February ...	50 0p	35 0p	22 6p	11 3p	62 6p	53 9p	45 0p	36 3p
10 March ...	70 0p	55 0p	42 6p	31 3p	82 6p	73 9p	65 0p	56 3p
24 March ...	122 6p	107 6p	95 0p	83 9p	130 0p	121 3p	112 6p	103 9p
9 October ...	170 0p	157 6p	148 9p	141 3p	180 0p	175 0p	165 0p	165 0p
1931—15 January ...	302 6p	290 0p	281 3p	273 9p	310 0p	305 0p	300 0p	295 0p
13 " ...	360 0p	347 6p	338 9p	331 3p	367 6p	362 6p	357 6p	352 6p
17 " ...	500 0p	487 6p	478 9p	471 3p	510 0p	505 0p	500 0p	495 0p
28 " ...	600 0p	587 6p	578 9p	571 3p	610 0p	605 0p	600 0p	595 0p
3 December...	503 0p	487 6p	475 0p	463 9p	510 0p	505 0p	500 0p	495 0p

The foregoing rates are now usually quoted on the basis of the price in Australia (Australian currency) of £100 London (British currency). Thus, as from 3rd December, 1931, the banks were prepared to pay £125 Australian currency for a telegraphic transfer of the right to £100 in London.

(British currency), and to sell such a right for £125 10s. Australian currency. The margin between the buying and selling rates (10s. per £100) represents the bankers' commission. The margins for other usances include allowances for interest. Quotations are available also in respect of usances of three, fifteen, and ninety days.

The margin between the buying and selling rates for telegraphic transfers was increased from 5s. per cent. to 7s. 6d. in June, 1926, to 10s. per cent. in March, 1928; and to 12s. 6d. in January, 1930, and reduced to 7s. 6d. on 24th March, 1930, and increased to 10s. in October, 1930, where it has remained except between 5th and 17th January, 1931, when it was 7s. 6d.

THE COMMONWEALTH BANK OF AUSTRALIA.

The Commonwealth Bank of Australia was established under an Act passed by the Federal Government in 1911, and since amended from time to time. The bank commenced operations on 15th July, 1912, by opening a savings bank department. Ordinary banking business was commenced on 20th January, 1913. The head office is in Sydney, and branches have been established in the principal cities and towns of Australia, in London, and in the territory of New Guinea.

The Commonwealth Government is responsible for the payment of all moneys due by the bank, and debts due to the bank by other banks have the same priority as debts due to the Commonwealth. The affairs of the bank are subject to inspection and audit by the Auditor-General of the Commonwealth. The bank is authorised to conduct general banking business, to exercise the functions of an ordinary bank of issue, and, with the approval of the Treasurer of the Commonwealth, it may take over the business of banking corporations. Since 1920 the control of the Australian note issue has been one of the functions of a separate department of the Commonwealth Bank. The Savings Bank Department was separated from the bank in June, 1928, and it is managed by a Commission of three persons, one being a director of the Commonwealth Bank. Further details regarding the Commonwealth Savings Bank thus established are stated on page 713.

Central Reserve Bank.

An amending Act, passed in 1924, made provision for extending the scope of the bank's operations with the object of facilitating its transition into a central reserve bank. In May, 1930, a further bill was introduced in the Parliament of the Commonwealth to make material alteration in the constitution of the bank with a view to transforming it into a central reserve bank. The Senate submitted this bill to a Select Committee for report; and it was not passed into law.

Following on consultation between the Directors of the Commonwealth Bank and the Comptroller of the Bank of England in the early part of 1927 discussions were initiated between the Commonwealth Bank and trading banks on the establishment of a central reserve system. Little practical result ensued until 1930, when the Commonwealth Bank reported that the trading banks were, to a much larger extent, treating the Commonwealth Bank as a central reserve bank and had substantially increased their deposits with it, partly as a result of the acquisition of gold by the Commonwealth Bank from the trading banks to meet the exchange crisis. In March, 1931, the Directors of the bank reported that it was in reality functioning as a central bank.

Control.

The Commonwealth Bank is controlled by a Board of Directors, composed of the Governor of the Bank, the Secretary of the Commonwealth Treasury, and six other directors with experience in agriculture, commerce, finance, or industry. The last-mentioned are appointed by the Governor-General for terms ranging, in the case of the first appointments, from two to seven years, so that one will retire in each year, but will be eligible for reappointment. Subsequent appointments will be for seven years. The Governor of the Bank is its chief executive officer and is appointed for a term of seven years, with eligibility for reappointment. A Board of Advice in London, consisting of three members selected by the Board of Directors, exercises such powers as the latter delegates to it. A director or officer of any other bank may not be appointed as a director of the bank nor as a member of the London Board.

The Board of Directors may be authorised by proclamation to fix and publish the rate at which it will discount and rediscount bills of exchange. The settlement of balances between the banks trading in Australia is conducted by means of cheques drawn on the Commonwealth Bank, and for this purpose the other banks keep funds with the Commonwealth Bank.

Capital and Profits.

The capital of the Bank is limited to £20,000,000, consisting of £4,000,000 from accumulated profits, a sum not exceeding £6,000,000 which the Federal Treasurer is authorised to borrow, and such sum as may be raised by the sale and issue of debentures up to £10,000,000. The Bank will pay the interest on any loan raised for its purposes. It has not yet exercised its authority to issue debentures.

Of the net profits of the Bank—except those of the Note Issue and the Rural Credits Departments—half are payable to the Bank reserve fund and half to the National Debt Sinking Fund. Three-fourths of the annual profits from the Note Issue Department are paid to the Commonwealth Treasury and one-fourth to the capital account of the Rural Credits Department, the limit of these latter payments being £2,000,000. The aggregate profits to 30th June, 1931, excluding the Note Issue Department, amounted to £9,290,683, which have been distributed as follow:—General Bank, capital account, £4,000,000, and reserve fund, £1,185,718; Rural Credits Department reserve fund, £132,945, and development fund, £132,945; Savings Bank reserve fund, £1,528,672; and National Debt sinking fund, £2,310,403. Up to 30th June, 1931, an aggregate amount of £1,458,126 had been paid to the Rural Credits Department capital account from the profits of the Note Issue Department.

Rural Credits Department.

The Rural Credits Department was established towards the end of 1925 to assist the marketing of products of the rural industries. This department may make advances upon the security of primary produce, viz., wool, grain, butter, cheese, fruits, hops, cotton, sugar, and any other produce as may be prescribed. The advance may not be for a period of more than one year. The advances may be made upon the security of primary produce to the general banking section of the Commonwealth Bank, to other banks, to co-operative associations, and to such other bodies as may be specified by proclamation. In lieu of making advances the department may discount bills secured upon primary produce on behalf of any of these institutions.

Capital for the Rural Credits Department is provided from the profits of the note issue, as already indicated, and additional capital may be provided by loans from the Federal Government up to a limit of £3,000,000. The Commonwealth Bank may raise further funds for the department by issuing debentures up to an amount not exceeding the greater of the following, viz., (a) advances on primary produce outstanding at the date of the issue of the debentures; or (b) four times the sum of (i) outstanding loans to the department from the Federal Government, (ii) moneys received from the profits of the note issue, (iii) the credit balance of the Rural Credits Department Reserve Fund. The dates for the redemption of the debentures are to coincide, as nearly as practicable, with the dates for the repayment of the advances made. In addition, the general banking department of the Commonwealth Bank may make advances to the Rural Credits Department of such amounts and subject to such terms and conditions as the Board of Directors determines.

The assets of the Rural Credits Department are available, firstly, for meeting liabilities other than loans from the Federal Government and interest thereon; and secondly, for repaying such loans with interest.

One half of the net profits are payable to the reserve fund of the Department and one half to a fund to be used, at the discretion of the Board of Directors, for the promotion of primary production.

The following statement shows the liabilities and assets of the Commonwealth Bank (including the Rural Credits Department) in New South Wales in the June quarter of each of the years 1928 to 1931. The particulars for the years 1929 to 1931 do not include the Savings Bank:—

Particulars.	June Quarter.			
	1928.	1929.	1930.	1931.
	£	£	£	£
Liabilities—				
Deposits at interest—				
Savings Department ...	10,434,395	...	...	...
Government ...	12,728	4,642	7,630	11,582
Ordinary ...	2,623,975	2,786,522	3,945,215	5,268,445
Deposits not bearing interest—				
Government ...	1,484,915	1,598,812	1,585,636	501,187
Ordinary ...	3,796,694	4,115,525	3,794,745	3,989,808
Total deposits ...	18,352,707	8,505,501	9,333,226	9,771,022
Other liabilities ...	2,946,234	3,664,098	6,094,284	7,576,262
Total Liabilities in New South Wales ...	21,298,941	12,169,599	15,427,510	17,347,284
Assets—				
Coin and Bullion ...	147,349	186,563	339,391	186,011
Australian Notes ...	998,042	1,067,081	2,174,161	1,328,343
Advances, etc. ...	6,095,783	5,777,069	6,966,912	7,065,382
Government Securities†	21,531,683	12,242,680	13,949,102	10,410,446†
Landed Property ...	284,249	243,353	186,371	214,974
Other Assets ...	793,596	65,649	108,531	86,296
Total Assets in New South Wales ...	29,850,702	19,582,395	23,724,468	19,291,452

* Excluding particulars of Commonwealth Savings Bank.

† Includes £7,498,080 advances of a temporary nature to Governments and Local Government bodies.

‡ Including municipal.

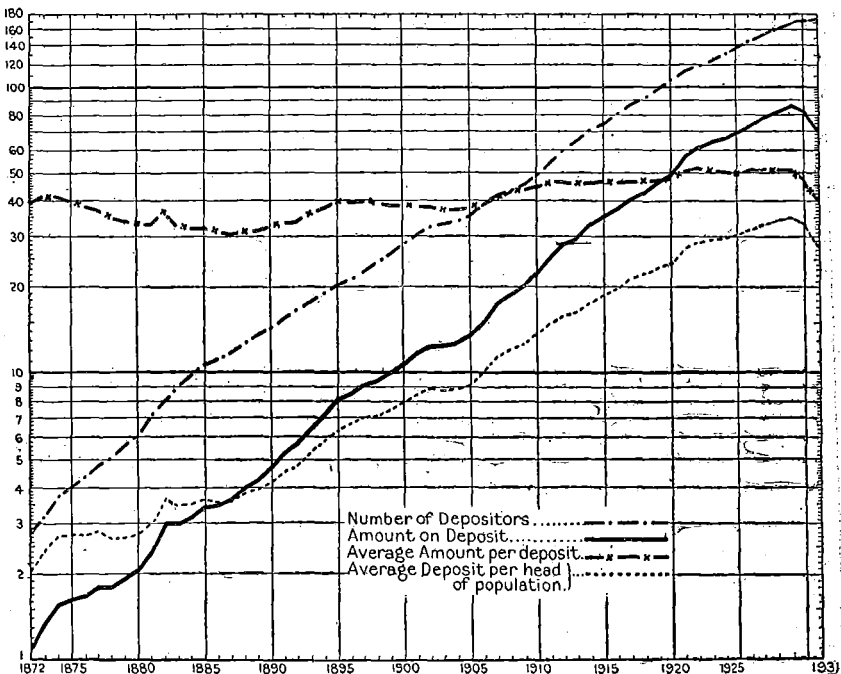
The liabilities classified as "other" in the table consist for the most part of amounts deposited with the Commonwealth Bank by the trading banks.

The total liabilities and assets of the bank in New South Wales and elsewhere at 30th June, 1913, amounted to £5,055,382. At 30th June, 1931, the liabilities and assets of the general bank and rural credits departments amounted to £68,031,360, those of the Note Issue Department to £50,706,232 and those of the Savings Bank to £51,601,897.

SAVINGS BANKS.

Savings bank business in New South Wales has been conducted by the Government Savings Bank of New South Wales, and by the Commonwealth Savings Bank, and extensive use is made of the facilities offered for the accumulation of small sums on which interest is paid. These banks are now amalgamated.

SAVINGS BANKS, 1872 to 1931. (Ratio Graph.)



The numbers at the side of the graph represent 10,000 depositors, £1,000,000 of deposits, £1 of average amount per depositor, and £1 of average deposit per head of population. The diagram is a ratio graph. The vertical scale is logarithmic, and each curve rises and falls according to the rate of increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

The following statement shows the number of accounts and the amount of deposits in the State and Commonwealth savings banks in New South

Wales at the end of various years. The figures for 1910 and earlier years do not include School Savings Bank accounts of which particulars are shown on page 711:—

At 30th June.	Accounts.	Savings Bank Deposits.				
		State Bank. †	Common- wealth Bank.	Total. †	Per Account.	Per head of Population.
	No.	£	£	£	£ s. d.	£ s. d.
1880*	61,531	2,075,856	...	2,075,856	33 14 9	2 17 0
1890*	143,826	4,730,469	...	4,730,469	32 17 10	4 5 10
1900*	282,643	10,901,382	...	10,901,382	38 11 5	8 2 4
1910*	478,006	20,823,764	...	20,823,764	43 11 3	12 18 0
1921	1,126,157	50,820,334	6,592,304	57,412,638	50 19 4	27 5 10
1926	1,446,432	64,371,265	9,436,386	73,807,651	50 19 8	31 16 8
1927	1,528,287	67,858,089	10,493,644	78,351,733	51 4 0	32 0 7
1928	1,599,007	70,652,735	10,974,932	81,627,667	50 19 4	33 13 4
1929	1,685,181	73,895,207	11,832,307	85,727,514	50 15 5	34 15 10
1930	1,729,553	70,566,232	11,899,198	82,465,430	47 11 4	33 3 3
1931	1,744,488	55,317,832	14,492,937	69,810,769	39 18 3	27 16 7

* As at 31st December. † Includes amount of deposits in Schools Savings Banks in 1921 and later years.

Included in the number of accounts in the State Savings Bank shown above are a large number of small inoperative accounts. In some measure the inclusion of these destroys the comparative value of "number of accounts" and "amount deposited per account." The number of operative accounts was 955,931 as at 30th June, 1921, with an average amount of £60 0s. 2d. per account; 1,215,917 with an average of £60 12s. 3d. as at 30th June, 1926, and 1,403,632 with an average of £49 10s. 8d. as at 30th June, 1931.

In 1928-29 a sum of £3,043,110 was added as interest to depositors' accounts by the banks, and the net increase in the amount at depositors' credit during the year was £4,099,847 inclusive of added interest. In 1929-30 added interest amounted to £3,117,342 and depositors' credits decreased by £3,262,084. In 1930-31 the corresponding figures were:—Interest added, £2,792,014; decrease in depositors' credits, £12,654,661.

The number of accounts does not represent individual depositors, as considerable duplication is caused by persons having deposits in both banks. Many of the accounts are joint accounts and accounts of societies, trusts, etc., whose members have personal accounts also. It is apparent, however, that a large proportion of the people practise thrift through the medium of the savings banks.

THE GOVERNMENT SAVINGS BANK OF NEW SOUTH WALES.

An institution named the Savings Bank of New South Wales was established in 1832 under the control of trustees nominated by the Government. This bank continued in operation until absorbed by the Government Savings Bank of New South Wales in 1914.

The Government Savings Bank of New South Wales was established in 1871 as a post office savings bank under the control of the Postmaster-General of New South Wales. In 1901, when the Postal department was transferred to the Commonwealth, the control of the bank was vested in the State Treasurer, and in 1907 it was placed under the control of three commissioners. By agreement with the Commonwealth the agencies of the bank were retained at post offices until the establishment of the Commonwealth Savings Bank in 1912. In that year separate branches and agencies were opened by the Government Savings Bank throughout New South Wales.

The scope of the bank was enlarged by the addition of an Advances to Settlers Department in 1907, to take over the functions of the Advances to Settlers Board. This department was merged into the Rural Bank in 1921. In 1914 the Advances for Homes Department was created, and in 1925 the administration of the outstanding loans of the Government Housing Department was transferred to the Bank. In 1910 a Closer Settlement Promotion Department was opened in the bank to finance intending settlers out of the proceeds of debentures issued under Government guarantee by the bank. These activities were amalgamated with other closer settlement operations under the control of the Lands Department on 1st July, 1919.

The bank suspended payment as from 23rd April, 1931. It was reconstructed and opened for the transaction of new business in September, 1931, and, following on negotiations, was amalgamated with the Commonwealth Savings Bank as from 15th December, 1931. Payment up to 10 per cent. of depositors' balances was resumed, and in January, 1932, all restrictions were removed from depositors' rights to operate on their accounts.

Savings Bank Department.

In the Savings Bank Department deposits of one shilling upwards were received, and interest was paid on the minimum monthly balances. From 1st July, 1920, to 30th September, 1928, interest was paid at the rate of 4 per cent. per annum on depositors' balances up to £500, and 3½ per cent. on any excess up to £1,000 on personal accounts. The rates of interest paid on accounts of institutions not carried on for profit were 4 per cent. up to £1,000 and 3½ per cent. beyond that limit. Subsequent to 1st October, 1928, the rates were 4 per cent. up to £1,000 on personal and trust accounts, and on municipal and shire accounts, other than sinking funds; and 4 per cent. on total balances in respect of the sinking funds of municipalities and shires, and on accounts of institutions not conducted for profit. From 1st July, 1931, to 31st January, 1932, interest accrued on moneys deposited before the bank suspended payment at the rate of 3 per cent. On new business between 1st September to 31st December, 1931, the rate on personal accounts was 3½ per cent. up to £500 and 3 per cent. from £500 to £1,000; and a rate of 3½ per cent. was paid on the total deposits by institutions, etc.

The Commissioners were required by law to hold 20 per cent. of the deposits at call or short notice.

The balance-sheet at 30th June, 1930 and 1931, showing how the funds were held, is as follows:—

<i>Liabilities.</i>	30th June.		<i>Assets.</i>	30th June.	
	1930.	1931.		1930.	1931.
	£	£		£	£
Depositors' Balances ...	70,633,344	55,367,112	Cash ...	1,751,584	390,418
Guarantee Funds, etc. ...	75,687	78,092	Deposits at Call ...	4,160,752	7,275,086
Mortgage and Investments ...			Fixed Deposits—Bank ...	5,463,985	
Depreciation Account ...	62,360	62,360	Treasury ...	5,582,501	
Special Advance by Commonwealth Bank ...		1,111,708	Government Securities—		
Reserve Fund... ..	1,500,000	1,500,000	State ...	29,215,170	25,378,141
Profit and Loss Account ...	20,418	284,801	Commonwealth ...	3,808,849	2,702,660
Other Liabilities ...	578,973	568,497	Municipal Council Loans ...	3,017,159	2,874,324
			Rural Bank Stock ...	4,423,323	4,226,883
			Securities held by Commonwealth Bank ...		1,106,623
			Advances for Homes Stock ...	10,819,780	10,538,559
			Other Loans ...	2,833,764	2,694,596
			Bank Premises ...	1,750,000	1,740,000
			Other Assets ...	43,915	45,080
Total ...	£ 72,870,782	58,972,370	Total ...	£ 72,870,782	58,972,370

The gross earnings of the Savings Bank Department for the year ended 30th June, 1930, were £3,580,854, of which £2,679,949 were credited as interest to depositors' accounts, and £446,691 were absorbed as expenses of management. The net profits for the year were £454,214. The corresponding figures for 1930-31 were:—Gross earnings, £3,099,506; interest on depositors' accounts, £2,352,066; expenses of management, £436,464; net profits, £310,976.

At 30th June, 1931, there were 192 branches and 643 agencies of the bank. The classification of depositors' balances in 1930 and 1931 was:—

Deposit Series.	30th June, 1930.		30th June, 1931.	
	Accounts.	Amount of Deposits.	Accounts.	Amount of Deposits.
	No.	£	No.	£
Under £1* ...	304,692	57,528	327,368	61,462
£1 to £20 ...	625,302	2,585,193	628,835	2,401,668
£21 to £100 ...	215,368	10,358,925	183,281	8,782,400
£101 to £500 ...	152,551	33,827,050	122,431	26,895,193
£501 to £750 ...	20,063	11,954,195	14,592	8,756,851
£751 to £1,000 ...	6,895	5,986,936	5,176	4,473,418
£1,001 and over ...	4,930	5,608,207	3,332	3,775,895
Special Thrift Accounts ...	15,762	58,274	13,488	35,848
Total ...	1,345,563	70,436,308	1,298,503	55,182,735
School Savings Banks ...	138,678	197,035	142,746	184,377

*Inoperative and non-interest bearing.

The system of school savings banks, established in connection with State schools in 1887, was transferred to the control of the Government Savings Bank of New South Wales in 1925. The number of accounts and the amount at credit at the end of the last seven years are shown below:—

At 30th June.	Depositors.	Deposits.
	No.	£
1925	46,158	35,307
1926	62,449	64,538
1927	78,205	100,987
1928	92,772	133,787
1929	114,533	169,380
1930	138,678	197,035
1931	142,746	184,377

Rural Bank Department.

An account of the origin and operations of the Rural Bank is given in the chapter "Rural Settlement," of this Year Book.

The Rural Bank receives fixed deposits as well as deposits at current account operated on by cheque and subject to the usual trading bank conditions. Advances are made to persons engaged in primary industries by way of overdraft, loans repayable by instalment, and fixed loans for limited terms.

The balance-sheet of the Rural Bank at 30th June, 1931, was:—

<i>Liabilities.</i>	£	<i>Assets.</i>	£
Rural Bank Department and Treasury Stock and Debentures	5,630,277	Cash	114,911
Deposits and Other Liabilities to Customers	11,295,245	Investments—	
Reserve Fund	559,001	Government Securities ...	635,164
Other	40,890	Fixed Deposits	1,584,742
		Loans and Advances to Customers	14,775,499
		Other	415,097
Total	£17,525,413	Total	£17,525,413

The items shown above, with the exception of inscribed stock issued to the Savings Bank and Treasury Stock, are included in the particulars of trading banks published on page 694 *et seq.*

The net profit for the year was £61,437, which was transferred to the reserve fund.

Advances for Homes Department.

An account of the operations of the Advances for Homes Department appears in the chapter "Social Condition," of this Year Book.

The Department does not receive deposits, and its funds have been obtained mainly by loan from the Savings Bank Department and by the issue of a special Treasury loan. In the latter part of the year 1928 arrangements were made to authorise the Commissioners to obtain advances from the Housing Fund constituted by the Commonwealth Government, and the sum of £1,000,000 was made available for the first year's operations.

The balance-sheet of the Advances for Homes Department at 30th June, 1931, was as follows:—

Liabilities.		Assets.	
	£		£
Advances for Homes Department Stock and Debentures... ..	12,596,883	Loans for Homes	12,811,018
Liability to Borrowers, etc. ...	408,398	Invested in Government Securities	576,838
Reserve Fund	587,588	Cash at Bankers	195,784
		Due by other Departments ..	9,229
Total	£ 13,592,869	Total	£ 13,592,869

The net balance of profit in 1930-31 was £19,255, which was transferred to the reserve fund.

The Government Housing Department of the bank was created in terms of the Housing (Amendment) Act of 1924, which provided for the abolition of the Housing Board, whose operations were described in earlier issues of the Year Book, and for the transfer to the Commissioners of the Savings Bank of properties subject to agreement for sale and securities for advances under the Housing Act. At 30th June, 1931, the number of loans current was 849 and the amount of principal outstanding £497,888.

The following statement shows the growth of loans current in each department of the bank in recent years, excluding from account Government and Municipal securities held:—

30th June.	Savings Bank	Rural Bank.		Advances for Homes.	Government Housing Department.	Total Loans administered by Government Savings Bank.
		Long Term & Fixed Loan	Overdrafts.			
	£	£	£	£	£	£
1925	2,179,456	5,721,678	2,830,915	7,145,187	262,916	18,140,152
1927	2,364,905	5,783,776	4,746,220	9,244,999	587,518	22,727,418
1928	2,724,077	5,759,410	6,098,405	10,431,837	562,470	25,576,199
1929	2,920,973	5,951,428	6,938,041	11,424,862	536,242	27,771,546
1930	2,833,764	6,272,685	7,988,275	12,937,522	515,842	30,548,088
1931	2,694,596	6,166,523	8,254,744	12,661,842	497,888	30,275,593

* Excluding accrued interest.

COMMONWEALTH SAVINGS BANK.

The Savings Bank Department of the Commonwealth Bank was opened on 15th July, 1912, and its business has been transacted at all branches of the Commonwealth Bank as well as at numerous post offices and agencies. As from 15th December, 1931, the business of the bank was transacted also in former branches and agencies of the Government Savings Bank, which, as from that date, became offices of the Commonwealth Savings Bank. Legislation was passed in 1927 and proclaimed on 9th June, 1928, for the purpose of establishing this department of the Commonwealth Bank as a separate institution—the Commonwealth Savings Bank of Australia. It is controlled by a commission consisting of a chief commissioner and two other persons, and its funds are available for long-term investments, *e.g.*, loans on the security of land, advances for homes or for warehouses and stores for primary products, in debentures of the Rural Credits Department of the Commonwealth Bank and on fixed deposits with the Commonwealth Bank. One member of the Savings Bank Commission is a director of the Commonwealth Bank nominated by the Board of Directors. This facilitates co-operation between the two institutions and enables the Commission to obtain the advice of the Board of Directors regarding the investment of the Savings Bank funds.

Deposits are received in sums of one shilling or more, and interest has been allowed on the minimum monthly balances at the rate of $3\frac{1}{2}$ per cent. per annum up to £1,000 and at 3 per cent. for an additional £300 on personal accounts, and at the rate of $3\frac{1}{2}$ per cent. per annum on the whole credit balance of bodies such as friendly societies not operating for profit. On 1st October, 1928, the rate on personal accounts up to £500, and on the deposits of friendly societies, etc., was raised to 4 per cent. The rates were reduced on 1st July, 1931, to the following, *viz.*, personal accounts 3 per cent. up to £500, $2\frac{1}{2}$ per cent. from £500 to £1,000, and 2 per cent. from £1,000 to £1,800; and the rate on deposits by friendly societies, etc., to 3 per cent. As from 1st July, 1932, the rates on personal accounts up to £1,000 were reduced by $\frac{1}{4}$ per cent.

The growth of deposits since 1921 is shown in the table on a previous page.

The total liabilities and assets of the Commonwealth Savings Bank at 30th June, 1931, amounted to £51,601,897. The liabilities included reserve fund £1,528,672, and depositors' balances £49,817,731. The assets consisted of Government and other public securities £45,495,916; coin and cash balances and Australian notes, £3,989,167; other, £2,116,814.

DEPOSITS IN ALL BANKS IN NEW SOUTH WALES.

In June, 1931, the net amount of deposits at credit of private and public accounts in the savings and the trading banks in New South Wales was £188,223,177, or £75 0s. 7d. per head of population after deducting from the combined totals a sum of £2,940,687 deposited with trading banks by the savings banks. A similar deduction amounted to £10,022,438 in June, 1930, when the net amount of deposits was £202,861,317, or £81 11s. 7d. per

head. The figures for the savings banks in the following table represent the deposits on 30th June in each year, and those for the trading banks are the averages of the June quarter:—

June.	Net Deposits bearing Interest.			Net Deposits not bearing Interest.*	All Deposits.*	
	Savings Banks.	Trading Banks.*	Total.		Total.	Per head of Population.
	£	£	£	£	£	£ s. d.
1921	66,174,117	43,748,948	109,923,065	52,514,431†	162,437,496†	72 18 2
1925	69,149,433	48,628,465	117,777,898	54,466,766†	172,244,664†	75 15 6
1926	73,807,651	52,148,006	125,955,657	58,135,332	184,090,989	79 8 1
1927	78,351,733	55,888,031	134,239,764	55,064,313	189,304,077	79 16 0
1928	81,627,667	63,483,867	145,111,534	54,018,901	199,130,435	82 2 7
1929	85,727,514	66,919,541	152,647,055	55,099,134	207,746,189	84 6 3
1930	82,465,430	73,234,666	155,700,096	47,161,221	202,861,317	81 11 7
1931	69,810,769	77,531,529	147,342,298	40,880,379	188,223,177	75 0 7

* Excluding deposits lodged by Savings Banks in Trading Banks.

† Approximate.

Included in the above figures are deposits by children in the School Savings Bank which amounted to £197,035 at 30th June, 1930, and to £184,377 at 30th June, 1931.

The amounts of interest-bearing deposits in the trading banks shown above differ from the figures in preceding tables, which include the savings deposits in the Commonwealth Bank up to 1928 inclusive and the deposits of the savings banks in the trading banks.

INCORPORATED COMPANIES.

The legislation relating to incorporated companies in New South Wales is contained principally in the Companies Act, 1899, the amending Acts of 1900, 1906, and 1907, the Companies (Death Duties) Act, 1901, and the Companies (Registration of Securities) Act, 1918, providing for the registration of debentures issued by companies. These enactments follow the general provisions of Imperial Acts relating to companies, with variations embodying the results of local experience.

The formation of a company, association, or partnership of more than ten persons in a banking business, or of twenty in any other business trading for profit, is prohibited, unless it is registered under the Companies Act, or incorporated under some other enactment by royal charter, or by letters patent, or as a no-liability company.

The liability of members of a company may be limited by shares or by guarantee, or it may be unlimited. Under certain conditions associations formed for the purpose of promoting commerce, art, science, religion, charity, or other useful object, may be registered with limited liability. Special provision is made to regulate the formation of no-liability mining companies, and the liability of members for calls and for contributions to meet debts and liabilities in the event of winding-up ceases upon registration, shares upon which calls are unpaid being forfeited.

Local limited companies (*i.e.*, those whose original registration is in New South Wales) are required to file an annual summary statement of their capital, and a list of shareholders with the amount of their shares, besides an original copy of their memorandum and articles of association and amendments thereto and other particulars as to the location of their registered office. In addition to the foregoing particulars no-liability mining companies and foreign companies, *i.e.*, those whose original registration is outside New South Wales, are required to file an annual balance-sheet and a list of debentures or other securities secured on the property of the company.

Particulars relating to the registration of new companies in New South Wales and of increases of capital are shown below, the figures for the quinquennial periods representing the annual average:—

Period.	Limited Companies.				No-Liability Mining Companies.			
	New Companies.		Increases of Capital.		New Companies.		Increases of Capital.	
	No.	Nominal Capital.	No.	Nominal Amount.	No.	Nominal Capital	No.	Nominal Amount.
		£		£		£		£
*1901-05 ...	113	3,104,766	13	483,930	25	301,766	5	24,175
*1906-10 ...	231	5,184,658	23	1,010,710	45	430,112	7	29,634
*1911-15 ...	383	10,263,455	58	3,468,139	20	308,017	3	31,395
*1916-20 ...	321	17,465,293	93	3,624,272	14	284,271	1	11,400
*1921-25 ...	528	16,940,799	94	5,585,987	16	273,350	3	16,690
*1926-30 ...	709	33,316,333	96	9,164,442	21	677,630	1	3,200
1926 ..	695	42,731,310	119	15,669,740	27	490,150	1	5,000
1927 ...	774	29,413,417	116	9,520,500	9	485,500	...	...
1928 ...	770	44,983,350	97	8,809,150	28	749,600	...	...
1929 ...	737	36,063,240	90	7,038,800	33	1,599,650	3	9,000
1930 ...	571	13,389,850	59	4,784,020	10	63,250	1	2,000
1931 ...	447†	10,678,450†	29	1,208,700	11	93,800	1	50,000

* Average per annum.

† Excluding two ephemeral companies capital, £112,000,000.

The total number of limited companies which appeared to be in active existence in New South Wales at the end of 1925 was 5,809, including 4,967 local and 842 "foreign," as defined above. This number had increased by the end of 1929 to 6,979, of which 6,044 were local and 935 were "foreign." These numbers decreased respectively to 5,888 local and 911 "foreign" as at the end of 1930 and to 5,587 local and 900 "foreign" as at the end of 1931.

Between 1901 and 1915 there was a steady increase in the promotion of limited companies, principally joint-stock companies, and a large amount of capital was invested in the expansion of existing enterprises, especially in the years immediately preceding the outbreak of the war. In 1915 and 1916 there was a noticeable slackening, and regulations under the War Precautions Act prohibited the issue or subscription of fresh capital unless under permit, the object being to encourage the flow of capital into loans for war purposes. After 1917 the number of registrations began to rise again, as industrial and commercial enterprises prospered in consequence of war expenditure and over 800 companies with nominal capital amounting to £16,700,000 were registered in 1920.

The figures for the years 1926 to 1929 were on a high level, and the aggregate capital was unusually large in 1926 and 1928. The companies registered in 1926, viz., 695 with nominal capital of £42,731,310, included a number with very large capital, e.g., one with £5,000,000 and five with £1,000,000 or more. In 1928 the registrations included two companies with nominal capital of £5,000,000 and six others with £1,000,000 or over.

During the period 1911 to 1920 the number of foreign companies registered was, on an average, about 56 per annum. The number registered in each of the past ten years was as follows:—

No.	Nominal Capital.	No.	Nominal Capital.
	£		£
1922 ...	58 29,143,312	1927 ...	69 15,192,085
1923 ...	69 34,971,400	1928 ...	81 10,849,780
1924 ...	83 14,131,711	1929 ...	74 11,759,100
1925 ...	78 94,833,857	1930 ...	54 6,023,284
1926 ...	83 17,752,806	1931 ...	38 9,670,480

The particulars for the year 1925 include the Canadian Pacific Railway with a nominal capital of £75,000,000.

Stock Exchange Index.

An index of the prices of company shares on Sydney Stock Exchange is in course of compilation, and monthly indexes have been compiled as from July, 1929, based on the ratio of prices to par value of ordinary shares. The prices represent the average values for the respective months, and are based on records of actual sales or, where no sales have taken place, on a valuation determined from previous sales, current quotations, etc. In addition to the indexes for component groups and the total index for 75 companies, an index has been compiled in respect of 34 companies in whose shares there is a considerable volume of business. The indexes for each month are shown below, the par value of shares being taken as base (100) :—

Month.	23 Manu- facturing and Distribu- ting Companies.	10 Retail Companies.	8 Public Utility Companies.	5 Pastoral and Finance Companies.	5 Insurance Companies.	Total Companies, 75.	34 Active Shares included in foregoing.
1929—							
July ...	178.8	172.9	129.9	158.8	231.6	169.4	168.8
August ...	179.2	174.2	130.6	156.3	233.7	169.2	167.8
September...	178.7	171.8	132.2	151.9	233.9	167.9	165.4
October ...	169.5	164.0	126.7	142.9	215.1	159.3	156.0
November...	163.3	153.7	125.2	137.8	206.2	153.8	150.2
December...	154.4	142.7	124.0	120.5	198.6	146.4	144.0
1930—							
January ...	145.2	136.3	123.3	107.1	195.3	139.4	136.7
February ...	136.9	129.0	117.4	98.6	180.2	131.5	130.1
March ...	132.5	120.0	114.6	93.1	181.2	127.0	127.3
April ...	127.3	114.2	114.2	93.1	177.1	123.3	123.0
May ...	123.5	112.5	113.9	96.8	173.1	121.1	119.1
June ...	124.2	116.4	116.1	97.4	181.8	123.0	122.8
July ...	112.5	102.8	109.6	87.9	172.6	112.6	111.2
August ...	105.2	94.8	101.2	80.8	164.1	106.0	105.1
September...	91.7	79.6	94.7	66.9	150.0	93.1	90.4
October ...	88.7	77.0	93.0	63.5	141.9	90.2	89.6
November ...	90.0	80.4	96.8	73.3	147.8	91.8	94.3
December...	86.7	76.0	96.1	65.8	145.3	88.0	89.8
1931—							
January ...	81.2	66.7	90.8	60.2	134.6	81.4	85.3
February ...	80.8	66.1	90.0	61.2	127.5	80.0	84.8
March ...	82.9	71.5	88.9	80.7	132.1	83.7	90.2
April ...	82.9	71.3	89.1	81.5	137.6	85.1	90.7
May ...	81.7	67.9	86.7	79.8	126.8	82.6	88.5
June ...	78.2	66.5	89.4	78.0	120.0	80.1	85.4
July ...	77.3	65.9	90.8	79.3	119.0	79.5	83.5
August ...	76.1	62.9	89.3	77.6	118.3	77.4	80.6
September...	72.3	60.2	87.9	75.2	121.3	74.4	77.2
October ...	77.4	64.3	90.6	84.8	129.8	78.9	84.2
November...	88.0	73.5	95.1	95.9	143.9	87.7	94.4
December...	92.6	74.5	98.5	95.4	153.7	91.5	98.6
1932—							
January ...	94.2	75.5	110.0	95.2	158.8	93.3	100.9
February ...	92.6	75.3	111.9	92.0	154.5	92.3	99.0
March ...	90.3	73.9	105.1	88.8	148.2	89.5	95.5
April ...	90.0	72.4	104.6	87.5	139.5	87.8	94.4
May ...	91.9	74.8	104.7	89.3	132.3	88.5	95.3
June ...	96.3	77.8	109.0	87.3	145.6	92.2	99.4
July ...	100.4	78.0	112.1	94.9	152.0	95.4	103.1

CO-OPERATIVE SOCIETIES.

The laws relating to co-operation in New South Wales are embodied in the Co-operation, Community Settlement, and Credit Act, 1923, with subsequent amendments, known now as the Co-operation Act, 1923-31.

The Act is a comprehensive measure, affording ample scope for co-operative development. It authorises co-operative societies to engage in all forms of economic activity except banking and insurance.

Societies may be of various kinds, viz.: (a) rural societies to assist producers in conducting their operations and in marketing products; (b) trading societies to carry on business, trade, or industry; (c) community settlement societies to acquire land and settle or retain persons thereon and to provide any common service or benefits; (d) community advancement societies to provide any community service, *e.g.*, water, gas, electricity, transport, recreation, etc.; (e) building societies—terminating or permanent—to assist members to acquire homes or other property; (f) rural credit societies to make or arrange loans to members for the purpose of assisting rural production; (g) urban credit societies to assist members to acquire plant, furniture, etc., or to commence business or trade; (h) investment societies to enable members to combine to secure shares in a company or business or to invest in securities. Societies of the same kind may combine into co-operative associations, and such associations of all kinds may form unions.

Societies are corporate bodies with limited liability except that a rural credit society may be formed with unlimited liability. Existing societies (with the exception of seven permanent building societies) were deemed to have applied for registration under the new Act, and were required to alter their rules to conform thereto.

Co-operative companies registered as limited companies under the Companies Act, 1899, are permitted to transfer their registration to the Co-operation Act, without winding up or loss of identity. The use of the word "co-operative" by any company not specially authorised in that regard or by any person or firm as part of a trade or business name is prohibited, and such bodies may not in any manner hold out that their trade or business is co-operative.

Adequate provision is made to safeguard the funds and financial interests of the societies, the issue of shares and the disposition of the funds are regulated, the power to raise loans and to receive deposits is limited, reserve funds must be established, and the accounts of the societies are subject to inspection and audit. A member may not hold more than one-fifth of the shares. No dividend may be paid in respect of shares in a rural credit society with unlimited liability, and in other cases the maximum rate of dividend is 8 per cent. per annum. Powers of supervision are vested in the Registrar, who registers the societies and their rules, adjudicates upon matters in dispute, and may inspect accounts if necessary.

An Advisory Council has been appointed to submit recommendations to the Minister with respect to regulations and model rules of co-operative societies, the appointment of committees, and other action for promoting co-operation. The Council consists of the Registrar and of persons appointed by the Governor to represent different forms of co-operative enterprise.

Co-operative effort for production is a prominent feature of the dairying industry, most of the butter factories being organised on a co-operative basis.

The following table shows particulars relating to various classes of co-operative societies, other than building societies, in the year 1929-1930.

Type of Society.	Number at 30th June, 1930.	Number supplying Returns for Year.	Number of Members.	Amount of Share Capital Paid-up.	Surplus and Reserves.
				£	£
Rural	115	92	38,498	834,816	643,826
Trading	64	47	59,019	1,016,778	432,544
Community Advancement ...	15	13	856	3,400	4,644
Investment	5	3	1,243	43,455	324
Total	199	155	99,616	1,898,449	1,081,338

There were also at 30th June, 1930, three associations of co-operative societies, one, comprised by sixteen co-operative trading societies, with a share capital of £81,051 and reserves and undistributed surplus amounting to £41,432. Another association formed to control the marketing of prunes and other fruits on behalf of the societies in the Young district had distributed £12,118 to component societies in the form of advances, funds being obtained from the Rural Bank on the security of the crop. The other association is in the Murrumbidgee Irrigation Area and undertakes marketing of certain fruits for its component societies.

The difference between the number of societies in existence at the end of the year and the number of returns received represents mainly societies in liquidation and those registered during the year from which returns were not due.

Further details regarding the co-operative movement are set forth in the chapters of this book relating to agriculture and the dairying industry.

Trading Societies.

The transactions of co-operative trading societies during the last six years are given in the following table:—

Particulars.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Number of Societies	57	58	66	68	64	68
„ Returns	46	51	45	46	47	47
Number of Members	51,649	54,610	57,775	59,350	59,019	42,547
Liabilities—	£	£	£	£	£	£
Share Capital ...	791,002	868,395	977,627	1,034,600	1,016,778	643,465
Reserves and Net Profits ...	366,882	435,315	444,469	448,802	432,544	365,726
Other Liabilities...	277,685	367,388	365,696	468,477	682,842	445,839
Total Liabilities £	1,435,569	1,671,098	1,787,792	1,951,879	2,132,164	1,455,030
Assets—						
Freehold, Plant, etc.	428,876	718,160	854,211	895,193	1,072,568	557,628
Stock	445,582	490,703	501,190	502,817	507,616	377,857
Other Assets ...	561,111	462,235	482,391	553,869	551,980	519,545
Total Assets £	1,435,569	1,671,098	1,787,792	1,951,879	2,132,164	1,455,030
Sales, etc.	3,520,904	3,680,785	3,840,014	3,863,524	3,553,038	2,466,126

The diminution in 1930-31 was due partly to the acute economic depression, but also very largely to the closing down of a large co-operative store.

The trading societies are mainly consumers' distributive societies organised on the Rochdale plan of "dividend upon purchase," conducting retail stores. They buy their supplies largely from a wholesale co-operative society with which a considerable number of them are affiliated. The societies have met with success in the Newcastle and other mining districts, and to a limited extent in other centres where large numbers of industrial workers reside.

Rural Societies.

There were 118 rural societies at 30th June, 1931. Their objects covered a variety of activities, including the manufacture and distribution of butter, cheese and bacon, the packing and marketing of fruit, and the purchase of poultry feed or general requisites.

The rural societies are for the most part new societies formed since the commencement of the Co-operation Act of 1923 or organisations which had been registered previously as companies under the Companies Act.

A statement of the liabilities and assets of these societies in the last five years is shown below.

Particulars.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Societies—					
Number at 30th June	90	102	107	115	118
Returns received ...	82	81	89	92	98
Members ...	13,490	23,487	24,973	38,498	43,941
Liabilities—	£	£	£	£	£
Share Capital ...	235,960	385,488	449,783	834,816	883,834
Other liabilities ...	513,906	974,078	1,139,643	1,733,067	1,698,411
Assets—					
Land, Buildings, Plant, etc. ...	549,974	872,623	1,045,387	1,645,412	1,739,770
Stock ...	75,742	299,404	377,570	528,638	452,559
Other Assets ...	222,445	490,493	595,600	1,037,659	1,065,738

Investment Societies.

There are four investment societies. Two were formed during 1923 amongst employees of the Australian Gas Light Company and one in 1926 by employees of the City of Newcastle Gas and Coke Works. The object of these societies is to purchase shares in the respective companies by means of periodical subscriptions from the members. These shares are transferred to the names of individual shareholders when the contributions to their credit amount to the market value of the shares. At the middle of 1931 the amount of members' share capital was £44,961 and shares to the value of £39,718 were held in public companies.

The fourth society was registered in 1929 for the purpose of investments in shares of public companies which are listed on the Stock Exchange.

Permanent Building Societies.

The aggregate liabilities and assets of permanent building societies in the last five years are shown in the following statement:—

Particulars.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Number of Societies ...	7	7	7	7	7
Liabilities—	£	£	£	£	£
Deposits... ..	567,111	588,366	616,457	621,073	610,010
Share Capital	455,310	473,680	492,677	508,773	510,639
Reserves and net profits	313,769	320,188	327,151	329,528	330,398
Other Liabilities	19,948	25,259	30,294	49,404	27,926
Total	1,356,133	1,407,493	1,466,579	1,508,778	1,478,973
Assets—					
Advances	1,156,368	1,203,928	1,254,172	1,283,811	1,240,606
Other Assets	199,765	203,565	212,407	224,967	238,367
Total	1,356,133	1,407,493	1,466,579	1,508,778	1,478,973

The income during the year 1930-31 amounted to £125,001, of which the largest item was interest. The expenditure amounted to £69,296, including dividend on shares and interest on deposits and bonuses.

Starr-Bowkett and other Terminating Building Societies.

Starr-Bowkett building societies are terminating societies, in which the rights of members to appropriation are determined by ballot or by sale. The usual procedure is that the member pays a subscription of 6d. per share per week for 15 years, or in some cases until the last appropriation is made, and is entitled to a loan of £50 in respect of each share held by him. Loans are repayable by instalments spread over 10 to 12½ years without interest. The duration of societies varies, but frequently over 20 years elapse before the last loan is made. When an advance has been made to all members remaining in the society the process of winding-up commences and share capital is repaid as repayments in respect of loans accumulate. The life-time of a society of this type often extends to about 28 years. Particulars relating to their operations during the last five years are shown below:—

Particulars	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Number of Societies ...	156	148	145	147	134
Number of Returns ...	133	133	137	137	134
Liabilities—	£	£	£	£	£
To Members	2,449,876	2,496,272	2,475,702	2,342,104	2,364,716
Other Liabilities	42,968	47,778	88,240	65,298	59,202
Surplus	305,964	334,520	318,262	212,130	375,415
Total	2,798,808	2,878,570	2,882,204	2,619,532	2,799,333
Assets—					
Advances	2,355,978	2,428,385	2,448,313	2,341,722	2,382,726
Other Assets	442,830	450,185	433,891	277,810	416,607
Total	2,798,808	2,878,570	2,882,204	2,619,532	2,799,333

The subscriptions received from shareholders in 1929-30 amounted to £217,181, and the withdrawals to £253,163; the advances on mortgage amounted to £466,099, and repayments to £437,471, and the sum due on account of advances at the end of the year was £2,341,722. The income during the year amounted to £63,337, and the expenses to £38,492.

In 1930-31 subscriptions amounted to £188,620, withdrawals were £210,430, advances £335,409, repayments £386,234, income £60,506, and expenses £36,855.

Besides the Starr-Bowkett building societies there is another class of terminating building societies which work principally on a bank overdraft, and loans are made available to members practically as soon as they require them, the ballot being very rarely resorted to. A member receiving a loan does not repay the actual amount borrowed, but is required to pay an increased rate of contribution for the remainder of the life of the society, consequently a balance-sheet in the usual sense of the term cannot be prepared. Although a maximum period of twelve years is fixed as the life of the society, it is usual to wind up before the expiration of the theoretical time.

There were six such societies in existence at 30th June, 1931. The following statement shows particulars of the transactions of these societies, of which seven furnished returns for 1929-30 and six for 1930-31:—

Particulars.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Number of Societies	10.	8	10	8	6
Number of Returns	9	7	8	7	6
Receipts—					
Subscriptions from Members ...	£ 63,336	65,202	64,213	52,834	24,698
Fines and other Charges ...	£ 1,584	1,582	1,621	1,459	710
Interest received from borrowers ...	£ 3,845	3,570	3,378	1,741	1,444
Expenditure—					
Advances to members ...	£ 48,713	52,361	33,080	22,010	11,300
Withdrawals of share capital ...	£ 5,109	15,822	7,727	5,208	11,557
Interest paid by society ...	£ 7,412	6,885	6,842	5,964	4,066
Management Expenses ...	£ 1,916	1,793	2,042	1,842	1,777
Number of shares at end of year ... No.	17,190	14,339	12,170	10,311	9,202

FRIENDLY SOCIETIES.

The affairs of the friendly societies in New South Wales are conducted in accordance with the Friendly Societies Act of 1912 and its amendments. The societies are compelled to register, and are required to furnish periodical returns to the Registrar, giving details relating to membership, sickness, mortality, benefits, and finances. In this chapter finances only are discussed, and the figures in the following tables relate to the societies which provide benefits such as medical attendance, sick pay, and funeral donations, and are exclusive of the particulars of miscellaneous societies registered under the Friendly Societies Act, such as dispensaries, medical institutes, and accident societies. Other matters relating to friendly societies are discussed in the chapter entitled "Social Condition."

Early legislation did not make adequate provision for maintaining the solvency of the friendly societies, but in 1899 an Act was passed to bring their affairs under State supervision and to make provision for the actuarial certification of tables of contributions, for valuations at least once within five years, the investigation of accounts, and other measures for safeguarding the funds.

As a general rule, the moneys received or paid on account of a particular benefit must be kept in a separate account and be used only for the specific purpose. It is provided, however, that where the sickness and funeral funds of a society are administered by one central body for the whole society they may be treated as one fund, and on valuation being made the Register may authorise surplus moneys belonging to a fund to be used in any manner for the purposes of any other fund.

Actuarial Valuations.

In the quinquennial valuations between 1904 and 1919 all the societies were valued as at the same date, and particulars of the results were published in earlier issues of this Year Book. Under more recent arrangements the societies are to be valued in groups in successive years.

Nine affiliated and fifteen single societies were valued as at 31st December, 1922, two affiliated societies as at 31st December, 1923, and the remainder as at 31st December, 1924. Of fifteen affiliated societies, nine showed surpluses of assets amounting to £92,018 and six societies showed deficiencies amounting in the aggregate to £67,941. The total liabilities amounted to £6,967,303, as compared with accumulated funds, £2,506,138, and future contributions valued at £4,485,242. In the case of fifteen single societies the assets, £66,189 (including funds £38,581), exceeded the liabilities by £11,615. Four of these societies, with accumulated funds amounting to £4,307, showed deficiencies amounting to £580 in respect of liabilities valued at £9,241.

Particulars of the next valuation—made at various dates between 1926 and 1930—are summarised below:—

Valued as at—	Number.	Liabilities.	Assets.			Surplus + or De- ficiency (—)
			Accumu- lated Funds.	Future con- tributions.	Total.	
Affiliated Societies.						
		£	£	£	£	£
30th June, 1926 ...	5	943,662	313,488	610,081	923,569	(-) 20,093
do 1927 ...	4	2,740,176	1,195,145	1,608,109	2,803,254	63,078
do 1928 ...	3	2,175,976	750,043	1,389,947	2,139,990	(-) 35,986
do 1929 ...	3	1,934,730	849,475	1,168,930	2,018,405	83,675
Total ...	15	7,794,544	3,108,151	4,777,067	7,885,218	90,674
Single Societies.						
30th June, 1926 ...	14	61,646	54,263	23,626	77,889	16,243
do 1929 ...	1	2,226	1,013	1,533	2,546	320
do 1930 ...	11	54,743	46,676	20,063	66,739	11,996
Total ...	26	118,615	101,952	45,222	147,174	28,559

Accumulated Funds.

The following statement illustrates the growth of the funds of the Friendly Societies since 1911:—

At 30th June	Sickness and Funeral Funds.	Medical and Management Fund.	Other Funds.	All Funds.	
				Total.	Per Member.
	£	£	£	£	£
1911*	1,373,722	78,264	49,852	1,506,838	9·14
1916*	1,820,708	101,092	48,471	1,970,271	11·02
1921	2,134,339	194,358	83,065	2,411,762	12·08
1926	2,866,486	237,296	111,688	3,215,470	13·70
1927	3,055,187	249,305	114,307	3,418,799	14·33
1928	3,214,550	260,176	116,392	3,591,118	14·83
1929	3,376,326	272,536	115,370	3,764,232	15·19
1930	3,535,056	266,944	122,594	3,924,594	15·57
1931	3,640,368	261,663	117,209	4,019,240	16·58

*At 31st December.

During the twelve months ended 30th June, 1930, the total funds of the societies increased by £160,362, the increases being common to all the societies. The addition to funds in 1930-31 was £94,646.

Receipts and Expenditure.

The receipts and expenditure of the friendly societies during the last six years are shown in the following statement:—

Year. ended 30th June.	Receipts.				Expenditure.					
	Contributions.	Interest.	Other.	Total.	Sick Pay.	Funeral Donations.	Medical Attendance and Medicine.	Expenses of Management.	Other.	Total.
	£	£	£	£	£	£	£	£	£	£
1926	766,772	2,039	61,850	1,000,661	269,768	65,913	307,350	148,808	35,376	827,245
1927	795,542	191,753	83,467	1,070,762	232,216	69,186	319,825	154,115	42,141	867,438
1928	808,887	305,222	60,836	1,074,945	307,321	75,460	329,816	156,444	33,585	902,626
1929	832,187	219,788	66,173	1,118,148	319,787	77,928	343,381	161,300	42,638	945,034
1930	815,551	226,889	75,664	1,118,104	319,329	86,790	331,052	171,410	49,161	957,742
1931	765,113	210,164	49,260	1,024,537	307,979	75,747	298,299	171,820	76,076	929,921

The total amount disbursed in benefits in the year ended June, 1931, was £682,025, as compared with £330,000 in 1911 and £601,673 in 1924-25. The cost of medical attendance and medicine has increased, as additional charges were made by medical practitioners and pharmacists, and the average cost per adult member rose from 18s. 3d. in 1911 to 27s. 11d. in 1923-24, to 30s. 10d. in 1928-29, and dropped to 29s. 3d. in 1929-30, and to 26s. 9d. in 1930-31.

In the year 1929-30 the total expenses, £171,410, were equal to 13s. 4d. per head of mean membership as compared with 7s. 6d. per head in 1911, and 13s. 10d. in 1920-21. In proportion to contributions and to total income, expenses in 1929-30 represented 21.0 per cent. and 15.4 per cent. respectively, as compared with 14.4 per cent. and 11.5 per cent. in 1911. In 1930-31 expenses represented 13s. per head of mean membership.

INSURANCE.

Insurance in New South Wales, apart from Government pension funds, is mainly the province of private organisations. The question of national insurance was investigated by a Royal Commission appointed by the Government of the Commonwealth in September, 1923, the final report being issued in March, 1927. The Commission recommended the creation of a national insurance fund to provide sickness, invalidity, maternity, and superannuation benefits. In September, 1928, a National Insurance Bill was introduced into the Federal Parliament, but it was not taken beyond the early stages in view of an impending dissolution of Parliament.

Legislation.

In New South Wales there is no legislation dealing specifically with the conduct of insurance business, the insurance companies being subject to the Companies Acts. The Life, Fire and Marine Insurance Acts of 1902 and 1917 were enacted in the State Parliament to provide for the protection of life insurance policies and annuities against creditors, and for the issue of special policies in substitution for those lost or destroyed. The section of the 1902 Act relating to marine insurance was superseded by the

Commonwealth Marine Insurance Act of 1909, which defines the limit of marine insurance and regulates the terms of the contracts, the liability of the insurers, etc.

A Commonwealth Act passed in 1905 limits the amount of assurance payable on the death of children. The maximum amount ranges from £5 in respect of children under 1 year to £45 in the case of children between the ages of 9 and 10 years, the sums being payable only to parents or their personal representatives. The provisions of the Act do not apply, however, to any insurance effected by persons having an insurable interest in the lives insured or to insurances, *e.g.*, industrial assurances, effected by parents, in which the amount payable on the death of a child does not exceed the total amount of premiums actually paid, plus interest up to 4 per cent. per annum.

A bill for the purpose of regulating the conduct of life assurance business in Australia was introduced in the Federal Parliament in August, 1929, and again after a change of Government in March, 1930, but it has not been passed into law. In March, 1932, an Act was passed to provide that insurance companies may be required, when the Act has been proclaimed, to lodge deposits with the Commonwealth Treasurer.

LIFE ASSURANCE.

The volume of life assurance business transacted in New South Wales increased very rapidly both absolutely and in proportion to the population until the advent of the depression in 1929-30. At the same time there has been a marked tendency for the local business of non-Australian assurance companies to diminish, and, especially after the war, the number of local assurance institutions increased.

Particulars relating to life assurance are obtained from the reports published by the companies and from official returns collected under the Census Act of 1901.

Life assurance business in New South Wales is conducted generally on the principle of premiums which remain constant throughout the term for which they are payable. The rates quoted by the companies transacting new business in the State vary considerably, being affected by the conditions relating to bonuses and the age of the institutions.

New South Wales Business—Ordinary Branch.

The following tables relate only to assurances effected in New South Wales, and the extent of the business in force in the ordinary branch, exclusive of annuities, during the years 1929-30 and 1930-31 is shown below.

The business may be classified broadly in three categories—(1), whole-life assurance payable at death only; (2), endowment assurance payable at the end of a specified period or at death prior to the expiration of the period; (3), pure endowment payable only in case of survival for a specified period.

Classification.	1929-30.				1930-31.			
	Policies in Force.	Amount Assured exclusive of Bonuses and Re-assurances.	Bonus Additions.	Annual Premiums Payable.	Policies in Force.	Amount Assured exclusive of Bonuses and Re-assurances.	Bonus Additions.	Annual Premiums Payable.
	No.	£	£	£	No.	£	£	£
Assurance...	113,701	64,242,633	12,321,607	1,915,138	112,619	64,496,247	13,063,039	1,923,677
Endowment Assurance	153,594	33,116,161	4,905,301	1,304,144	149,502	33,050,505	5,251,751	1,283,480
Pure Endowment.	16,221	2,770,885	58,233	104,146	15,489	2,510,928	57,091	95,808
Total ...	283,516	100,129,679	17,285,141	3,323,428	277,610	100,057,680	18,371,881	3,302,965

In 1930-31 the majority of the policies, viz., 54 per cent., represented endowment assurances; whole-life policies were 40 per cent., and endowments 6 per cent. of the total number. The amount assured under the whole-life policies represented 64 per cent. of the total (exclusive of bonus additions), the average per policy being £573, endowment assurance policies, with an average of £221 per policy, covered 33 per cent. of the total amount assured; and endowment policies, with an average of £162 per policy, 3 per cent.

Industrial Assurance.

A large business in industrial assurance has developed in New South Wales during recent years. The policies in this class are for small amounts, and the premiums in most cases are payable weekly or monthly. Industrial business in the State is transacted by the Australasian companies only.

A classification of the industrial business in force in New South Wales is shown below:—

Classification.	1920-30.				1930-31.			
	Policies in Force.	Amount Assured exclusive of Bonus Additions.	Bonus Additions. *	Annual Premiums Payable.	Policies in Force.	Amount Assured exclusive of Bonus Additions.	Bonus Additions. *	Annual Premiums Payable.
Assurance	No. 70,765	£ 2,236,834	£ 54,246	£ 108,374	No. 71,475	£ 2,042,523	£ 55,743	£ 105,875
Endowment Assurance	507,632	23,866,138	665,316	1,471,247	493,518	23,379,018	720,927	1,432,089
Pure Endowment	41,630	1,698,155	100	116,256	39,168	1,603,721	77	103,185
Total ...	620,027	27,801,127	719,662	1,695,877	604,161	27,025,257	776,747	1,640,149

* Partly estimated.

Annuities.

Transactions in annuities are not numerous, the business in force in New South Wales in 1930-31 being 503 policies for an aggregate amount of £40,736 per annum in the ordinary branch, and three policies representing £217 per annum in the industrial department.

New Business.

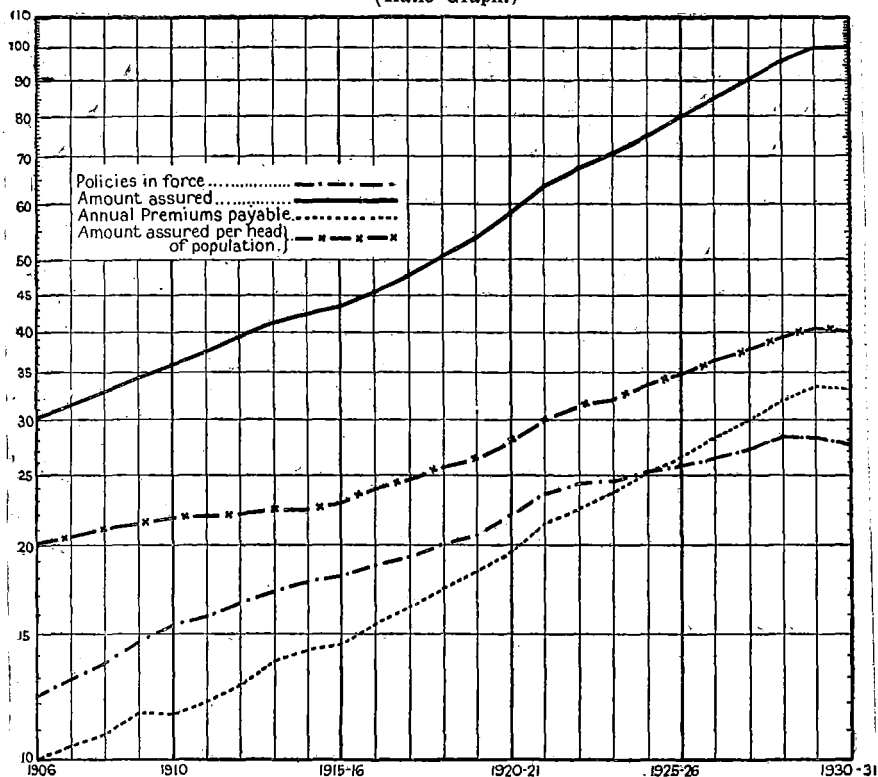
The new life assurance business, ordinary and industrial, effected in New South Wales during the last five years, is compared in the following table:—

Year.	Ordinary Branch.			Industrial Branch.		
	Number of Policies.	Amount Assured.	Annual Premiums Payable.	Number of Policies.	Amount Assured.	Annual Premiums Payable.
1926-27	26,360	£ 10,643,262	£ 368,417	407,844	£ 5,608,112	£ 338,090
1927-28	26,743	11,331,420	395,129	119,469	6,284,517	381,050
1928-29	33,298	12,984,604	453,724	131,498	6,987,127	417,364
1929-30	26,422	11,650,396	405,031	124,013	6,821,670	405,139
1930-31	19,515	9,058,478	320,555	97,970	5,102,788	307,401

The amount assured under new policies rose each year until 1928-29. In the industrial branch business had been expanding more rapidly than in the ordinary branch, but in 1928-29 the increase in the amount assured in the ordinary branch was 15 per cent. and in the industrial branch 11 per cent. The decline in volume of new business in 1929-30 and 1930-31 was relatively much more severe in the ordinary branch than in the industrial branch.

LIFE ASSURANCE—ORDINARY BUSINESS, 1906 to 1931.

(Ratio Graph.)



The numbers at the side of the graph represent 10,000 policies, £1,000,000 of Assurances, £100,000 of Premiums, and £1 of Assurances per head of population.

The diagram is a ratio graph. The vertical scale is logarithmic, and each curve rises and falls according to the rate of increase or decrease. In this it differs from the natural scale graph, in which the curves rise and fall according to the actual increase or decrease. Actual values are shown by means of the numbers at the side of the graph.

A comparative statement of the amount of ordinary and industrial business, excluding bonuses and annuities, in force in New South Wales at the end of the last five years is shown below:—

Year.	Ordinary Branch.			Industrial Branch.		
	Policies.	Amount Assured, excluding Bonus Additions.	Annual Premiums Payable.	Policies.	Amount Assured, excluding Bonus Additions.	Annual Premiums Payable.
	No.	£	£	No.	£	£
1926-27	264,432	84,973,960	2,812,902	524,600	21,431,152	1,309,107
1927-28	270,973	90,203,018	2,985,500	562,329	23,729,585	1,448,405
1928-29	283,416	96,368,918	3,199,603	604,275	26,186,916	1,604,964
1929-30	283,516	100,129,679	3,323,428	620,027	27,801,127	1,695,877
1930-31	277,610	100,057,680	3,302,965	604,161	27,025,257	1,646,149

The bonus additions effective in 1930-31 amounted to £18,371,881 in the ordinary branch, and those in the industrial branch were estimated at £776,747.

The amount assured in the ordinary branch increased by approximately £25,000,000, or by 35 per cent., in the five years ended 30th June, 1929, and in the industrial branch by £11,000,000 or by 73 per cent. The rate of growth diminished in 1929-30 and in 1930-31 there was recession in both departments.

The development of life assurance in relation to the population is shown in the following statement, which illustrates also the increase in the average amount per policy and in the premium payable.

Year.	Policies per 1,000 of Population.		Amount Assured per Head of Population.		Average Amount Assured Per Policy.		Average Annual Premium payable per Policy.	
	Ordinary.	Industrial.	Ordinary.	Industrial.	Ordinary.	Industrial.	Ordinary.	Industrial.
	No.	No.	£ s. d.	£ s. d.	£	£	£ s. d.	£ s. d.
1926-27	113	223	36 3 10	9 2 7	321	41	10 12 9	2 8 11
1927-28	113	234	37 11 5	9 17 8	333	42	11 0 4	2 11 6
1928-29	116	247	39 7 5	10 14 0	340	43	11 5 9	2 13 1
1929-30	114	250	40 8 2	11 4 5	353	45	11 14 5	2 14 8
1930-31	111	242	40 0 4	10 16 2	360	45	11 17 11	2 14 6

Until 1929-30 ordinary insurance business was growing steadily at a rate somewhat more rapid than the growth of population, and industrial business was growing at a much faster rate. The increase was much smaller in 1929-30, and in 1930-31 there was a general recession.

Australasian Assurance Societies—Total Business.

The life assurances undertaken in New South Wales by foreign companies represent a very small proportion of their total business and an insignificant proportion of the business done in New South Wales.

A summary of the total business—ordinary and industrial—of the Australasian societies operating in New South Wales, and of the amount of receipts, expenditure, and accumulated funds, at intervals since 1895, is shown below.

Year.	Societies.	Policies in Force.	Receipts.	Expenditure.	Accumulated Funds, including Paid-up Capital and Reserves.	Interest and Rents.	
						Amount Received.	Average Rate Realised on Mean Funds.
	No.	No.	£ 000	£ 000	£ 000	£ 000	per cent.
1895-96	10	268,242	3,392	2,334	20,438*	1,037	5.21
1900-01	11	331,868	4,093	2,648	26,491*	1,162	4.51
1905-06	14	756,585	5,437	3,834	34,916	1,528	4.48
1910-11	11	1,056,173	7,131	4,619	45,668	1,963	4.46
1915-16	14	1,424,196	9,474	6,085	61,572	2,836	4.74
1920-21	14	1,944,845	14,079	7,944	83,029	4,116	5.16
1925-26	33	2,678,790	22,189	12,860	124,361	6,595	5.52
1926-27	31	2,819,352	23,525	13,788	134,163	7,290	5.64
1927-28	33	2,957,328	25,250	15,107	145,017	7,832	5.61
1928-29	31	3,094,838	27,755	16,270	156,724	8,424	5.53
1929-30	28	3,163,241	28,845	17,539	167,334	9,093	5.61
1930-31	24	3,190,768	29,898	20,030	178,307	9,802	5.67

* Exclusive of capital and reserve funds, etc.

The annual additions to the funds have shown a considerable increase since 1911, and there was gradual increase in earning power of funds from 1910-11, when 4.46 per cent. was realised, until a rate equal to 5.64 per cent. was reached in 1926-1927. The rate in 1928 and 1929 was somewhat lower; then it rose to 5.67 per cent. in 1930-31.

The following table shows details of the total receipts and disbursements of the Australasian institutions during 1929-30 for both classes of business, including small amounts of business done in New South Wales by non-Australasian companies.

Particulars.	Ordinary Branch.	Industrial Branch.	Total.
Receipts—	£	£	£
Premiums—			
New	2,038,967	} 5,044,295	19,206,055
Renewal	12,122,793		
Consideration for Annuities	122,877	...	122,877
Interest on Investments*	7,655,631	1,212,845	8,868,476
Rents	188,413	36,249	224,662
Other Receipts	398,881	24,330	423,211
Total Receipts	22,527,562	6,317,719	28,845,281
Expenditure—			
Claims and Policies matured	7,514,691	1,703,425	9,218,116
Surrenders	1,667,693	234,366	1,902,059
Annuities	132,856	195	133,051
Cash Bonuses and Dividends	760,378	89,070	849,448
Expenses, incl. commission, and brokerage	2,328,210	1,795,089	4,123,299
Taxes	621,468	92,376	713,864
Depreciation, Reserves, Transfers, etc.	460,063	147,119	607,182
Total Expenditure	13,485,359	4,061,660	17,547,019

* Includes rent in some cases.

A more detailed comparison of receipts and expenditure for each of the past ten years is shown on pages 161 and 162 of the Statistical Register for 1930-31.

The receipts of the societies consist mainly of premiums on policies and of interest arising from investments. The former represented 66.6 per cent. of the receipts in 1929-30 and the latter 30.8 per cent. of the total expenditure in the ordinary branch. Payments on account of death claims, policies matured and surrendered, and cash bonuses and dividends amounted in 1929-30 to £10,075,618, or 74.7 per cent., and in the industrial branch £2,027,056, or 49.9 per cent. Expenses of management, including taxes, constituted 21.9 per cent. of the expenditure in the ordinary branch and 46.5 per cent. in the industrial.

Expenses of Management.

The ratio between management expenses and premium income must necessarily vary with the volume of new business transacted, and with the age of the society, quite apart from the competition for new business. The following figures show in respect of the ordinary and industrial departments of the Australasian societies the cost of management, including commission and taxes, and its proportion to premium income and gross receipts.

Year.	Management Expenses, Taxes, etc.	Premium Income.	Gross Receipts.	Management Expenses.	
				Per cent. of—	
				Premium Income.	Gross Receipts.
	£	£	£		
1895-96	438,524	2,380,167	3,392,423	18·42	12·93
1900-01	565,380	2,799,512	4,093,376	20·19	13·81
1905-06	858,741	3,500,448	5,437,589	24·53	15·79
1910-11	1,016,153	5,074,204	7,131,250	20·03	14·25
1915-16	1,252,438	6,591,572	9,474,126	19·00	13·22
1920-21	2,222,218	9,870,814	14,079,302	22·51	15·73
1925-26	3,727,350	14,635,673	22,189,345	25·47	16·80
1926-27	3,881,716	15,825,049	23,525,386	24·53	16·50
1927-28	4,193,295	17,047,366	25,249,652	24·60	16·61
1928-29	4,378,765	18,874,582	27,755,242	23·20	15·78
1929-30*	4,837,163	19,206,055	28,845,281	25·18	16·77
1930-31*	4,897,622	19,557,848	29,897,842	25·04	16·38

* Includes a small amount of New South Wales business of foreign companies.

The expenses of management in 1930-31 include £1,987,860 commission and brokerage, £439,976 payments to agents, etc., £889,513 income and other taxes, and £1,580,273 in general office management expenses. The increase in the relative and absolute amount of management since 1928-29 has been due to the increase in taxation from £351,329 in that year to £889,513 in 1930-31.

Particulars regarding the management expenses of the ordinary and industrial branches are stated separately in the following table for each of the past five years:—

Year.	Ordinary Branch.		Industrial Branch.	
	Proportion of Management Expenses (including Taxes) to—			
	Premium Income.	Total Receipts.	Premium Income.	Total Receipts.
	per cent.	per cent.	per cent.	per cent.
1926-27	19·94	12·70	38·31	31·07
1927-28	19·71	12·59	38·72	31·32
1928-29	18·45	11·92	37·36	30·11
1929-30	20·83	13·09	37·42	29·87
1930-31	21·03	12·96	36·16	28·45

The expenses of the industrial branch are necessarily very high in proportion to the receipts, on account of the house-to-house method of collection, which is an essential feature of the system.

Liabilities and Assets.

The following table gives a summary of the total liabilities and assets of the Australasian societies in the year 1929-30:—

Liabilities.		Assets.	
Assurance Funds—	£	Loans—	£
Participating in Profits ...	153,200,895	On Mortgage ...	38,498,085
Not participating in Profits ...	848,101	„ Municipal and Other	...
Claims Investment Fund ...	8,290	„ Local Rates ...	35,634,165
Other Assurance Funds ...	9,431,807	„ Reversionary, Life, and	...
		Other Interests ...	552,018
Total ...	163,489,093	„ Policies ...	20,843,424
Other Funds—		„ Personal Security ...	32,420
Guarantee and Contingency		„ Government Securities..	63,913
Funds ...	384,564	„ Other Debentures and	...
Investment Fluctuation		Bonds ...	1,437,565
Fund ...	966,027	Miscellaneous Loans ...	816,533
Paid-up Capital ...	2,132,857		
Reserve Funds ...	361,279	Total ...	97,878,123
Total Funds ...	167,334,120		
Other Liabilities—		Government Securities ...	47,772,574
Claims admitted but not		Other Securities and Shares ...	8,190,592
paid ..	1,556,833	Real Estate ...	7,743,925
Outstanding Accounts ...	274,585	Other Assets ...	8,351,191
Miscellaneous ...	770,870		
Total Liabilities ...	£169,936,408	Total Assets ...	£169,936,408

In some of the States companies are obliged by law to deposit certain sums with the Treasury as a guarantee of good faith, and these amounts are included in their balance-sheets under the head of Government securities or of deposits.

In former years insurance companies sought only such forms of investment as loans on mortgage, municipal securities, policies of members, etc., but in more recent years attention was given to Government securities and investments in shares, and large sums were subscribed to war loans. Considerable sums are deposited also with banks, or invested in freehold and leasehold property. Investments on personal security are unusual, and are generally combined with life policies, the total amount under this heading in the year 1929-30 being only £32,420.

The following comparison relating to liabilities and assets of Australasian life assurance institutions illustrates the rapid growth of the funds, etc., of the assurance societies:—

Year.	Liabilities.			Assets.		
	Paid-up Capital and Accumulated Funds.	Other Liabilities.	Total.	Loans on Mortgages, Policies, etc.	Securities, Freehold Property, etc.	Total.
	£	£	£	£	£	£
1895-96	21,497,059*	...	21,497,059	15,600,229	5,896,830	21,497,059
1900-01	27,471,223*	...	27,471,223	19,013,579	8,457,644	27,471,223
1905-06	34,915,842	951,520	35,867,362	22,072,061	13,795,301	35,867,362
1910-11	45,668,204	775,785	46,443,989	30,625,778	15,818,211	46,443,989
1915-16	61,572,309	1,619,028	63,191,337	45,535,992	17,655,345	63,191,337
1920-21	83,028,808	6,992,147	90,020,955	40,127,817	49,893,138	90,020,955
1925-26	124,361,308	4,576,073	128,937,381	62,387,027	66,550,354	128,937,381
1926-27	134,162,893	4,123,144	138,286,037	71,105,547	67,180,490	138,286,037
1927-28	145,016,722	4,856,137	149,872,859	79,411,504	70,461,355	149,872,859
1928-29	156,724,076	3,052,955	159,777,031	90,046,925	69,730,106	159,777,031
1929-30	167,334,120	2,602,288	169,936,408	97,878,123	72,058,285	169,936,408
1930-31	178,306,700	3,530,543	181,837,243	106,095,791	75,741,452	181,837,243

* Includes other liabilities.

The ratio of loans on the security of mortgages, local rates, policies, etc., to total assets, which was between 60 and 70 per cent. up to the year 1915-16, was reduced to 43 per cent. by 1921-22 and has risen since that year to 58 per cent. in 1930-31. These changes were due mainly to fluctuating investments in war loans of the Governments, which represented 17 per cent. in 1915-16, compared with 44 per cent. in 1921-22 and 27 per cent. in 1930-31.

FIRE, MARINE, AND GENERAL INSURANCE.

The nature of the local insurances effected during the year 1929-30 is shown in the following table. The particulars relate to New South Wales risks only. Premiums exclude re-insurances and returns; and treaty arrangements are not taken into consideration. In the case of losses, amounts recovered from Australasian re-insuring offices are excluded also. Interest receipts cannot be distributed among the various classes of insurance and are included in one item:—

Nature of Insurance.	Premiums in New South Wales, less Re-insurances in Australia and New Zealand.	Expenditure in New South Wales.						
		Losses, less Re-insurances.	Expenses of Management.		Total.	Proportion of Premium Income.		
			Commission and Agents' Charges	Other.		Losses.	Commission and Agents' Charges	Other Management Expenses.
	£	£	£	£	£	percent.	percent.	percent.
Fire	2,376,441	1,293,088	400,513	657,295	2,350,894	54.41	16.85	27.66
Marine	426,543	183,941	32,893	115,086	331,920	43.12	7.71	26.98
Personal Accident	173,970	84,448	34,962	41,888	161,298	48.54	20.10	24.08
Employers' Liability and Workmen's Compensation ..	1,556,019	977,014	76,703	302,492	1,356,209	62.79	4.93	19.44
Public Risk, Third Party ..	48,925	14,383	7,650	9,721	31,763	29.40	15.65	19.87
Plate-glass	63,156	19,730	11,722	15,144	46,396	30.92	18.56	23.95
Motor Car and Motor Cycle ..	1,109,520	647,925	181,570	192,609	1,022,113	58.40	16.37	17.36
Flintstone	55,413	17,938	11,826	11,804	41,568	32.37	21.34	21.00
Boiler Explosion	12,202	4,616	1,138	1,911	7,665	37.83	9.33	15.66
Live Stock	13,217	6,436	2,269	3,873	12,578	48.69	17.17	29.30
Burglary	58,417	26,292	8,735	12,462	47,489	45.01	14.95	21.33
Guarantee	35,129	24,472	5,291	8,325	38,088	69.66	15.06	23.70
Loss of Profits	64,619	16,592	9,831	15,083	41,506	25.68	15.21	23.34
Elevator	2,995	1	462	577	1,040	0.03	15.43	19.27
Sprinkler	2,830	936	441	522	1,899	33.07	15.58	18.45
Pluvius	6,035	2,856	675	1,227	4,758	46.94	11.09	20.16
Householders' Comprehensive ..	29,742	7,370	3,396	6,199	16,965	24.78	11.42	20.84
Other	3,643	2,568	750	893	4,246	70.40	21.41	24.65
Total Premiums	6,038,874	..	..	..	..	..	..	..
Total Interest, etc. ...	354,407	..	..	..	..	..	..	..
Total	6,393,281	3,330,404	790,875	1,397,116	5,518,395	55.1	13.10	23.14

The total losses amounted to 55.1 per cent. of the premiums. The expenses for commission and agents' charges were £790,875, and for general management £1,397,116, making a total of £2,187,991, or 36.24 per cent. of the premium income. In 1930-31 losses amounted to £2,641,941, or 55.2 per cent. of premium income, and expenses, £1,950,752, represented 40.7 per cent.

The principal classes of insurance, according to the amount of net premiums are fire, employers' liability and workmen's compensation, motor vehicles, and marine.

In 1929-30 the premium income showed a net decrease of £165,787. The premiums in respect of employers' liability and workmen's compensation showed a decrease of £70,723, which may be attributed mainly to a decline in the aggregate amount of wages paid in industry, motor vehicle insurance premiums decreased by £35,083, personal accident by £9,749, and fire insurance by £14,473.

In 1930-31 premium income declined by £1,249,472. The largest decrease, £541,915, was in respect of workers' compensation, which was affected by reason of widespread unemployment and by a restriction of benefits under an amending law passed in November, 1929. Premiums in respect of motor vehicles decreased by £330,354, fire by £189,787, and marine by £130,661.

A summary of the revenue and expenditure in respect of general insurance transactions in New South Wales in the period of five years ended June, 1931, is shown below:—

Particulars.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Revenue—	£	£	£	£	£
Net Premiums	5,787,818	6,189,643	6,229,699	6,038,874	4,789,402
Interest, etc.	269,784	305,434	329,369	354,407	355,089
Total	6,057,602	6,495,077	6,559,038	6,393,281	5,144,491
Expenditure—					
Losses	3,700,918	3,601,889	3,804,141	3,330,404	2,641,941
Management—					
Commission and Agents' Charges	761,783	804,054	838,496	790,875	621,037
Other Expenses	1,260,090	1,370,591	1,396,078	1,397,116	1,329,715
Total	5,722,791	5,776,534	6,038,715	5,518,395	4,592,693
Excess of Revenue..	334,811	718,543	520,353	874,886	551,798
Proportion to Premium Income—	per cent.	per cent.	per cent.	per cent.	per cent.
Losses	63·94	58·19	61·06	55·15	55·16
Expenses—					
Commission, etc.	13·16	12·99	13·46	13·10	12·97
Other	21·77	22·14	22·41	23·14	27·76

During the five years shown above approximately 58 per cent. of the premiums have been repaid to insurers to cover losses. The fluctuations in the excess of revenue were due mainly to the amount of losses in fire insurance.

In proportion to premium income the losses and expenses vary greatly in the different classes of insurance. The following table shows a comparison under these heads for the past five years:—

Class.	Proportion per cent. of Losses to Premiums.					Proportion per cent. of Expenses to Premiums.				
	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.
Fire	72.9	56.3	67.5	54.4	49.3	42.0	43.8	44.8	44.5	47.4
Marine	45.4	42.7	51.6	43.1	40.8	30.4	33.1	33.4	34.7	52.2
General Accident	46.3	49.7	50.0	48.5	45.4	41.8	46.0	35.1	44.2	41.3
Employers' Liability and Workers' Compensation	68.9	67.9	69.8	62.8	73.2	25.0	20.6	22.8	24.4	28.1
Public Risk, Third Party	31.2	34.3	28.1	29.4	26.3	33.4	37.2	36.5	35.5	45.0
Plate Glass	34.2	33.2	30.8	30.9	33.3	38.3	38.3	37.8	42.5	42.4
Motor Car and Motor Cycle	57.0	59.0	52.0	58.4	62.0	33.6	36.3	35.1	33.7	34.2
Hailstone	39.9	39.7	18.1	32.4	32.3	39.4	47.2	46.6	42.6	40.4
Boiler Explosion	29.6	27.9	24.6	37.8	62.7	43.2	32.0	23.3	25.0	26.1
Live Stock	58.4	104.2	53.1	48.7	39.1	44.2	47.4	45.9	46.5	51.2
Burglary	33.9	39.8	44.1	45.0	46.3	35.9	39.5	36.3	36.3	39.1
Guarantee	34.2	44.4	54.5	69.7	39.2	31.1	37.1	36.1	38.8	36.6
Loss of Profits	53.2	66.7	8.5	25.7	19.4	35.6	37.6	37.2	38.5	41.4
Elevator	0.2	...	...	...	14.4	38.2	38.7	40.5	34.7	38.8
Sprinkler	5.6	51.1	30.1	33.1	13.9	31.4	36.2	36.1	34.0	37.6
Other	72.6	47.1	29.1	32.4	90.0	105.5	128.2	35.8	33.4	36.2
Total	63.9	59.2	61.1	55.1	55.2	34.9	35.1	35.9	36.2	40.7

In some cases the losses and expenses of management combined exceed the amount of premium income. This does not necessarily mean an aggregate loss on the class of business concerned, because societies have other sources of income, such as interest, which it is not possible to allocate to respective classes of insurance.

Many policies are for a period of twelve months, and the majority of the insurance companies set aside annually a reserve for unexpired risks. In the case of fire insurance the amount so set aside is usually 40 per cent. of the net premium income of the year. By reviewing the figures to calculate a reserve on that basis, it is found that fire business in New South Wales showed a substantial underwriting surplus in 1924-25, and a small surplus in 1925-26. In the next three years, however, there were deficits to be made good by interest earnings, etc., the amounts being large in 1926-27 and in 1928-29. Small surpluses were shown in 1929-30 and 1930-31.

The total amount of the fire insurance written in New South Wales was £520,473,844 in 1925, £525,252,189 in 1926, £556,098,507 in 1927, £620,253,548 in 1928, £626,946,940 in 1929, £632,831,566 in 1930, and £584,810,551 in 1931. The measures taken for the prevention of fire are described in the chapter "Local Government."

Insurance relating to the liability of employers grew rapidly while wages were rising and as the scope of workers' compensation was extended by legislation. An amended Workers' Compensation Act, which commenced on 1st July, 1926, increased the amount of compensation payable, extended the benefits to a large body of workers previously excluded, and placed upon

employers the obligation of insuring against liability in respect of practically all classes of employees. The premiums amounted to £1,749,775 in 1927-28, to £1,626,742 in 1928-29, to £1,556,019 in 1929-30, and to £1,014,104 in 1930-31. Details regarding the workers' compensation law and its operation are shown on page 602 of this Year Book.

The insurance of motor cars also developed rapidly, its growth being due to an increased use of these vehicles, but premiums declined from £1,109,520 in 1929-30 to £779,166 in 1930-31.

For marine insurance the premium receipts, which amounted to £552,202 in 1925-26, have declined since to £295,887.

Government Insurance Office.

The Government Insurance Office of New South Wales transacts workers' compensation insurance for employers generally, as well as fire and other classes of insurance (except life assurance) for Government departments and statutory bodies and their employees. The establishment of the office was an outcome of the extension of workers' compensation benefits under the Act of 1926. It took over the internal insurance fund which had been created under the Treasury Insurance Board in 1911 for the insurance of Government buildings against fire risks. From time to time its operations were extended to provide other classes of insurance for Government and public bodies. The Government Insurance Office provides workers' compensation insurance in respect of private as well as public employment in order that employers may be enabled to fulfil at the lowest cost their obligations to insure their employees as prescribed by the Act. The scope of the activities of the Government Office is defined by the Government Insurance (Enabling and Validating) Act, 1927, deemed to have commenced on 30th June, 1926.

Particulars of the business transacted by the Government Insurance Office during the year 1929-30 are shown below:—

Particulars.	Workers' Compensation.	Fire and Marine.	Motor Vehicles.	Other. *	Total.
	£	£	£	£	£
Premiums <i>less</i> Reinsurances, etc. ...	266,106	38,236	25,122	5,029	334,493
Interest, etc. ...	22,643	16,277	2,328	3,628	44,876
Total Revenue ...	£ 288,749	54,513	27,450	8,657	379,369
Claims <i>less</i> Reinsurances, etc. ...	129,825	17,058	18,140	3,025	168,048
Expenses (and Taxation) ...	54,226	12,777	3,762	988	71,753
Total Expenditure ...	£ 184,051	29,835	21,902	4,013	239,801
Surplus ...	104,698	24,678	5,548	4,644	139,568

* Including Treasury Guarantee Fund.

The large surplus includes approximately £52,000 brought to account in the Workers' Compensation Department by reduction of reserve provision made during previous years.

In 1930-31 net premium income amounted to £272,970, including £201,305 in respect of workers' compensation; interest amounted to £47,747; net claims to £121,147 and expenses, including taxes, to £72,369—leaving a surplus of £127,201 on the year's transactions.

The general reserve funds accumulated in five years' operations amount to £713,815, and the assets of the office amounted to £956,125 at 30th June, 1931.

BANKRUPTCY.

The Bankruptcy Act, 1924-30, of the Commonwealth superseded the bankruptcy laws of the States as from 1st August, 1928. Under the Federal law sequestration orders may be made by the Bankruptcy Court on a bankruptcy petition presented either by a debtor or by a creditor. The Court may refuse to make an order on a debtor's petition if his unsecured liabilities are under £50, and creditors may not petition unless the indebtedness amounts to £50. Upon sequestration the property of the bankrupt vests in an official receiver for division amongst the creditors. Provision is made also for compositions and assignments without sequestration and for deeds of arrangement.

Statistics relating to the sequestration and assignment of estates of persons who are unable to pay their debts afford some indication of the fluctuations in the business conditions of the community. At the present time, however, it is not practicable to make comparisons between the transactions in former years under the State law and those recorded since the commencement of the federal system owing to the material alterations made in regard to legal proceedings between debtors and creditors. Moreover the federal records will not provide an entirely satisfactory basis for conclusions until the people have become familiar with these changes.

The following statement shows particulars of the bankruptcies (sequestrations, compositions, assignments, and deeds of arrangement) in New South Wales under the Bankruptcy Act of the Commonwealth in each of the past three years. The records are inclusive of cases in the Federal Capital Territory which for the purposes of the Act is included in the Bankruptcy district of New South Wales:—

Particulars.	Year ended 31st December—		
	1929.	1930.	1931.
	No.	No.	No.
Sequestration Orders—			
Number	500	659	557
Liabilities as estimated by Debtors ... £	729,552	1,101,619	732,477
Assets „ „ ... £	545,724	787,244	486,525
Composition and Assignments without Sequestration—			
Number	28	52	25
Liabilities as estimated by Debtors ... £	25,591	89,627	394,409
Assets „ „ ... £	19,480	81,378	297,673
Deeds of Arrangement—			
Number	319	640	713
Liabilities as estimated by Debtors ... £	709,233	1,495,456	1,750,097
Assets „ „ ... £	662,980	1,506,054	1,983,617
Total—Number	847	1,351	1,295
Liabilities... .. £	1,464,376	2,686,702	2,876,983
Assets £	1,228,184	2,374,676	2,767,815

Data as to the number of bankruptcies and the amount of liabilities of bankrupts each month are published in the "Monthly Summary of Business Statistics."

At any time after he has been publicly examined, or at such times as are prescribed, a bankrupt may apply for an order of discharge releasing him from his debts, and he must apply when the Court orders him to do so. The Court may either grant or refuse an absolute order of discharge, or may suspend its operation for a specified time or may grant an order subject to conditions with respect to future income or property acquired subsequently. During the year ended 31st July, 1931, 96 applications were made for orders of discharge, 95 orders were granted—16 unconditionally, 41 with conditions, and 38 were subject to suspension for periods under two years—and 25 cases were pending at the end of the year.

TRANSACTIONS IN REAL ESTATE.

The procedure in regard to land transfers is regulated under the Real Property Act, 1900 and its amendments. The title under this Act first conferred under the Real Property Act, 1862, is known as "Torrens" title. The main features of the system are transfer of real property by registration of title instead of by deeds, absolute indefeasibility of the title when registered, and protection afforded to owners against possessory claims, as the title under the Act stands good notwithstanding any length of adverse possession. Lands may be placed under the Real Property Act only when the titles are unexceptional. All lands alienated by the Crown since the commencement of the Act are subject to the provisions of the Real Property Act, but transactions in respect of earlier grants are governed by the Registration of Deeds Act unless the land has been brought under the operation of the Real Property Act.

The area of Crown grants registered under the Real Property Act and the total consideration expressed in the grants in each of the past five years are shown below, also the area and value of private lands brought under the Act:—

Year.	Area.			Value.		
	Crown Lands.	Private Lands.	Total.	Crown Lands.	Private Lands.	Total.
	acres.	acres.	acres.	£	£	£
1927	794,400	34,203	828,603	625,071	2,431,050	3,056,121
1928	572,247	47,755	620,002	532,980	2,972,948	3,505,928
1929	549,746	38,986	588,732	436,572	2,417,307	2,853,879
1930	550,461	32,130	582,591	493,781	1,899,281	2,393,062
1931	442,681	8,728	451,409	473,718	801,903	1,275,621

At the close of 1931 lands of a total area of 48,744,758 acres were registered under the Act, the declared value as at date of registration being £115,906,982. The great part of this land consists of Crown grants issued since 1863, but it includes also 2,847,893 acres of land originally under the Registration of Deeds Act, but now under the Real Property Act.

The following table shows for each year of the past decade the amount paid as money consideration on sales of private lands; that is, of lands absolutely alienated with titles registered under the statutes shown. Transfers of conditional purchases and of leases from the Crown are excluded:—

Year.	Conveyances or Transfers.			Year.	Conveyances or Transfers.		
	Under Registration of Deeds Act.	Under Real Property (Torrens) Act	Total.		Under Registration of Deeds Act.	Under Real Property (Torrens) Act.	Total.
	£000	£000	£000		£000	£000	£000
1922	10,710	31,622	42,332	1927	8,857	47,844	56,701
1923	9,632	44,204	53,836	1928	9,364	47,462	56,826
1924	9,417	38,554	47,971	1929	9,500	45,100	54,600
1925	8,874	39,311	48,185	1930	5,123	20,987	26,110
1926	9,851	48,915	58,766	1931	3,213	10,473	13,686

Monthly statistics of sales of real estate are published in the "Monthly Summary of Business Statistics."

As already mentioned, the Real Property Act provides that on the issue of a certificate the title of the person named in the certificate is indefeasible. If a transfer has been made in error, the holder of a certificate cannot be dispossessed of the property concerned unless he has acted fraudulently, therefore provision has been made to enable the Government to compensate persons erroneously deprived of property. An assurance fund was created by means of a contribution of one halfpenny in the pound on the declared capital value of property when first brought under the Act and upon transmission of titles of estates of deceased persons. In 1907 the fund, amounting to £255,059, was amalgamated with the Closer Settlement Fund, to which subsequent contributions have been paid.

REGISTRATION OF MONEY-LENDERS.

Under the Money-lenders and Infants Loans Act, 1905, money-lenders must be registered at the Registrar-General's Office, and they must conduct their business only under their own or their firms' names, and at their registered offices. The term "money-lender" includes every person or company transacting the business of money-lending, but it excludes licensed pawn-brokers, registered friendly societies, institutions incorporated by special Act of Parliament to lend money, and banking and insurance companies. The number of registrations and renewals during the year 1931 was 95.

MORTGAGES OF REALTY AND PERSONALTY.

Mortgages, except those regulated by the Merchant Shipping Act, may be registered at the Registrar-General's Office, but there is a large number of unregistered mortgages of which records are not obtainable.

Mortgages of land are registered under the Registration of Deeds Act or the Real Property Act, according to the title of the property at the date of mortgage. The consideration given generally represents the principal owing, but in some cases it stands for the limit within which clients of banks and of other loan institutions are entitled to draw.

Liens on wool, mortgages on live stock, and liens on growing crops are registered under a special Act. Mortgages on live stock are current till discharge, and liens on wool mature at the end of each season, terminating without formal discharge. The duration of liens on agricultural and horticultural produce may not exceed one year.

Mortgages on personalty (other than ships and shipping appliances), wool, live stock, and growing crops are registered at the office of the Registrar-General in terms of the Transfer of Records Act, 1923, which was proclaimed on 18th October, 1925. Previously they had been filed at the Supreme Court. A bill of sale comprising household furniture actually in use by husband and wife living together is ineffective unless the consent of the wife or the husband of the maker or the giver of the bill is endorsed thereon. The law requires that each document must be filed within thirty days after it is made or given, otherwise the transaction is void as against execution creditors and against the official assignee or the trustee of a bankrupt estate. The registration of a bill of sale must be renewed every twelve months, and in order to prevent fraud and imposition the records are open to the inspection of the public. Information is not readily available to show the total amount of advances made annually on bills of sale.

Mortgages of registered British vessels are arranged under the Imperial Merchant Shipping Act of 1894.

Particulars of the mortgages of land, crops, wool, and live stock effected during each of the last five years, are shown below.

Year.	Mortgages of Land.		Mortgages on Crops, Wool, and Live Stock.			
	Number.	Consideration.	Number.			Consideration.
			Crops.	Wool.	Live Stock.	
		£				£
1927	48,868	50,624,554	5,190	3,170	4,223	5,205,903
1928	50,035	47,723,870	10,259	3,614	4,614	6,266,633
1929	50,841	48,420,657	7,211	3,709	4,481	6,451,596
1930	36,402	35,037,786	13,542	4,508	4,453	9,842,968
1931	21,959	18,790,164	12,377	5,565	6,437	10,739,592

The amounts shown under the heading "Consideration" include only the cases in which a specific amount is stated in the deeds, whether the amount was actually advanced or not. Where the sum advanced is liable to fluctuation, it is usual to insert the words "valuable consideration" or "cash credit," etc., instead of a definite sum. In view of the number of mortgages in which the amount is omitted, it is probable that the totals are understated. Complete records of discharges and foreclosures are not available.

The rights of mortgagees have been restricted by the Moratorium Act passed in December, 1930, and amended in the following year. Without leave of a competent court, a mortgagee may not demand payment of principal moneys—nor of interest in the case of mortgages of real estate; he may not exercise his power of sale, nor foreclose. The mortgagee is not precluded from entering into possession of property without an order of the court, if interest or rates are in arrears for at least two years, or if the

mortgagor has failed to observe conditions as to the insurance, maintenance, or preservation of the property, but in any such case the mortgagor may apply within three months for an order of the court requiring the mortgagee to vacate the property. The time for the repayment of principal moneys is extended to February, March, or April, 1933, and in cases of hardship the court may grant further extension. Except in cases where such extensions have been granted, the moratorium in respect of mortgages will expire on 30th April, 1933. Special provisions of the Act apply to hire purchase agreements.

PRIVATE WEALTH.

Estimates of the wealth of New South Wales at intervals since 1891 were reviewed in detail in the 1921 issue of the Year Book, and the following statement supplies a summary of the estimates relating to private wealth at ten-year intervals since 1901 and in 1925.

Year.	Estimated Value.	
	Total.	Per Head.
	£	£
1901	368,568,000	270
1911	553,816,000	333
1921	947,930,000	450
1925	1,132,000,000	498

Estates of Deceased Persons.

Some information relating to the distribution of wealth may be gleaned from returns relating to the estates of deceased persons which are valued for the purpose of assessing death duties. In accordance with the provisions of the Stamp Duties Act the estates are deemed to include all the property of the deceased persons which is situated in New South Wales, including property which, within three years prior to death, was transferred as a gift, or vested in a private company or trust in consideration of shares or other interest, and moneys payable under life assurance policies, etc.

The following table shows the number of estates and the value as assessed for probate duty during the ten years ended 30th June, 1931, including intestate and other estates administered by the Public Trustee:—

Year ended 30th June.	Estates.	Amount.	Year ended 30th June.	Estates.	Amount.
	No.	£		No.	£
1922	5,458	13,883,674	1927	7,064	18,138,133
1923	5,681	15,441,378	1928	7,749	21,819,953
1924	6,281	16,429,860	1929	7,494	24,548,457
1925	6,410	17,970,385	1930	8,406	25,002,546
1926	6,909	18,390,924	1931	7,332	20,562,001

A rough test of the diffusion of wealth may be made by relating the number of people who died possessed of property to the total number of deaths, as in the following statement. The figures in this and in the succeeding table are exclusive of estates administered by the Curator of Intestate Estates for the years prior to 1911, and the figures for 1919 and subsequent years indicate the relation between the number of deaths in the calendar year stated and the number of estates on which probate was granted in the twelve months ended six months later. The particulars showing estates in calendar years are not available since 1918, and probate is not granted usually until several months after the death of a testator:—

Period.	Proportion of Deceased Persons with Estates per 100 Deaths.	Period.	Proportion of Deceased Persons with Estates per 100 Deaths.
1880-84	11·0	1910-14	22·9
1885-89	11·6	1915-19	30·1
1890-94	13·2	1920-24	29·0
1895-99	14·9	1925-29	31·5
1900-04	17·0	1930	34·5
1905-09	19·1		

The figures indicate a wide diffusion of property, but the deaths include those of a large number of minors at ages when the proportion of property owners is small. The next table shows the proportion of estates per 100 deaths of adult males, and as a large number of women are possessors of property in their own right, the ratio of estates to the deaths of adults of both sexes.

Period.	Ratio of Estates per 100 Deaths of Adult Males.	Ratio of Estates per 100 Deaths of Adult Males and Females.	Period.	Ratio of Estates per 100 Deaths of Adult Males.	Ratio of Estates per 100 Deaths of Adult Males and Females.
1880-84	34·6	22·3	1910-14	56·6	34·0
1885-89	37·5	23·8	1915-19	71·3	42·1
1890-94	41·2	25·8	1920-24	68·1	39·3
1895-99	42·7	26·2	1925-29	1·6	41·0
1900-04	46·0	27·8	1930	77·4	44·1
1905-09	48·8	29·2			

The foregoing figures include the estates of persons who died abroad, but usually the number is not sufficient to cause an appreciable degree of error. The proportions during the war period, however, were increased considerably by reason of the inclusion of a large number of estates left by members of the naval and military forces, and the deaths which occurred abroad were not included in the number on which the ratios shown in the table are based. Making due allowance for the deaths of absentees, it is apparent that the proportion of property-owners in the State has increased.

An indication of the proportionate distribution of wealth may be gained from an analysis of the value of the estates of deceased persons, and in the following statement the estates on which probate was granted during the ten years ended 30th June, 1931, have been graded according to value:—

Value of Estate.	Number of Deceased Persons leaving Property.	Value of Estates of Deceased Persons.	Proportion in each Group.	
			Number.	Value.
		£	Per cent.	Per cent.
Under £1,000	39,830	14,412,742	57·90	7·50
£1,000 to £5,000	21,424	43,096,532	31·15	22·42
£5,000 to £12,500	4,554	34,951,264	6·62	18·19
£12,500 to £25,000	1,863	31,079,947	2·71	16·17
£25,000 to £50,000	708	24,970,715	1·03	12·99
Over £50,000	405	43,676,111	0·59	22·73
Total	68,784	192,187,311	100·00	100·00

The average value per estate during the period was £2,794, but of the property-owners who died 58 per cent. possessed less than £1,000, the total value of their property being 7·5 per cent. of the aggregate. More than half the property devised was contained in 4 per cent. of the estates.

PRIVATE INCOMES.

Formerly the narrow scope of the State income-tax and latterly the inadequacy of statistical data made available concerning incomes assessed for purposes of State income tax rendered it impossible to formulate estimates of the national income, and, for various reasons, the information published by the Commissioner of Federal Taxation has been of very limited assistance. However, satisfactory results were obtained for the year 1920-21 by using the returns of occupations and breadwinners obtained at the census of 3rd April, 1921, in conjunction with statistics relating to income derived during the year ended 30th June, 1921, published by the Federal Commissioner of Taxation. An estimate based on these data was set forth in detail in the 1924 issue of this Year Book.

A comparative statement of estimates of the incomes in various years from 1892 to 1926 is shown below:—

Year.	Net Income of Resident Individuals.	Undistributed Income of Local Companies, etc.	Income accruing to absentees.		Private Income derived in New South Wales.
			From Private Investments and Property.	From investment in Government Loans. †	
	£	£	£	£	£
1892	*	*	3,050,000	1,870,000	68,270,000
1898	57,649,000	2,250,000	2,530,000	1,975,000	64,404,000
1901	*	*	2,832,000	1,976,000	66,912,000
1914-15	102,100,000	*	*	3,100,000	114,100,000
1920-21	187,800,000	10,300,000	3,400,000	6,700,000	208,200,000
1925-26†	234,000,000	16,500,000	3,500,000	8,100,000	262,100,000

* Not available.

† Commonwealth and State.

‡ Subject to revision.

The estimate of 1892 relates to a year in which the financial boom had reached its highest point and the income of that year was consequently inflated. In 1898 and 1901 the State was slowly recovering from an industrial depression consequent on the financial crisis of 1893 and a succession of adverse seasons. The income of the year 1914-15 was affected by the dislocation caused by the outbreak of war and by the occurrence of a very bad season.

The decrease in the amount of income derived in the years 1898 and 1901 as compared with 1892 may be readily understood. The subsequent increase has been partly nominal owing to depreciation in the purchasing power of money, though it is certain that the growing prosperity of the community has had a very favourable influence.

The following table shows the number of persons deriving income, their proportion to the total population of the State, and the average amount of income derived per inhabitant and per person deriving income:—

Year.	Resident Persons receiving Income.	Proportion of Persons receiving Income to Total Population.	Average amount of Income per person receiving Income. †	Average amount of Income per Inhabitant. †	Proportion of Total Income received by Absentees.
	No.	Per cent.	£	£	Per cent.
1892	446,190	37·4	139·8	53·8	7·2
1898	534,315	40·4	112·1	45·6	7·0
1901	*	*	"	45·4	7·2
1914-15‡	788,600	41·7	138·2	57·3	*
1920-21	902,400	42·9	219·5	94·8	4·9
1925-26§	995,200	42·9	251·7	109·0	4·4

* Not available.

† Excluding absentees and their income.

‡ The figures for 1914-15 relate to the incomes of persons resident in, and companies with head offices in, New South Wales.

§ Subject to revision.

With the growth of population the number of persons receiving income has shown a very pronounced increase and its proportion to the total population has risen steadily. This is probably due, in part, to the increase in the employment of women in commercial and industrial occupations, but it is also a consequence, in part, of the increase in the proportion of adults in the population.

Existing data as to price levels are insufficient to enable a satisfactory measure of comparison to be made between the real income of post-war and earlier years, because of the difficulty of properly assessing the effect of the inflation of prices, which reached a maximum in 1920.

The foregoing estimates represent, as nearly as may be, the sum of the net incomes derived by private individuals and by companies from sources within New South Wales. As such they contain some duplication in respect of amounts paid from the proceeds of taxation to old-age, invalid and war pensioners and to bondholders in war and other Government loans. On the other hand, appreciable amounts of income derived by the various Governments from State lands, forests and mines and from governmental business enterprises are excluded from account.

LOCAL GOVERNMENT.

GROWTH OF LOCAL GOVERNMENT.

THE first step towards Local Government in New South Wales may be said to have been taken in 1840, when the Parish Roads Act was passed, authorising proprietors of lands adjacent to or within 3 miles of parish roads to elect trustees, who were empowered to levy rates, establish tolls, and borrow money for making or repairing such roads and the bridges thereon. Particulars of the subsequent development will be found in the Year Book for 1922.

Local Government in New South Wales is conducted under the provisions of the Local Government Act of 1919 and its amendments, except in the City of Sydney, where it is regulated by the Sydney Corporation Acts. Slight modification has been made in the system by the Main Roads Act and other laws. The system extends over the whole of the Eastern and Central Land Divisions of the State, with the exception of the Federal Capital Territory. The Murrumbidgee Irrigation Area also was excluded until the year 1928. The sparsely-populated Western Division, embracing two-fifths of the area of the State, is unincorporated, with the exception of the portions included in the municipalities of Bourke, Brewarrina, Broken Hill, Cobar, Wentworth, and Wilcannia, and parts of the municipalities of Balranald and Hillston which lie within its boundaries.

Local governing areas are of two main kinds, viz., municipalities and shires. At the end of 1930 there were 181 municipalities, including the City of Sydney, and their aggregate area was 1,570,469 acres. The smallest municipality is Darlington, a suburb of Sydney, with 54 acres, and the largest is Central Illawarra, 83,054 acres. There were 138 shires, extending over an area of about 181,500 square miles. The smallest is Woy Woy, 48 square miles, which was separated from Erina Shire on 1st August, 1928. The largest is Lachlan, with headquarters at Condobolin, 5,883 square miles. Certain of the municipalities and shires have combined to form county councils, which are local governing bodies, constituted to administer specific services.

In this chapter the particulars relating to municipalities and shires are shown conjointly in a summarised form and separately in greater detail. In making a distinction between the metropolitan and country districts, the metropolitan district, unless otherwise specified, is the area defined by Schedule IV of the Local Government Act of 1919. It embraces the municipalities of Auburn, Bankstown, Dundas, Ermington and Rydalmere, Granville, Lidcombe, and Parramatta, and the shires of Hornsby, Sutherland, and Warringah, in addition to the City of Sydney and forty-one suburban municipalities, including Ku-ring-gai, formerly a shire, which was proclaimed as a municipality as from 1st November, 1928.

Sydney Corporation Acts.

In terms of the Sydney Corporation Act of 1902, and its amendments, the local government of the City of Sydney is vested in the City Council, which is composed of fifteen aldermen, three for each of the five wards. The Lord Mayor is elected annually by the aldermen from their own number.

Elections are held every third year. In November, 1927, however, an Act was passed which placed the administration of the city in the hands of a temporary Commission until June, 1930, when a new council was elected for a term dating from 1st July, 1930, to 31st December, 1932.

The functions of the Council, exercised during its term of office by the Commission, include the maintenance of the streets and other public ways of the city, though the traffic is regulated by the police. Similarly the Council is empowered to levy general, special, and street watering rates; to establish public markets; to regulate street selling, the erection of hoardings, matters relating to public health and sanitation, and the inspection of food; to resume land for the purpose of remodelling or improving areas and for widening streets, etc.; to erect and let dwellings; to maintain free-lending libraries; to control parks; and generally to make by-laws for the good government of the city.

The Council exercises authority to generate and supply electricity for public and private purposes; to elect two members of the Board which administers the metropolitan water supply and sewerage services, one being elected in every second year to hold office for a period of four years; and, at the triennial elections of members of the Board of Fire Commissioners of New South Wales, to vote at the election of one member to represent the City of Sydney and the councils of the suburban municipalities.

The right to be enrolled as a voter at elections of the City Council, extends to adult British subjects by reason of (a) the ownership or (b) the occupation of property. The qualification of ownership is held by persons who own a freehold interest in possession of property of a yearly value of £5 and upwards in any ward, or a leasehold interest in property of a yearly value of £25 and upwards. A person with this qualification may be placed on the roll for every ward in which he is so qualified, but may not then be enrolled in any ward by virtue of any other qualification.

The qualification by reason of occupation is held in respect of a ward by those who have occupied continuously for a period of six months a house, shop, or other building of a yearly value of £10 in that ward, also by lodgers who have occupied lodgings of a yearly value of £10 for a period of six months continuously in the same dwelling-house in the ward. In the case of joint occupation as lodger or otherwise only one occupier may be placed on the roll for every £10 of the annual value of the premises. Any such person may be placed on the roll for one ward only, and if he has more than one such qualification he may choose the roll on which his name shall be placed.

Enrolment entitles the elector to one vote in each ward in which he is enrolled. Any person qualified to vote is eligible for election as an alderman unless disqualified under the provisions of the Sydney Corporation Act.

System of Local Government.

The Local Government Act of 1919 and its amendments, with ordinances thereunder, are administered by the Minister for Local Government, who is in charge of a State Department. Each municipality or shire is governed by a council, which is elected for a term of three years. A municipal council must consist of not less than six nor more than fifteen aldermen, and a shire council of not less than six nor more than nine

councillors, each riding being represented by an equal number of councillors. Each municipal council elects a mayor annually from amongst its members, and each shire council a president. A council may pay to its members reasonable out-of-pocket expenses for travelling, and may pay an allowance to its mayor or president, but otherwise the services of aldermen and councillors are gratuitous.

Every adult natural-born or naturalised British subject of either sex is qualified to be enrolled as an elector, provided he or she is either a landowner, a rate-paying lessee, or has been continuously for the three months preceding the day prescribed for enrolment an occupier of ratable land of the yearly value of £5 or upwards, or of land by virtue of a miner's right or business license, or is in occupation of Crown land and pays rent. By the Local Government (Amendment) Act, 1927, the franchise was extended to all adult residents of a ward or riding who have been residing there continuously for a period of six months. Persons may be enrolled and may vote in respect of each ward or riding in which they are qualified as owners or as rate-paying lessees, but not more than once in respect of the same ward or riding. A person qualified as owner or as rate-paying lessee in a ward or riding who is qualified also as an occupier in another ward or riding of the same municipality or shire may not be enrolled under both qualifications. He may choose the ward or riding in which he desires to be enrolled, and failing due notice of his choice he is enrolled where he is qualified as owner or lessee. A person qualified as occupier in more than one ward or riding may be enrolled in one only.

Unless disqualified by the Act, every elector is qualified for a civic office. The powers of the councils are extensive; they were stated in detail in the 1922 issue of the Year Book at page 332.

A municipality may be proclaimed under the Local Government Act as a city if it is an independent centre of population with an average population of at least 20,000 people, and an average annual income of at least £20,000. Sydney, Armidale, Bathurst, Goulburn, Grafton, and Newcastle were proclaimed as cities under the Crown Lands Act in 1885, and Broken Hill was proclaimed under the Local Government Act in 1907.

In the shires, urban areas may be established upon proclamation by the Governor if the majority of the electors in the locality favour the project. In such cases the council of the shire exercises within each urban area the powers of the council of a municipality. Except in the shires of Hornsby, Sutherland, and Warringah, urban committees may be appointed to exercise within the urban areas certain powers of the council, and to expend money raised by a local rate levied by the council upon the request of the urban committee.

In some cases boards or trusts have been constituted under special Acts to conduct operations which are regarded usually as belonging to the sphere of local government. A brief description of their activities is given later.

Provision is made for joint action by local governing bodies in regard to undertakings of magnitude or those which benefit more than one area. For such purposes county councils may be constituted in terms of the Local Government Act, or joint committees may be arranged under the ordinances.

Any group of local areas or of parts thereof may be constituted by proclamation as a county district, in which a county council, consisting of delegates from the areas concerned, exercises such powers as may be delegated to it. Where powers relating to the destruction of aquatic pests have

been delegated, the county council may be assisted by subsidies from Consolidated Revenue, if the funds be voted by Parliament. The subsidies are payable in six half-yearly instalments, viz., for the first and second half-years, £1 for every £1 of revenue collected for the destruction of aquatic pests; for the third and fourth half-years respectively, 15s.; for the fifth and sixth, 10s.

At the end of 1930 four county districts were in existence. The St. George county district embraces the municipalities of Bexley, Hurstville, Kogarah, and Rockdale. It was formed for the purpose of establishing an electric lighting service.

The Richmond River county district consists of the municipalities of Ballina, Casino, Coraki, and Lismore, and the shires of Byron, Copmanhurst (part only), Gundurimba, Kyogle, Terania, Tintenbar, Tomki, and Woodburn. It was established for the eradication of the water hyacinth pest.

The Clarence River county district was incorporated by the municipalities of Grafton, South Grafton, and Ulmarra, and the shires of Copmanhurst (part only), Nymboida, and Orara. It was constituted principally for the purpose of carrying out the Nymboida hydro-electric scheme.

The Southern Riverina county district was formed by the municipalities of Wagga and Corowa and the shires of Coreen and Culcairn to establish a quarry at Culcairn for the supply of metal for roadmaking.

Extent of Local Government.

Prior to 1906, when the shires were constituted, the extent of the local governing areas was only 2,830 square miles. At the end of 1930 the incorporated area was about 184,020 square miles, or nearly 60 per cent. of the total area of the State (309,432 square miles). The population in municipalities and shires as at 31st December, 1930, was 2,487,620, or 99 per cent. of the total population.

The area, population, and unimproved capital value of ratable property in the incorporated areas as at 31st December, 1930, are stated below:—

Local Areas.	Area.	Population.	Unimproved Capital Value.
Metropolitan Area—	acres.	No	£
City of Sydney	3,244	109,500	†60,896,353
Other Municipalities	150,704	1,151,890	118,862,033
Shires	284,160	49,420	10,218,243
Total, Metropolitan*	438,108	1,310,810	189,966,609
Country—			
Municipalities	1,416,521	531,130	40,673,365
Shires	115,936,000	645,680	153,635,454
Total, Country	117,352,521	1,176,810	199,308,819
Grand Total	117,790,629	2,487,620	389,275,428

* Schedule IV, Local Government Act, 1919. † Excluding Federal Government and other non-ratable properties.

The area of the country shires as shown above includes 28 square miles of Federal Territory at Jervis Bay, but the Federal Capital Territory, containing an area of 912 square miles, is not included.

The improved capital value of ratable property in the City of Sydney, as at 31st December, 1930, was £221,856,440, and the assessed annual value £9,553,692. In the other municipalities included in the metropolitan area, as defined by Schedule IV of the Local Government Act, the improved

capital value was £330,381,039 and the assessed annual value was £25,246,454. In the three shires in the metropolitan area the corresponding values were improved £20,484,205 and annual £1,299,665, so that the improved capital value of the metropolitan area was £572,721,684 and the assessed annual value £36,099,811. In the country municipalities the improved value was £128,768,077, and the annual value £10,309,586. Similar particulars are not available for the country shires.

The financial position of the municipalities and shires in 1930 was as follows:—

Local Areas.	Total Revenue.			Total Expenditure.	Total Liabilities.	Total Assets.
	Rates Levied.	Other.	Total.			
Metropolitan Area—	£	£	£	£	£	£
City of Sydney	1,148,778	3,178,655	4,327,433	4,240,286	28,393,820	29,708,530
Other Municipalities	2,641,953	974,429	3,616,382	3,975,593	7,024,170	3,618,384
Shires	212,543	178,269	390,812	358,696	953,089	645,636
Total, Metropolitan*	4,003,274	4,331,353	8,334,627	8,574,580	36,371,079	33,970,549
Country—						
Municipalities	1,321,861	1,945,047	3,266,908	3,059,937	7,372,659	9,593,186
Shires	1,506,987	2,070,059	3,577,046	3,307,404	1,719,936	2,408,492
Total, Country	2,828,848	4,015,106	6,843,954	6,367,341	9,091,995	12,001,678
Grand Total ..	6,832,122	8,346,459	15,178,581	14,941,921	45,463,074	45,972,227

* Schedule IV, Local Government Act, 1919.

The revenue shown under "Other" is mainly derived from business undertakings, such as lighting services, etc. Particulars of these and of the operations of individual councils are published annually in the Statistical Register of New South Wales. The revenue and expenditure shown above include the main roads and harbour bridge rates, collected by the councils for the Main Roads Board and the State Treasury respectively.

VALUATION OF PROPERTY IN LOCAL AREAS.

The revenue of local governing bodies is derived mainly from the taxation of land and improvements thereon, and as the rates of taxation are levied on the unimproved, improved, or annual value, it is necessary that periodic valuations be made of all ratable property. The valuations are made at intervals not exceeding three years, and prior to the enactment of the Valuation of Land Act in 1916 they were made by valuers appointed by the councils. This system had remained in operation for many years without any centralised control to secure uniformity, but the Act of 1916 made provision for the valuation of the lands of the State by the Valuer-General. The Act prescribed that rates and taxes based on land values must be levied on the values determined by the Valuer-General, and that the power of a council to assess values ceased when the Valuer-General delivered a valuation list. A council may, however, ask the Valuer-General to re-value any land which it considers has not been valued correctly, and pending action by the Valuer-General the valuations are made by the council's assessors as formerly. Valuations either by the Valuer-General or the councils' valuers are subject to review on appeal to the Land and Valuation Court, described in the chapter of this Year Book relating to Law Courts.

This system was modified by the Local Government Act, 1924, to provide that the council of a shire, other than the Blue Mountains Shire or any shire wholly or partly within the County of Cumberland, may decide whether the valuation should be made by the Valuer-General under the Valuation of Land Act, 1916, or by a valuer appointed by the council.

In municipalities the valuation must show the unimproved capital value, the improved capital value, and the assessed annual value of ratable property. In the shires the law requires the valuation of the unimproved capital value only, the determination of the improved capital value and of the assessed annual value being optional, except in urban areas, in which the assessed annual value must be determined. The Valuer-General usually determines such values for shires within his jurisdiction.

The unimproved capital value is defined, in both the Local Government Act and the Valuation of Land Act, as the amount for which the *fee-simple* estate in land could be sold under such reasonable conditions as a *bona-fide* seller would require, assuming that the actual improvements had not been made.

The Valuer-General's valuations cover all land except Commonwealth properties, reserves, parks, etc., and unoccupied Crown lands, and the values are on a freehold basis. For purposes of rating, however, the unimproved capital value of Crown lands occupied as pastoral or agricultural holdings is twenty times the rent payable to the Crown during the year preceding the assessment. After the expiry of ten years of the term of leases, lands leased from the Crown with right of conversion to freehold are rated on thirty times the annual rental paid.

The unimproved capital value of mines may be ascertained at the direction of the council, upon the basis of the output, as follows:—

- (1) *Coal and Shale Mines*.—A sum equal to 3s. per ton of large coal and shale, and 1s. 6d. per ton of small coal, on the average annual output during the preceding three years.
- (2) *Other Mines*.—A sum equal to 20 per cent. of average annual value of ore or mineral won during the preceding three years.

In the case of idle or undeveloped mines the unimproved capital value is calculated by multiplying the annual rental, if any, by twenty.

The improved capital value is the amount for which the *fee-simple* estate of the land, with all improvements and buildings thereon, could be sold.

The assessed annual value is nine-tenths of the fair average rental of land, with improvements thereon, but must not be less than 5 per cent. of the improved capital value.

In 1930 Crown lands in the City of Sydney were ratable whether built upon or not, and following properties were exempt, viz., lands vested in and used for the University or any of its colleges; lands vested in the Railway Commissioners or in the Metropolitan Water, Sewerage and Drainage Board; the Sydney Harbour Trust lands unless leased for private purposes; lands vested in trustees for purposes of public recreation, health, or enjoyment; hospitals, benevolent asylums, or other buildings used solely for charitable purposes; buildings used solely for public worship; State schools and schools certified under the Public Instruction Act, and playgrounds in connection therewith.

In terms of the Rating (Exemption) Act, 1931, which commenced on 1st January, 1932; all Crown lands have been exempted from rating except those leased for private purposes or used in connection with a State industrial undertaking. By the same Act the exemption of church and school lands was extended to embrace all lands belonging to religious bodies, including those occupied solely by clergymen or official heads of religious bodies or used for religious teaching or training; all State schools and those certified

under the Public Instruction Act or registered under the Bursary Endowment Act, and playgrounds and teachers and caretakers' residences belonging to or used in connection with these schools.

The underground mains of the gas and hydraulic power companies are ratable. Properties of the Commonwealth Government are not ratable, though a contribution is made to the funds of the Council in respect of part of them.

In municipalities and shires under the Local Government Act all lands, including areas vested in the Railway Commissioners and the Sydney Harbour Trust, were ratable in 1930 except the following:—Lands vested in the Crown or public body or trustees and used for public cemeteries, commons, reserves, or free libraries; lands used for public hospitals, public benevolent institutions, or public charities, or for the University of Sydney or a college thereof; Crown lands which are not occupied or are occupied only by public works in course of construction; church lands belonging to religious bodies, used for public worship, or solely as the clergyman's residence; public roads, streets, wharves, etc; lands belonging to and used for schools registered under the Bursary Endowment Act, or certified under the Public Instruction (Amendment) Act, 1916, including playgrounds belonging to and used in connection with such schools. As from the beginning of the year 1932 Crown lands and church and school properties in areas under the Local Government Act were exempted by the Rating (Exemption) Act, 1931, under the same conditions as in the City of Sydney (see above). Where water is supplied or sewerage or drainage services are rendered, a charge or fee may be imposed in respect of properties thus exempted from rating.

In the following table are shown the aggregate valuations used for assessing rates on ratable property and the value of improvements in local government areas in the year 1928. Complete data as to the value of improvements in shires is not available as only a few of the country shires record the improved capital or assessed annual value, but for the purpose of completing the table, it has been assumed that in the aggregate improvements in country shires are equivalent to the unimproved value.

Division.	Unimproved Value of Ratable Land.			Value of Improvements on Ratable Land.		
	Total.	Average Per Head.	Average Per Acre.	Total.	Average Per Head.	Average Per Acre.
	£000	£	£ s.	£000	£	£ s.
Metropolitan—						
City of Sydney† ...	60,896	556	18,771 18	160,960	1,470	49,617 15
Other Municipalities	118,852	103	788 13	211,529	184	1,403 12
Shires ...	10,218	207	35 19	10,266	208	36 2
Total, Metropolitan	189,966	145	433 12	382,755	292	873 13
Country—Municipalities	40,673	77	28 14	88,094	166	62 4
Shires ...	158,636	246	1 7	158,636‡	246	1 7
Total Incorporated Areas	389,275	156	3 6	629,485	253	5 7

† The figures for the City of Sydney are based on unimproved values assessed in 1927, and improved values assessed in 1930; Federal Government and other non-ratable properties are excluded.

‡ Estimated.

Lands leased from the Crown and assessed on a capitalised rental basis are included above at such capitalised value.

The unincorporated portion of the Western Division contains about 79,600,000 acres, of which 76,000,000 acres are pastoral or agricultural lands held under lease from the Crown at annual rentals. The unimproved capital value of these leaseholds assessed at twenty times the annual rent payable to the Crown would not exceed £3,500,000.

A comparative summary of the unimproved and improved capital values, and the assessed annual value of ratable property, excluding lands coming within the exemptions noted above, is shown in the following statement.

The valuations for the City of Sydney exclude the values of federal and other non-ratable properties and the value of underground mains laid in the city by gas and hydraulic power undertakings which are ratable on the basis of length.

Division.	1921.	1926.	1930.
	£	£	£
Unimproved Capital Value.			
Metropolitan—			
City of Sydney	35,887,412	44,758,056	60,896,333
Other Municipalities*	57,290,654	84,803,345	118,852,033
Shires*	4,875,448	7,601,004	10,218,243
Total Metropolitan	98,053,514	137,162,405	189,966,609
Country—			
Municipalities	27,004,608	34,028,277	40,673,365
Shires	123,398,036	143,152,312	158,635,454
Total Country	150,402,644	177,180,589	199,308,819
Total Incorporated Areas	248,456,128	314,342,994	389,275,428
Improved Capital Value.			
Metropolitan—			
City of Sydney	99,647,030	151,528,760	221,856,440
Other Municipalities*	156,849,137	249,835,896	330,381,039
Shires*	9,750,000†	14,821,477†	20,484,205
Total Metropolitan	266,246,197	416,186,133	572,721,684
Country Municipalities	74,565,192	104,126,174	128,768,077
Assessed Annual Value.			
Metropolitan—			
City of Sydney	4,484,118	6,818,794	9,553,692
Other Municipalities*	10,718,438	18,924,404	25,246,454
Shires*	‡	928,218†	1,299,665
Total Metropolitan	‡	26,671,416	36,099,811
Country Municipalities	5,354,867	8,035,997	10,309,586

* Ku-ring-gai is included as a municipality. † Partly estimated. ‡ Not available.

Between 1921 and 1930 the unimproved capital values increased by £140,800,000, or 57 per cent., viz., by £91,913,000, or 94 per cent., in the metropolitan areas; and by £48,900,000, or 33 per cent., in the country districts. The increase in the country shires (excluding that due to the

incorporation of two new shires in the Murrumbidgee Irrigation Area) was nearly £33,400,000, or 27 per cent. As the urban and residential lands in shires are not relatively large, this represents roughly the assessed increment of rural land values in the period. In making comparisons, however, allowance should be made for the operations of the Valuer-General in revaluing lands which had been undervalued formerly, therefore it is probable that the actual increase was not so great as the increase indicated by the figures in the foregoing statement.

The ratio of assessed annual value to improved capital value in 1930 was 4.3 per cent. in the City of Sydney, 7.6 per cent. in other metropolitan areas, and 8 per cent. in country municipalities. As the assessed annual value is nine-tenths of the actual annual value, the proportions per cent. of annual value to improved value were 4.8 per cent., 8.4 per cent., and 8.9 per cent., respectively.

It is the practice in the City of Sydney to derive the aggregate improved capital value of properties by capitalising the fair average rental at 5 per cent. For this reason the ratio of the assessed annual to the capital values of city properties is lower than the ratios for properties in suburban and country municipalities. It is noteworthy, however, that the appreciation of value, which may be regarded as part of the return on capital value, has been more rapid in the city than in suburban and country municipalities.

The value of improvements, ascertained by deducting the unimproved from the improved values, indicates that very great increases have occurred in all divisions:—

Areas.	Value of Improvements.		
	1921.	1926.	1930.
Metropolitan—	£	£	£
City of Sydney	63,760,000	106,771,000	160,960,000†
Other Municipalities*	99,558,000	165,033,000	211,529,000
Shires*	4,875,000	7,220,000	10,266,000
Total, Metropolitan	168,193,000	279,024,000	382,755,000
Country Municipalities	47,560,000	70,098,000	83,094,000
Total Municipalities and Metropolitan Shires	215,753,000	349,122,000	470,849,000

* Ku-ring-gai is included as a Municipality.

† Based on unimproved values assessed in 1927, and improved values assessed in 1930.

Valuations by the Valuer-General.

Up to the end of the year 1931 valuations had been issued by the Valuer-General in respect of 115 municipalities and 35 shires, including one shire valued in 1924 in which the more recent valuations have been made by the council in terms of the amending legislation of 1924. All the districts in the County of Cumberland have been valued by the Valuer-General except the City of Sydney. The assessments are made under the Valuation of Land Act, which provides that all lands shall be valued on a freehold basis, and that all lands shall be valued except those owned by the Commonwealth Government, unoccupied lands owned by the State Government, and Crown reserves, parks, etc. When preparing the rate books of the council,

adjustments are made to provide for the exclusion of non-ratable properties and for the difference between the value of the fee-simple and the capitalised-rent value of leases held from the Crown.

It has been the usual practice to revise the valuations triennially, but in view of a marked depreciation many new valuations have been revised during the last two years.

TAXATION BY LOCAL GOVERNING BODIES.

The total revenue in 1929 of all the local governing bodies from rates and charges amounted to £9,599,461, equal to £3 17s. 11d. per head of the population residing in the taxable districts. In 1930 the amount was £9,869,435, or £3 19s. 4d. per head. These amounts include rates levied by the municipalities and by shires and rates and charges levied by the various Water and Sewerage Boards referred to later.

The collections by the councils include special and loan rates, Harbour Bridge and main roads rates, amounting to £1,524,897 in 1929 and £1,476,567 in 1930. Of these sums, £256,043 in 1929 and £278,497 in 1930 were levied in the shires.

The distribution of the total amounts is as follows:—

Local Bodies.	1929.		1930.	
	Rates and charges.	Per head of population living in local areas.	Rates and charges.	Per head of population living in local areas.
	£	£ s. d.	£	£ s. d.
Municipalities (including City of Sydney)	4,839,237	2 14 7	5,112,592	2 17 1
Shires	1,679,538	2 8 7	1,719,530	2 9 6
†Metropolitan water and sewerage charges	2,753,690	1 15 9	2,704,088	1 15 1
†Hunter District water and sewerage charges	320,185	1 10 9	326,483	1 10 8
Grafton and South Grafton Water Board	6,811	1 0 0	6,742	0 19 5
Total	£ 9,599,461	3 17 11	9,869,435	3 19 4

† Years ended 30th June, 1930 and 1931.

The total amount per head of population was £1 6s. in 1911, and £2 11s. 2d. in 1921.

A comparative statement of the local government rates and charges levied in each of the last five years will be found on pages 634 and 635 of this Year Book, where they are considered in relation to the total taxation imposed in the State.

City of Sydney—Rating.

In 1916 the City Council adopted the principle, embodied in the Local Government Act of 1906, of levying rates for general expenditure upon the unimproved value. Formerly the rates had been levied on the annual rental, with an additional rate since 1909 on the improved capital value. The maximum rate is fixed at 6d. in the £. The exemption from rating was removed from Crown lands in 1916, and the council was authorised to collect rents in respect of gas and hydraulic mains, etc., in the streets, which cannot be assessed on the basis of unimproved value.

In 1923 and subsequent years a rate of $\frac{1}{2}$ d. in the £ on the unimproved capital value was levied in respect of the Sydney Harbour Bridge, and since 1925 a rate of $\frac{1}{2}$ d. in the £ for main roads.

The following table shows the rates struck and the total amounts levied by the City Council annually since 1923. The amount of rates levied in earlier years is shown in the 1922 issue of the Year Book at page 341.

Year.	City Fund.		Main Roads Rates.	Harbour Bridge Rates.	Total Rates Levied.
	Rate struck in the £ on u.c.v.	Total Amount Levied.			
	pence.	£	£	£	£
1923	4 $\frac{1}{2}$	713,018	...	75,054	788,072
1924	3 $\frac{1}{2}$	651,338	...	93,048	744,386
1925	5 $\frac{1}{2}$	652,397	...	93,199	745,596
1926	3 $\frac{1}{2}$	655,921	46,201	93,246	795,368
1927	3 $\frac{1}{2}$	826,287*	63,537	127,058	1,016,882
1928	3 $\frac{1}{2}$	842,463	63,724	127,447	1,033,634
1929	3 $\frac{1}{2}$	959,112	63,107	126,270	1,148,489
1930	3 $\frac{1}{2}$	959,400	63,068	126,310	1,148,778

* Includes £4,906 other rates.

The rate struck for 1931 was 3 $\frac{1}{2}$ d. in the £.

Suburban and Country Ratings.

Suburban and country municipalities may levy rates of four kinds, viz., general, special, local, and loan rates, and certain of them may be required to levy special rates in respect of main roads and the Sydney Harbour Bridge. A general rate of not less than 1d. in the £ must be levied on the unimproved capital value, but if this minimum rate is more than sufficient to meet the requirements of the area the Governor may allow the council to levy a lower rate. The maximum amount leviable in a municipality is limited as follows:—(a) For the general rate alone—the amount yielded by a rate of 2d. in the £ on the unimproved capital value and 1s. 6d. on the assessed annual value taken together; (b) the total of all rates (except water local and sewerage local rates) the yields of 2d. on the unimproved capital value and 2s. on the assessed annual value; (c) water local rate alone or sewerage local rate alone, the yield of 2s. in the £ on assessed annual value of land ratable to the local fund. A general rate exceeding 3d. in the £ on unimproved capital value may not be levied upon a mine worked for minerals other than coal or shale. In special cases where the rate as stated above would yield less than the amount required for the purpose of the rate, the Governor may alter the limit by proclamation.

In 1930 the general rates levied in the metropolitan municipalities ranged from 2 $\frac{1}{2}$ d. to 6 $\frac{1}{2}$ d. In the country municipalities the general rate ranged from 1d. to 18d. on the unimproved value, but in the case of the municipality in which this rate was 1d. there was an additional general rate of 1 $\frac{1}{2}$ d. on the improved value, and in one with a general rate of 5d. on the unimproved value there was an additional rate of 2 $\frac{1}{2}$ d. on the improved value.

The first year in which the general rate was levied on the unimproved capital value was 1908, and a comparison of the general rates struck for various years since then is shown below.

The figures for the metropolitan municipalities exclude the City of Sydney but include all those municipalities in the metropolitan district as defined by Schedule IV of the Local Government Act of 1919, and listed on page 743 of this Year Book:—

General Rate.	Number of Municipalities.*									
	1908.		1916.		1921.		1926.		1930.	
	Metro- politan.	Coun- try.	Metro- politan.	Coun- try.	Metro- politan.	Coun- try.	Metro- politan.	Coun- try.	Metro- politan.	Coun- try.
1d. under 2d. ...	4	28	2	21	...	5	...	3	...	1
2d. „ 3d. ...	11	36	5	28	1	9	1	14	2	13
3d. „ 4d. ...	21	38	18	41	7	18	7	20	13	22
4d. „ 5d. ...	9	26	19	29	20	33	22	28	13	22
5d. „ 6d. ...	3	9	3	16	18	28	16	24	16	23
6d. „ 7d. ...	...	2	...	4	1	23	1	25	4	24
7d. „ 8d. ...	...	2	...	1	...	11	...	8	...	9
8d. „ 9d. ...	...	...	...	1	...	6	...	6	...	11
9d. and over ...	...	1	...	1	...	3	...	4	...	7
Total ...	48	142	47	142	47	136	47	132	48	132
Amount of General and Additional General Rate levied* £	547,110		954,340		1,508,332		2,111,493		2,892,054	

* Excluding City of Sydney.

There has been a tendency towards higher rating, particularly in the country municipalities, where the rise in assessed value of ratable property has been less than in the suburbs. The number of country municipalities in 1926, as stated in the table, does not include Cessnock, which was part of Cessnock Shire until 1st November, 1926.

One hundred and fifty-one municipalities, other than the City of Sydney, levied rates other than the general rate, *e.g.*, special, local, and loan rates. The amount of such rates levied, including the Sydney Harbour Bridge rate and the rates requisitioned by the Main Roads Board, was £1,142,584 in 1929 and £1,198,070 in 1930.

The amount of rates levied by the five suburban municipalities ratable in connection with the Sydney Harbour Bridge was £34,077 in 1926, and the amount levied by six municipalities (Ku-ring-gai being included) was £54,015 in 1930. The rates requisitioned from municipalities by the Main Roads Board amounted to £179,711 in 1926, to £239,535 in 1929, and to £257,056 in 1930. These amounts are exclusive of contributions by the City of Sydney.

Shire Ratings.

In the shires the kinds of rates which may be levied are similar to those in municipalities. They are levied upon the unimproved capital value except in a few cases where a small special rate has been imposed on the improved value. The minimum general rate is the same as in the municipalities and the maximum amounts leviable are as follows:—(a) For the total of the general rate only—the sum yielded by a rate of 2d. in the £ on the unimproved capital value of all ratable land in the shire; (b) for the total of all rates in urban areas (other than general, water local, and sewerage local) the yield of 2s. in the £ on the assessed annual value of ratable land in the urban area; (c) the total of water local alone or sewerage local

alone, the yield of 4d. in the £ on assessed annual value. As in municipalities the limits may be altered by proclamation if after inquiry it appears that the limit is less than is needed for the purposes of the rate.

Particulars relating to the general rates levied in the shires in various years since 1907, the first year the shires were in operation, are shown in the following table:—

General Rate in £.	Shires.						1930.	
	1907.	1911.	1916.	1921.	1926.	Number.	Unimproved Capital Value.	
d.							£	
1	1	1	1	...	...	...	...
1 ¹ / ₂	1	3	2	...	...	...	...
2	3	2	5	1	...	...	...
2 ¹ / ₂	...	...	...	...	1	...	...
3	104	64	20	13	7	4	7,315,260	
3 ¹ / ₂	...	3	1	...	1	2	2,394,660	
4	10	23	15	8	4	5	8,807,621	
4 ¹ / ₂	...	1	...	1	...	...	...
5	...	...	...	...	1	...	...
5 ¹ / ₂	12	22	33	12	8	10	18,540,781	
6	...	1	...	1	1	1	1,456,310	
6 ¹ / ₂	...	...	6	7	7	4	8,231,797
7	...	...	...	...	1	1	1,380,170
7 ¹ / ₂	3	14	53	83	78	60	64,582,153	
8	...	...	...	...	3	4	3,513,051
8 ¹ / ₂	...	...	...	...	...	...	...
9	...	...	...	4	14	25	28,022,076
9 ¹ / ₂	...	...	...	...	1	2	1,395,158
10	...	...	...	...	...	1	697,646
10 ¹ / ₂	...	...	...	6	9	19	22,517,014
11	...	...	...	...	...	...	...
Total	134	134	136	136	136	138	168,853,697	
Amount of General and additional General Rates levied	£ 358,751	461,971	633,973	959,446	1,260,618		1,441,033	

The tendency towards higher taxation is very marked. In 1907 the predominant rate of 1d. in the £ was levied in 104 shires and only 25 shires imposed a higher rate, whereas, in 1930, only 27 shires levied a rate lower than 2d., 60 shires levied the rate of 2d., and 51 councils took advantage of the special provisions of the Act, and were allowed, after inquiry, to levy rates beyond that amount.

On 29 per cent. of the ratable property in shires the general rate was under 2d. in the £ in 1930, on 38 per cent. the rate was 2d. and 33 per cent. was subject to even higher rates.

In addition to the general and additional general rates, special, local, or loan rates were levied by 83 shires. The purposes for which these special, local, and loan rates were imposed included the following:—Roads and street improvements and maintenance, water supply, drainage, electricity, street lighting, street watering, sanitary and garbage services, parks, fire brigade, town improvements, and payment of interest, etc., on loans current.

The total amount of general and additional general rates levied in 1930 was £1,441,033, equal to an average rate of 2.05d. in the £, and the special and local rates (including the Sydney Harbour Bridge and Main Roads rates levied in the metropolitan area) amounted to £278,497. These amounts represent the rates actually levied in respect of the year 1930, and do not agree with the amounts shown in the following tables, which include interest on rates in arrears.

The amount of rates levied by the three metropolitan shires ratable in connection with the Sydney Harbour Bridge was £18,110 in 1926, and by two shires ratable in 1930 the amount was £13,477. The rates requisitioned by the Main Roads Board from shires amounted to £32,275 in 1926 and to £28,568 in 1930, the decrease being due to the exclusion of Ku-ring-gai—now a municipality.

City of Sydney Finances.

The City Council conducts its affairs under the Sydney Corporation Acts and is not bound by the provisions of the Local Government Acts. Its accounts in recent years however, have been kept in the same manner as those of other local bodies, so that the financial statements show the income accrued and expenditure incurred, during the period to which they relate.

The rates and other city revenues are paid into, and the expenses not otherwise provided for are defrayed out of the City Fund. Receipts and disbursements relating to the public markets, and to resumptions of land, etc., are recorded separately, but these accounts are subsidiary to the City Fund, to which their balances are transferred at the end of each year. The financial operations of the city electricity undertaking form a separate account.

The income of the various funds in 1930 amounted to £4,327,433, viz., the City Fund, £1,676,900, including the Public Markets Fund, £148,152, and the Resumption Account, £187,729; the Electricity Supply Fund, £2,480,745; other funds, £43,478; rates levied in respect of the Harbour Bridge, £126,310.

The disbursements in 1930 amounted to £4,240,286, viz., City Fund, £1,638,014, including the Public Markets Fund, £139,842; Resumptions Account, £477,828; Electricity Supply Fund, £2,456,048; other funds, £19,914; and Harbour Bridge rates, £126,310.

The following is a statement of the expenditure and income of the City of Sydney during 1930:—

Particulars.	City Fund.			
	Public Markets.	Resumptions.	Other.	Total.
Expenditure—	£	£	£	£
Salaries and wages	23,644	3,926	419,314	446,884
Stores and sundries	15,753	20,802	324,393	360,951
Insurance and rates	22,450	44,505	19,377	86,332
Electricity	4,983	1,088	41,441	47,512
Interest	58,810	339,737	179,713	578,260
Sinking Fund	14,199	67,770	36,106	118,075
Total, City Fund	139,842	477,828	1,020,344	1,638,014
Insurance Fund ... ..	...	...	...	19,914
Harbour Bridge Rates ... ..	...	...	...	126,310
Electricity Works Fund ... ..	...	...	...	2,456,048
Total, Expenditure ... ..	...	...	...	4,240,286
Income—				
Rates ... ..	...	...	1,022,468	1,022,468
Rents and hire	87,256	186,069	25,412	298,737
Dues and proceeds	60,022	...	24,437	84,459
Licenses, fees and fines ... ..	...	...	25,708	25,708
Sundries	874	1,660	242,994	245,528
Total, City Fund	148,152	187,729	1,341,019	1,676,900
Insurance Fund ... ..	...	...	...	43,478
Harbour Bridge Rates ... ..	...	...	...	126,310
Electricity Works Fund ... ..	...	...	...	2,480,745
Total, Income ... ..	...	...	...	4,327,433

Salaries and wages absorbed 27 per cent. of the expenditure from the City Fund and interest and sinking fund contributions 43 per cent.—over 59 per cent. of the latter item of expenditure was incurred in respect of resumptions. The rates collected in respect of main roads and paid to the Main Roads Board are included in the income and expenditure of this fund.

The income of the Public Markets Fund in 1930 exceeded the expenditure by £8,310, after the payment of interest and sinking fund contributions amounting to £73,009. The Queen Victoria Buildings brought in a revenue of £33,955, and the receipts from the municipal markets and cold storage works amounted to £87,747.

The income of the resumptions account was £187,729, and the expenditure £177,828, showing a debit of £290,099. The principal items of the expenditure were interest and sinking fund contributions £407,507.

City of Sydney—Liabilities and Assets.

The following is a summary of liabilities and assets of all funds of the City of Sydney as at 31st December, 1930:—

Liabilities.		Assets.	
	£		£
Debentures ...	24,546,946	Land and Buildings ...	11,781,724
Sundry Creditors ...	2,479,378	Machinery, Plant, and	
Overdrafts ...	1,367,496	Stores ...	15,232,761
	28,393,820	Less Depreciation Reserve ...	27,014,485
			3,451,367
Reserves, Revenue Ac-			23,563,118
counts, etc. ...	4,037,609	Sundry Debtors ...	648,817
		Cash and Bank Balances ...	1,760,341
		Investments—Sinking Funds ...	2,761,085
		Other ...	973,178
		Total tangible Assets	£ 29,706,539
		Loan Discounts and Flotation Ex-	
		penses ...	487,841
		Revenue Accounts—Deficits	178,630
		Expenditure on Streets, etc—Capital-	
		ised ...	1,796,504
		Other ...	161,915
		Total intangible Assets	£ 2,724,890
Total Liabilities	£32,431,429	Total Assets	£32,431,429

The liabilities at 31st December, 1930, excluding reserves and balances on revenue accounts, amounted to £28,393,820. The tangible assets, apart from depreciation reserve in respect thereof, amounted to £29,706,539, the excess over liabilities being £1,312,719.

The total amount of debentures outstanding at the end of 1930 was £24,546,946, and the accumulated sinking fund amounted to £2,761,085, leaving the net indebtedness on capital account at £21,785,861.

The debentures included £13,881,265 borrowed in connection with electric lighting, £7,508,375 for resumptions, and £929,006 for public markets. The proceeds of such loans have been spent mainly on reproductive municipal works, and in 1930 the various funds were debited with £1,400,474 to

meet annual interest charges and £234,487 for sinking fund contributions. After meeting these charges there was a net surplus of £87,147 on all funds for the year.

Land and buildings include such large items as public markets, £1,560,676; town hall, etc., £1,262,410; resumptions, £5,957,428; land and buildings used for the electricity works, £3,001,210. The investments of the accumulated sinking fund £2,761,085, consisted of State and Commonwealth Government loans and State Treasury deposits, £1,136,578, Municipal Council of Sydney debentures and deposit £1,577,800, and Commonwealth Bank deposits £46,707.

Progress of City of Sydney.

The following table shows the progress of the City of Sydney since 1926:—

Particulars.	1926.	1927.	1928.	1929.	1930.
Area Acres	3,244	3,244	3,244	3,244	3,244
Population No.	107,880	109,640	110,000	109,000	109,500
Value*—	£	£	£	£	£
Unimproved Capital ...	44,758,056	61,352,514	61,162,239	60,983,094	60,896,333
Improved Capital ...	151,528,760	185,394,260	190,999,120	193,988,920	221,856,440
Assessed Annual ...	6,818,794	8,001,840	8,236,784	8,343,732	9,553,692
City Fund†—					
Income—Rates† ...	655,921	821,391	842,463	959,112	1,022,468
Other sources ...	785,003	992,769	705,708	655,817	654,432
Total ...	1,440,924	1,814,159	1,548,171	1,614,929	1,676,900
Expenditure	1,533,552	1,873,084	1,596,398	1,562,747	1,638,014
Electricity Works Fund—					
Income	1,870,989	2,135,780	2,249,796	2,549,685	2,480,745
Expenditure	1,909,425	2,157,818	2,283,533	2,358,336	2,456,048
All Funds—					
Total Income† ...	3,460,970	4,193,797	4,063,853	4,338,851	4,327,433
Total Expenditure† ...	3,587,126	4,246,020	4,099,618	4,073,546	4,240,286
Excess of Income ...	(—)126,156	(—)52,223	(—)35,765	265,305	87,147
All Funds—					
Liabilities	16,798,448	20,355,128	24,571,822	26,905,640	28,393,820
Assets	17,505,353	21,053,983	25,573,545	28,066,416	29,706,539
Excess of Assets ..	706,905	704,855	1,001,723	1,160,776	1,312,719
Loans outstanding ...	14,288,088	15,301,812	19,075,148	21,982,947	24,546,946
Sinking Fund	1,867,801	2,085,236	2,137,207	2,428,784	2,761,085

(—) Denotes excess of Expenditure. * Excluding properties not ratable. † See context below.

‡ Including subsidiary accounts, Public Markets, and Resumptions.

There was a revaluation of city properties in 1927, and improved capital and annual values were reassessed in 1930. The value of Federal Government properties is not included in the figures shown above.

The total income and expenditure of all funds as shown in the foregoing table include rates collected in respect of the Sydney Harbour Bridge and the main roads and transmitted to the State Treasury and the Main Roads Board respectively. On the other hand, the income and expenditure of the

City Fund do not include the bridge rates, and include the main roads rates in 1929 and 1930 only. Details as to the amount of these rates levied in each year are shown in the table on page 753.

The total liabilities, as shown above, are exclusive of reserves and balances on revenue accounts. The total assets refer to tangible assets only, less depreciation reserve in respect to them, and intangible assets have been omitted. The loans outstanding increased by 72 per cent. between 1926 and 1930, and the sinking fund by 48 per cent. The sinking fund in 1930 represented 11.2 per cent. of the indebtedness.

FINANCES OF SUBURBAN AND COUNTRY MUNICIPALITIES AND OF SHIRES.

The Local Government Act prescribes that there must be a general fund in each area, to which must be paid the proceeds of all general and additional general rates, loans, moneys received as grants or endowment from the Government, and miscellaneous income not required by law to be carried to other funds. The expenditure from the general fund must be on administration, health, roads, other public services, and repayment of loans.

There must be a special fund for each special rate levied, and for each work or service conducted by the council in respect of which the special rate has been made, and the fund may be used only for the purposes of such work or service. A local fund also must be kept for each local rate levied, with restrictions similar to those in the case of the special funds, and the expenditure of the local fund is confined to works in the specified portion of the area.

A trading fund must be kept in respect of each trading undertaking conducted by the council, into which all moneys received, whether from rates or other sources, loans, transfers, etc., must be paid, and a separate account must be kept. The fund may be applied only to the maintenance of the works, payment of interest and principal of loans, or other purposes incidental to the working of the undertaking.

All loan proceeds must be used for the specific purpose for which the loans were obtained, and may not be transferred from one fund to another, except by authority of the Minister.

The revenue of special and local funds must provide the money to meet not only the ordinary cost of maintaining the services, but also the obligations of the corresponding loan funds.

In addition to the above-mentioned funds, there must be a trust fund, which consists of receipts from the Government pending transfer to appropriate funds, deposits from contractors, etc., and any other amounts held in trust by the council.

According to the ordinances under the Act, accounts must be "Income and Expenditure Accounts," kept by double entry, and each "fund" must have a separate banking account. Thus there is shown for each general, special, local, or trading fund a revenue account, or profit and loss account, giving the total expenditure chargeable for the period, whether paid or unpaid, and the total income for the same period, whether received or outstanding. A balance-sheet also is required for each fund with appropriate liabilities and assets, and aggregate balance-sheets and revenue accounts must be published. Only "realisable" assets may be shown, so that roads, bridges, drains, and other constructive works are excluded.

Expenditure and Income.

A summary of the expenditure and income of all municipalities and shires is shown below for the year 1930. The statement relates to income accrued and expenditure incurred irrespective of amounts actually received and paid. In regard to the City of Sydney, the expenditure and income of the City fund and its subsidiary accounts are shown under the heading of "General Fund," but the classification of the items is only approximate, as the City accounts are not compiled in the same form as those of the other councils.

Particulars.	City of Sydney. *	Other Metropoli- tan Muni- cipalities.	Country Muni- cipalities.	Shires.	Total.
Expenditure.					
General Fund—	£	£	£	£	£
Administration	83,914	160,642	121,835	214,816	581,207
Public Works	192,991	2,239,329	893,049	2,700,646	6,026,015
Health Administration	173,249	462,173	322,880	140,967	1,099,269
Public Services	160,930	258,913	120,640	48,444	588,927
Municipal or Shire Property	47,797	42,365	38,291	23,043	151,496
Interest on Loans and Over- drafts, etc.	578,260	341,935	96,695	89,465	1,106,355
Miscellaneous	400,873	269,387	41,596	67,835	779,671
Total (General Fund)	1,638,014	3,774,724	1,634,986	3,285,216	10,332,940
Trading Accounts	2,456,048	75,295	960,617	196,451	3,688,411
Special and Local Funds	146,224	125,579	464,334	184,433	920,570
Total Expenditure	4,240,286	3,975,598	3,059,937	3,666,100	14,941,921
Income.					
General Fund—	£	£	£	£	£
General Rates (inc. Interest, etc.)	1,022,468	2,139,645	806,090	1,470,046	5,438,249
Government Endowment ... ..	...	...	...	250,303	250,303
Loan Rates ... ..	...	397,691	96,882	57,262	551,835
Public Works—Government Grants. ... ..	...	267,386	314,502	1,467,358	2,049,246
Other	27,405	239,879	40,000	70,115	377,419
Public Health	56,335	213,459	258,475	132,022	660,291
Public Services	158,176	48,789	33,812	21,578	262,155
Municipal or Shire Property	40,964	33,344	73,412	44,279	191,999
Other	371,552	51,482	26,313	17,419	466,766
Total (General Fund)	1,676,900	3,391,675	1,649,486	3,530,202	10,248,263
Trading Accounts	2,480,745	93,057	1,114,856	249,005	3,937,663
Special and Local Funds	169,788	131,650	502,566	188,651	992,655
Total Income	4,327,433	3,616,382	3,266,908	3,967,858	15,178,581

* Classification of items in this column is approximate only.

The amounts shown above include part of the loan receipts and expenditure, the total amount of which is shown on page 767. Rates levied for the Main Roads Board and the Sydney Harbour Bridge are included also.

The total expenditure by municipalities other than the City of Sydney, amounted in 1930 to £7,035,535, or £4 3s. 7d. per head of population in those areas, and the expenditure by the shires to £3,666,100, or £5 7s. 6d. per head. Expenditure on works was the largest item, viz., £3,132,378 in the municipalities, and £2,700,646 in the shires.

The expenditure from the general funds (which include the loan funds) on the actual maintenance and construction of works of a public character, viz., roads, streets, bridges, culverts, drains, wharves, ferries, etc., and sundry expenses amounted to £5,603,864, of which the sum of £2,171,479 was expended by the municipalities in the metropolitan area except Sydney, £866,202 by country municipalities, and £2,566,183 by the shires. The expenses of supervision, such as the salary of the engineers, etc., amounted to £229,160, or 3.9 per cent. of the amount expended on public works. The foregoing amounts relate to the general funds only, and do not represent the total expenditure of the suburban and country areas under the headings stated.

The cost of administration is relatively high in the country on account of the sparse population and small revenue of many of the country municipalities, as in such cases the expenses on account of salaries, etc., are larger proportionately than those in the more closely settled localities. The cost in the metropolitan municipalities (other than Sydney), represented 4.3 per cent. of the total expenditure from general funds, 7.5 per cent. in the country municipalities and 6.5 per cent. in the shires.

The total income of the suburban and country municipalities in 1930 was £6,883,290, or £4 1s. 10d. per head, and of the shires £3,967,858, or £5 14s. 2d. per head. These amounts include Government endowments and grants.

The amount of Government assistance to municipalities in 1930 was £632,722, viz., £21,969 paid in respect of loans taken over by the Main Roads Board, and £610,753 included in the income shown above. Of the last mentioned amount £581,888 represented contributions to public works (roads, streets, bridges, etc.); and £19,512 were granted for health administration, chiefly as contributions to inspectors' salaries, etc. The shires received Government assistance amounting to £1,722,591 in 1930, including £1,467,358 on account of public works.

The trading accounts of the city and of the shires relate to the supply of electricity and those of the other municipalities to gas and electricity, and, in Broken Hill, to abattoirs.

Only a few metropolitan councils are concerned directly in the supply of these services, gas being supplied for the most part by non-governmental works, and electricity from the City of Sydney undertaking, or from private enterprises. The special and local funds relate to water supply, sewerage, street-watering, street-lighting, footpaths, guttering, drainage, fire brigades, parks and reserves, and other miscellaneous matters.

Liabilities and Assets.

The liabilities and assets of the City of Sydney as at 31st December, 1930, are shown on page 757, and the following statement indicates the nature of

the liabilities and "realisable" assets of the suburban and country municipalities and the shires as at that date, amounts due from one fund to another being excluded:—

Funds.	Municipalities.		Shires.	Total.
	Metropolitan (excluding Sydney).	Country.		
Liabilities—	£	£	£	£
Sundry creditors, including Loans out- standing and interest	6,183,675	3,149,961	1,697,465	11,031,101
Debts due to Government, including interest	198,495	3,706,227	418,541	4,323,263
Bank overdraft	560,015	403,969	425,780	1,389,764
Other (including Deposits on Con- tracts and unexpended Govern- ment grants)	81,985	111,902	131,239	325,126
Total	£ 7,024,170	7,372,059	2,673,025	17,069,254
Assets—				
Cash in hand and bank balances ...	450,541	570,336	384,585	1,405,462
Outstanding rates and interest ...	390,095	350,051	434,216	1,174,362
Sundry debtors	292,817	411,761	196,435	891,013
Furniture	57,039	75,481	40,782	173,302
Stores and materials	55,575	139,962	65,447	260,984
Land, buildings, plant and machinery	2,072,052	7,929,156	1,916,806	11,918,014
Other	300,265	116,439	25,857	442,561
Total	£ 3,618,384	9,593,186	3,054,128	16,265,698
Excess of Assets ... ..	...	2,221,127	581,103	...
Excess of Liabilities	3,405,786	...	...	803,556

The policy of constructing works from loan moneys has been more extensively followed in the metropolitan area—where development has been rapid—than in the country districts. These loans are raised on the security of future revenue, and neither this nor the value of works such as streets, etc., constructed from loans are included in the table. There is, consequently, little significance in the total relationship of the assets shown to liabilities. The statement, however, contains interesting items of an informative character.

FINANCIAL ASSISTANCE RECEIVED FROM GOVERNMENT.

The central Government of the State affords financial assistance to the local governing bodies in the form of endowment or of grants for roads and other necessary works, or for special purposes. Endowments are paid to shires only, assistance to municipalities being paid as grants. The endowment is distributed amongst the shires according to an apportionment made by the Government in every third year. The matters to be taken into account in making the distribution are specified in the Act, *e.g.*, the necessity for developing new districts, the extent to which the council and the people of the areas concerned undertake to share in the development by constructing works or paying local rates, the rate levied and its relation to the maximum rate.

The amount of endowment, which, in recent years had been about £150,000 per annum, was increased in 1928 to £250,000 and reduced to £150,000 in 1931. The allotment for the three years commencing 1st January, 1931, was as follows:—

28 shires receive no endowment.

21	„	„	less than £500 per annum.		
26	„	„	£500 and under £1,000	per annum.	
21	„	„	£1,000	„	£1,500
13	„	„	£1,500	„	£2,000
16	„	„	£2,000	„	£3,000
8	„	„	£3,000	„	£4,000
4	„	„	£4,000	„	£5,000

The shires which receive the largest endowment are Bellingen, £4,000; Tenterfield, £4,200; Manning, £4,550; and Dorrigo, £5,000.

Beyond this endowment the State on occasion makes available funds for specific purposes which have usually been the subject of application by individual local governing bodies. Prior to 1925 the State voted to shires and municipalities considerable sums annually for the maintenance of main roads and bridges, and these sums are included below under the heading "Public Works." In 1925, however, the Main Roads Board came into being and increased funds were set aside for main roads construction and maintenance. Of these funds large sums are disbursed through the councils of municipalities and shires, and are included in the following comparison of funds provided by the State and Commonwealth Governments and expended by the councils.

Year.	Municipalities.			Shires.				Total Government Assistance.
	Public Works.	Other.	Total Municipalities.	Endowment.	Public Works.	Other.	Total Shires.	
	£	£	£	£	£	£	£	£
1921	51,466	5,772	57,238	178,420	152,181	572	331,173	388,411
1922	102,639	5,884	108,523	156,861	183,712	374	340,947	449,470
1923	66,688	5,259	71,947	150,296	166,697	472	317,465	389,412
1924	43,382	6,213	49,595	146,705	265,218	306	412,229	461,824
1925	232,354	5,959	238,313	149,345	613,045	7,253	769,643	1,007,956
1926	242,051	5,441	247,492	147,525	958,447	7,123	1,113,095	1,360,587
1927	298,184	9,196	307,380	153,410	1,051,454	1,296	1,206,160	1,513,540
1928	372,133	6,152	378,285	261,315	1,007,937	1,444	1,270,696	1,648,931
1929	424,732	6,102	430,834	254,948	1,483,334	498	1,743,780	2,174,614
1930	603,857	28,865	632,722	250,303	1,467,358	4,930	1,722,591	2,355,313

The amounts stated above do not include repayable advances by the State or Federal Governments. The expenditure from such advances in the years 1926 to 1930 is shown in the table on page 767.

LOANS.

Loans obtained by the Council of the City of Sydney prior to 1905 were raised under the provisions of special Acts of Parliament. In 1905 the Sydney Corporation Amendment Act authorised the Council to raise loans, with the approval of the Governor, by the sale of debentures secured upon the corporate rates and revenues of the Council from whatever source arising, and to issue new debentures to repay any such debentures upon

maturity. The term of the debentures may not exceed in the aggregate fifty years, and a sinking fund must be established for each loan raised under the Act of 1905, on the basis of 3 per cent. per annum compound interest over the period of fifty years. The maximum rate of interest was fixed at 4 per cent. until 1917, when amending legislation provided that the rate of interest be fixed by the Council with the approval of the Governor. The Act of 1917 provided also that the Council, in lieu of issuing debentures subject to the provisions of the Act of 1905, may issue debentures to secure the repayment of its loans, together with interest thereon, by equal yearly or half-yearly instalments. An Act passed in 1928 authorised the City Council to raise loans outside Australia.

Loans obtained by the councils of other municipalities and of shires are raised usually under the Local Government Act, 1919, as amended by subsequent Acts.

In respect of municipal loans, the Local Government Act prescribes that a council may not borrow any moneys which, with existing loans, will cause the total indebtedness to exceed 20 per cent. of the unimproved value of ratable land in the area. If the outstanding loans of a municipality exceed this proportion, the council may not raise a special loan until the total amount falls below the limit. Certain loans expended on reproductive works may be excluded in calculating the limit.

Loans under the Local Government Act may be raised by four methods, viz., limited overdraft, and renewal, ordinary, or special loans.

Limited overdrafts may be obtained for any purpose upon which the council is authorised to expend a fund (except a trust fund) or for any purpose for which moneys raised by ordinary loan may be applied. The sum raised may not exceed half the preceding year's income of the fund in respect of which it is obtained.

The purpose of limited overdrafts is to enable the councils to finance a regular programme of works and services and to meet extraordinary expenditure during periods of inequality or fluctuations in the collection of rates. In view of this fact, the Department of Local Government suggests to the councils as a general principle that the amount of the overdraft at end of each year, or, at least, at the end of each council's term, should not exceed the amount outstanding for rates in the case of the general or other fund of which rates constitute the principal source of revenue.

Renewal loans are for the purpose of repaying or renewing any other loan, and for paying the expenses incidental thereto.

Ordinary loans are those for such purposes as carrying out orders as to boundary works, discharging liability arising under verdicts or orders of legal tribunals, establishing or extending sanitary and garbage services, acquiring machinery and equipment for the construction of roads and bridges, establishing road punts and road ferries, and meeting liabilities transferred to the council consequent upon alteration of boundaries. An ordinary loan may be obtained notwithstanding that it will raise the total indebtedness of the council above the prescribed limit, but while there is an excess the council may not raise a special loan.

Special loans are those which do not fall within the other three categories. A council must give notice of a proposal to raise a special loan, and the ratepayers have the right, by petition of at least 25 per cent. of those concerned, to demand that a poll be taken as to whether they approve of the loan, and as to whether the loan rate (if any) shall be on the unimproved

or the improved capital value. As a general rule shire special loans may not exceed in the aggregate a sum equal to three times the amount of the income, as shown by the last year's accounts.

The councils may accept from ratepayers advances not exceeding £500 for the purpose of carrying out necessary works for which the lenders have applied. Such loans must be free of interest or at a rate not exceeding 4 per cent., and the amount accepted by a council may not exceed one-tenth of the total revenue for the preceding year.

Renewal, ordinary, or special loans under the Local Government Act are secured, firstly upon the income of the fund to which the loans belong; and, secondly, upon the income of the council arising from any source.

Unless the loans are repayable by instalments at intervals of one year or less, there must be a sinking fund for loan repayment in every fund in respect of which a renewal, ordinary, or special loan has been raised, and in each year the council must transfer to the sinking fund a sum of not less than the amounts which were intimated in its applications for approval of the loans. In the case of loans repayable by annual or more frequent instalments, the reserve for repayment is optional.

The fixed loans by municipalities and shires, as at 31st December, 1930, amounted to £34,626,136, redeemable as follows:—New South Wales, £25,171,738; Victoria, £105,412; London, £7,305,000; and New York, £2,043,986. The interest accrued during 1930 was distributed as follows:—New South Wales, £1,384,542; Victoria, £6,999; London, £401,775; and New York, £112,419. Particulars regarding the loans and the sinking funds set apart to meet them; are shown in the following statement. Overdrafts are not included:—

Division.	New South Wales.	Loans Outstanding.			Accumulated Sinking Funds.	Interest Accrued, during 1930.
		London.	New York.	Total.		
Municipalities—	£	£	£	£	£	£
Sydney	15,502,960	7,000,000	2,043,986	24,546,946	2,761,085	1,325,359
Other Metropolitan	5,725,883	...	...	5,725,883	310	33,889
Country	2,864,806*	...	...	2,864,806	47,453	164,815
Total Municipalities	£24,093,649*	7,000,000	2,043,986	33,137,635	2,808,848	1,821,063
Shires	1,183,501	305,000	...	1,488,501	21,480	84,672
Total	£25,277,150*	7,305,000	2,043,986	34,626,136	2,830,328	1,905,735

* Including £105,412 raised in Victoria.

The interest accrued in respect of the City of Sydney as shown above, represents the amount payable for a full year on the loans outstanding at the end of the year.

Apart from the liability to the State under the Country Towns Water and Sewerage Act, and the Main Roads Act, the total amount of municipal and shire loans outstanding at the close of the year 1930 was £34,626,136, and towards this amount there was at the credit of the sinking funds a sum of £2,830,328. The average rate of interest payable on loans of municipalities was 5.5 per cent., viz., Sydney, 5.4 per cent., other metropolitan 5.78 per cent., and country municipalities 5.75 per cent. The average rate on the shire loans was 5.69 per cent.

Since 1921 the loan indebtedness of the municipal and shire councils has increased threefold. The following comparison shows the loans outstanding at the end of various years since 1921, also the ratio of loans to the unimproved capital value of ratable property in the incorporated areas:—

At 31st Dec.	Amount of Loans Outstanding (excluding bank overdrafts).				Proportion to Unimproved Capital Value of Ratable Property.			
	City of Sydney.	Other Muni- cipalities.	Shires.	Total.	City of Sydney.	Other Muni- cipalities	Shires.	Total.
	£	£	£	£	per cent.	per cent.	per cent.	per cent.
1916	7,050,100	*1,692,133	*148,367	8,890,600	22·62	2·91	0·14	4·56
1921	9,341,742	1,982,953	109,573	11,434,268	26·03	2·43	0·08	4·60
1926	14,288,088	4,388,336	1,036,391	19,712,815	31·92	3·82	0·67	6·27
1927	15,306,812	5,667,016	1,202,773	22,176,601	24·95	4·57	0·76	6·44
1923	19,075,148	7,400,542	1,247,955	27,723,645	31·19	5·38	0·79	7·76
1929	21,932,947	8,145,285	1,397,352	31,525,584	36·05	5·42	0·84	8·34
1930	24,546,946	8,590,689	1,488,501	34,626,136	40·31	5·39	0·88	8·90

* Including bank overdrafts.

The effect of re-valuations is noticeable in the decline in the ratio of loans in the City of Sydney in 1927. The ratio of loans to the improved capital value in 1930 was 11·06 per cent. in the City of Sydney, and 1·87 per cent. in the other municipalities.

It is apparent that the borrowing by the municipalities and shires is, in the aggregate, well within the limits allowed by the Local Government Act already referred to. The relatively extensive loans of the City of Sydney are invested largely in the acquisition of revenue-producing assets, and considerable amounts have been expended on resumptions for city improvements, which are partly reproductive. Of the city loans current at 31st December, 1930, an amount of £13,881,265 was invested in the city electricity works from which electricity is supplied not only to the city proper but to a large number of other local areas.

The place of redemption and the approximate amount of interest payable on the foregoing loans of the City of Sydney, the other municipalities and the shires in New South Wales are shown in the following table. The amounts are exclusive of advances from the Government:—

Year.	Principal raised in—			Interest accrued during each year.		
	Australia.	Oversea. *	Total.	In Australia. †	Oversea. *	Total. †
	£	£	£	£	£	£
1916 ...	8,066,745†	823,855	8,890,600	316,371	33,208	349,579
1921 ...	9,922,268	1,512,000	11,434,268	423,746	85,690	509,436
1926 ..	16,480,315	3,232,500	19,712,815	835,089	187,862	1,022,951
1927 ..	18,951,601	3,225,000	22,176,601	944,226	186,685	1,130,911
1928 ...	22,418,645	5,305,000	27,723,645	1,155,198	294,414	1,449,612
1929 ...	24,220,584	7,305,000	31,525,584	1,297,849	405,840	1,703,689
1930 ...	25,277,150	9,348,986	34,626,136	1,391,541	514,194	1,905,735

*Years 1916 to 1929 London only; New York included, in 1930 viz: Loan £2,510,138, Interest £112,419.

† Includes interest on bank overdrafts in years 1916 to 1926 inclusive.

‡ Includes bank overdrafts, except in City of Sydney.

The amounts stated above do not include the sums due to the Government as capital debt on water and sewerage and drainage works, viz., £3,590,396 owing by municipalities and shires at the end of 1930, and £75,442 in respect of the Grafton and South Grafton works. The statement is exclusive also of loans of county councils, viz., £477,939 in 1930, and the interest, £27,182, which was payable in Sydney.

The amount of loan expenditure by local governing bodies in New South Wales during the years 1926 to 1930 is shown below:—

Districts.	1926.	1927.	1928.	1929.	1930.
Government Advances.					
Municipalities—	£	£	£	£	£
Metropolitan (excluding Sydney) ... ..	...	738	24,631	48,873	10,914
Country	17,377	32,058	348,112	48,999	22,169
Shires	85,072	71,779	81,464	49,591	20,583
Total, Government Advances	102,449	104,575	454,207	147,463	53,666
Other Loans.					
Municipalities—					
City of Sydney	1,805,820	3,299,516	3,144,892	3,675,806	2,092,548
Metropolitan	625,635	996,968	1,264,461	884,525	838,394
Country	279,143	510,496	485,685	460,285	334,509
Shires	346,109	305,448	270,404	294,223	196,315
County Councils	51,537	39,127	55,972	44,834	39,703
Total, other Loans	3,108,244	5,151,555	5,221,414	5,359,673	3,501,468
Total, Loan Expenditure	3,210,693	5,256,130	5,675,621	5,507,136	3,555,134

The amount of expenditure by councils from loan funds provided by, but not repayable to, the State is excluded. The total loan expenditure by local government bodies over and above Government loans was £3,501,468 in 1930, as compared with £5,359,673 in 1929.

MUNICIPAL GASWORKS.

The Local Government Act authorises the councils of municipalities and shires to construct gasworks, and to supply gas for public lighting and for use by private consumers. Eighteen country municipalities maintain works for coal gas, and others have installed acetylene and other plants. The metropolitan districts are served by private companies.

Details of the accounts of the works of various municipalities are shown in the section "Local Government" of the Statistical Register, 1930-31. A summary of the gasworks revenue accounts of the municipalities with coal gasworks in 1930 is shown in the following statement:—

Expenditure.		Income.	
	£		£
Cost of gas and residuals	119,680	Private lighting	101,182
Public lighting, attendance, etc. ...	1,133	Public lighting	1,342
Total Trading Expenditure ...	120,813	Sale of residual products ...	16,329
Surplus	7,164	Other	2,542
Total	£ 127,977	Total Trading Income	121,395
		Loan Rates	4,354
		Other	2,228
		Total	£ 127,977

The quantity of gas sold to private consumers during 1930 was 261,938,000 cubic feet at prices ranging from 6s. to 12s. 4d. per 1,000, the general average being 7s. 9d. per 1,000 cubic feet. The quantity used

for public lighting was 3,143,000 cubic feet, and the revenue therefrom represented 8s. 6d. per 1,000 cubic feet. Income was derived also from rates, and from the sale of residuals, etc. On the operations during 1930 there was a surplus of £7,164 after paying interest. Seven municipalities incurred a loss. The average cost of manufacture was about 6s. 2d. per 1,000 cubic feet, the cost being calculated by deducting from the cost of gas and residuals the income derived from the sale of residuals.

The balance-sheet of the gasworks trading undertakings for 1930 is given below:—

Liabilities.		Assets.	
	£		£
Loans and deferred payment debts	61,212	Buildings, land, stock, plant, etc.	300,756
Sundry creditors, etc.	17,847	Sundry debtors, including amounts:	
Overdrafts	17,214	due from other funds	30,315
Total liabilities	96,273	Fixed deposits and investments	9,840
Excess of Assets	253,403	Bank balance, and cash	8,765
Total	£349,676	Total	£349,676

The total excess of assets amounted to £253,403, and none of the municipalities showed a deficit at the close of 1930.

MUNICIPAL AND SHIRE ELECTRICITY WORKS.

The supply of electricity for lighting and for power is undertaken directly by the councils in many local governing areas. In some cases the councils have established works for the generation of electricity, while in others it is purchased in bulk from another council, from Government works, or from collieries, etc., and distributed to consumers. In addition, electricity for street and private lighting and power in defined areas is supplied under contract with the councils from works which are privately owned and operated, and are not included in the statistics relating to the municipal and shire undertakings which follow:

The largest undertaking is that of the City of Sydney, where operations were commenced in 1904 to supply electricity within the city, and subsequently the works were extended to supply a large area beyond the city boundaries. In 1930 the undertaking distributed electricity direct to consumers in the city and in thirty-three other municipalities, and supplied it in bulk to the local councils of six municipalities and four shires.

Certain other local government bodies obtain electricity in bulk from the generating stations of the Railway Commissioners of New South Wales, the Victorian State Electricity Commission, or the New South Wales Government power station at Port Kembla. A number of southern localities and the Federal Capital are supplied from the Burrumbidgee hydro-electric works.

The St. George County Council purchases from the Railway Commissioners bulk supplies of electricity which are sold for street lighting and to private consumers in its area, and the Clarence River County Council has constructed hydro-electric works on the Nymboida River.

A statement of the expenditure and income of the electricity concerns of the local governing authorities in 1930 is shown below:—

Particulars.	City of Sydney.	Other Municipalities.	Shires.	County Councils.		Total.
				St. George.	Clarence River.	
<i>Expenditure.</i>	£	£	£	£	£	£
Cost of electricity ...	2,402,247	855,369	185,894	109,479	24,150	3,577,139
Public lighting, attendance, etc. ...	53,801	55,345	10,557	3,674	543	123,920
Total Trading Expenditure. £	2,456,048	910,714	196,451	113,153	24,693	3,701,059
<i>Income.</i>						
Sales of electricity ...	2,435,099	934,700	180,770	131,915	26,606	3,709,090
Rent of Meters, installations, etc., ...	38,416	88,958	19,731	1,364	2,739	151,208
Total Trading Income ... £	2,473,515	1,023,658	200,501	133,279	29,345	3,860,298
Loan Rates ...	...	46,507	46,162	...	...	92,669
Interest and Sundries ...	7,230	6,410	2,342	6,571	...	22,553
Total Income ... £	2,480,745	1,076,575	249,005	139,830	29,345	3,975,520
Surplus ...	24,697	165,861	52,554	26,697	4,652	274,461

* Includes contribution to Sinking Fund, £80,700.

The operations of the electricity undertakings of the local governing bodies resulted in a surplus of £274,461 in 1930, as compared with a surplus of £443,375 in the previous year. The City of Sydney undertaking showed a surplus of £24,697 in 1930, after the payment of interest, £822,214, and contribution to sinking fund, £116,412.

A summary of the liabilities and assets of the electricity works at 31st December, 1930, is shown below:—

Particulars.	City of Sydney.	Other Municipalities.	Shires.	County Councils.		Total.
				St. George.	Clarence River.	
<i>Liabilities.</i>	£	£	£	£	£	£
Loans and deferred payment debts ...	13,881,265	1,489,359	526,166	288,739	188,507	16,374,036
Overdrafts ...	986,568	62,503	9,814	...	9,553	1,068,438
Sundry creditors, etc., ...	546,775	95,338	22,812	25,527	2,657	693,109
Total Liabilities £	15,414,608	1,647,200	558,792	314,266	200,717	18,135,583
<i>Assets.</i>						
Land, buildings, plant, etc. ...	15,225,287	2,519,484	687,990	380,917	216,724	19,030,402
Sundry debtors, etc. ...	419,543	231,732	51,924	17,146	8,921	729,266
Bank balance and cash	25	121,161	41,857	55,378	2,389	220,810
Fixed deposits and investments ...	934,497	126,410	32,137	126,000	...	1,219,044
Total Assets £	16,579,352	2,998,787	813,908	579,441	228,034	21,199,522
Excess of Assets £	1,164,744	1,351,587	255,116	265,175	27,317	3,063,939

The liabilities of the City of Sydney undertaking, as shown above, are exclusive of depreciation and other reserves; and the assets represent the tangible assets less depreciation reserve in respect thereof—loan discounts and flotation expenses and other intangible assets amounting in all to £497,003 being excluded.

City of Sydney Electricity Undertaking.

The City of Sydney undertaking obtained supplies of electricity from a power station at Pyrmont until the year 1923, when a contract was made for the purchase of additional supplies from the Railway Commissioners. Since January, 1929, supplies have been available from a new power station constructed by the Council at Bunnerong, and the contract with the Railway Commissioners was terminated on 30th September, 1929. The cost of the first section of the Bunnerong station, consisting of an installation capable of meeting a demand of 100,000 kilowatts, was approximately £3,500,000.

The following statement shows the electricity sold during each of the years 1926 to 1930, sales to the City Council for public lighting, etc., being included. The revenue from sales and the cost of the electricity are shown, also the deficit or surplus after the payment of interest and contributions to sinking fund:—

Particulars.	1926.	1927.	1928.	1929.	1930.
Units sold (000's) ...	234,609	277,744	300,984	347,595	332,950
Receipts per unit (d.)...	1-80	1-76	1-72	1-69	1-73
	£	£	£	£	£
Cost of electricity* ...	1,872,906	2,117,417	2,239,710	2,313,434	2,402,247
Other expenditure ...	36,429	40,401	43,823	44,902	53,801
Total expenditure	1,909,425	2,157,818	2,283,533	2,358,336	2,456,048
Sales	1,795,453	2,078,254	2,200,512	2,494,606	2,435,099
Other income	75,536	57,526	49,284	55,079	45,646
Total income	1,870,989	2,135,780	2,249,796	2,549,685	2,480,745
Surplus	(—) 38,436	(—) 22,038	(—) 33,737	191,349	24,697

* Including interest and sinking fund.

It is not practicable to dissect the sales by this undertaking so as to show the purposes for which the current was used because a large proportion is supplied to premises—residential and commercial—where only one meter is provided and the charges are assessed under a system whereby a reduced rate is charged for the quantity in excess of a limit which varies according to certain conditions, *e.g.*, the size of residential premises, or the maximum demand in the case of factories.

Sales of Electricity.

A dissection of the sales in 1929 and 1930 by municipalities (other than the City of Sydney), shires and the county councils is shown below. The figures for 1929 are exclusive of sales by two shires, and those for 1930 of sales by one shire, for which complete data are not available:—

Particulars.	1929.			1930.		
	Units.	Receipts.	Per unit.	Units.	Receipts.	Per unit.
	000	£	d.	000	£	d.
Private lighting	31,738	700,272	5-30	31,957	713,503	5-36
Public lighting	9,574	121,586	3-05	10,771	128,476	2-86
Power and bulk sales	64,120	419,475	1-57	67,442	437,304	1-56
Total	105,432	1,241,333	2-82	110,170	1,279,283	2-79

The receipts, as stated above, do not include rentals for meters, motors, etc., nor other sources of revenue accruing to the undertakings. The cost of the electricity sold in 1929, viz., 105,431,887 units, was £1,143,439 or 2.60d. per unit and the cost of 110,169,986 units sold in 1930 was £1,171,405 or 2.55d. per unit.

FIRE BRIGADES.

The public services for the prevention and extinguishing of fires are controlled by a Board of Fire Commissioners, constituted under the Fire Brigades Act, 1909, as amended in 1919 and 1927. Its jurisdiction extends over certain districts which were defined in the Act or added by proclamation. The areas under the oversight of the Board are grouped to form fire districts. They include the City of Sydney, nearly all the area comprised by the suburban municipalities, also Newcastle and suburbs, Broken Hill, and other municipalities, and twenty-five shires in respect of towns contained in them.

The Board consists of a president, appointed by the Governor for a term of five years, and seven members, elected for a term of three years, viz., one by the councils of the Sydney and suburban municipalities, one by the councils of the other incorporated areas to which the Act applies, three elected by the fire insurance companies, one by the volunteer fire brigades, and one by the permanent firemen who are members of the Fire Brigades Association of New South Wales. The votes are apportioned among the councils according to the amount contributed to the fund administered by the Board, viz., £100 or under, one vote; over £100 and not exceeding £500, two votes; over £500 and not exceeding £1,000, three votes; over £1,000, four votes. Each insurance company and each volunteer and permanent fireman is entitled to one vote.

In each year the Board makes an estimate of the amount proposed to be expended in the various fire districts during the ensuing year, and of this sum the councils of the municipalities and shires concerned contribute one-fourth, the insurance companies one-half, and the Government one-fourth. Until the year 1927, the contributions were made in equal shares by the councils, the insurance companies, and the Government. The estimates must be made so that the contribution by the councils in a fire district will not exceed 1d. in the £ on the unimproved capital value of ratable land, though the Board may exceed this limit with the consent of the Minister if requested by the councils to do so.

Where a fire district is comprised by more than one municipality or shire, the amount to be paid by each council is apportioned according to the annual value of ratable land within the district. Payments by the insurance companies are based on the amount of premiums payable in respect of fire risks within each district. With the consent of the Governor, the Board may borrow money up to £250,000.

The Board establishes and maintains permanent fire brigades and authorises the constitution of volunteer brigades, which are subsidised out of the funds. In the metropolitan districts in 1931 there were 78 fire brigades comprised by 608 permanent firemen whose services are wholly at the Board's disposal and 270 volunteers. In the country there were brigades at 134 localities, the principal stations being at Newcastle and Broken Hill, and there were 66 permanent firemen and 1,245 volunteers.

The following table shows the revenue account of the Board of Fire Commissioners for the year ended 31st December, 1931:—

Revenue.		Expenditure.	
	£		£
Balance from 1930	31,736	Administration	14,603
Subsidy from Government ...	106,618	Salaries including Payments to	
Subsidy from Municipalities and		Volunteers	241,137
Shires,	106,618	Repairs to Buildings, Plant, and	
Subsidy from Fire Insurance Com-		other expenses	115,779
panies and Firms	213,236	Equipment and Property Charges,	
Other Sources	7,744	Balance	42,668
Total	£465,952	Total	£465,952

The contributions by the fifty-five municipalities and shires comprising the Sydney fire district in 1931 represented 4s. 8d. per £100 of assessed annual value of the ratable land, as compared with 5s. 7d. in 1919.

Contributions amounting to £212,101 were received from 128 insurance companies and £1,135 from 49 firms who insured goods with companies not registered in New South Wales. In the Sydney fire district such contributions represented 14.67 per cent. of the premiums less reinsurances, and in the other districts the proportions ranged from 4.1 per cent. to 27.9 per cent.

The estimates of proposed expenditure by the board for the year 1932 amounted to £387,596, viz., £294,272 for the Sydney fire district and £93,324 for other districts.

The balance-sheet of the Board as at 31st December, 1931, is shown in the following statement:—

Liabilities.		Assets.	
	£		£
Fund Account	38,230	Land and Buildings	391,843
Trust Accounts	2,108	Plant and Fire Appliances ...	275,783
Debentures and Accrued Interest	165,042	Stocks on Hand	27,298
Revenue and Expenditure Account	42,668	Fixed Deposit, Bank Balances	
Property and Equipment Fund ...	476,592	and Cash	33,868
Administration Account	4,152		
Total	£728,792	Total	£728,792

WATER SUPPLY AND SEWERAGE SERVICES.

The Metropolitan Water, Sewerage, and Drainage Board administers extensive water supply and sewerage works in Sydney and environs, and the Hunter District Water Supply and Sewerage Board exercises similar functions in Newcastle and surrounding districts. These works have been constructed mainly from the loan moneys which form part of the public debt of the State, and interest and sinking fund charges in respect of the capital debts are payable from the revenues of the Boards.

The receipts and expenditure of the metropolitan services until 1st April, 1925, and of the Hunter District services until 1st July, 1928, were included in the Consolidated Revenue Account of the State. On the dates mentioned these accounts were separated from the Consolidated Revenue Account; the Metropolitan Board was entrusted with the management of its own moneys and a separate account was opened in the Treasury in respect of the Hunter district services.

In towns outside the areas administered by the Metropolitan and Hunter District Boards, works have been constructed in accordance with the provisions of the Country Towns Water Supply and Sewerage Act of 1880, which, with amendments, was embodied in the Local Government Act of 1919. On the application of a council the Minister for Public Works may construct water supply or sewerage works out of moneys voted for the purpose by Parliament. As a general rule the works are transferred upon completion to the care of the council. The capital cost is repayable by instalments, with interest on the unpaid balances at a rate fixed from time to time. The term of repayment is fixed with regard to the durability of the works, the maximum period being one hundred years.

At 30th June, 1931, water supply services constructed wholly or in part from loan funds by the Department of Public Works were in operation in eighty-five country towns, sewerage works in fourteen towns, and storm-water drainage works in sixteen towns. The total cost of the waterworks was £4,018,668, and of sewers and stormwater channels £1,100,872. The financial transactions in connection with these services are included in the accounts of the municipalities and shires, except the waterworks at Broken Hill and Hillgrove, which are administered by the central Government, and at Junee, where the water is delivered by the Public Works Department into service reservoirs, and the Grafton and South Grafton system which is controlled by a corporate board representing the two municipalities.

The debts due to the central Government on account of waterworks (including the Grafton and South Grafton services) at 30th June, 1931, amounted to £3,422,916, and on account of sewerage and drainage works to £1,080,769; the aggregate of the annual instalments of principal and interest was £188,027 in respect of the debt due on waterworks, and £56,543 for sewerage works. In addition two municipalities and six shires administered water services in respect of which there was no capital debt to the State Government.

A summary of the revenue and expenditure of the various systems is shown below—the particulars of the Metropolitan and Hunter District services being for the year ended 30th June, 1931, and those of the other works for the calendar year, 1930.

Services.	Capital Debt.	Gross Revenue.	Working Expenditure.	Net Revenue.	Interest and Sinking Fund.	Surplus.
	£	£	£	£	£	£
<i>Water Supply.</i>						
Metropolitan ...	23,381,090	1,672,954	456,474	1,216,480	1,214,912†	1,568
Hunter District ...	2,847,998	235,325	77,706	157,619	168,415†	(-)10,796
Grafton and South Grafton ...	75,442	6,742	2,107	4,635	3,060	1,575
Other Country Towns...	2,995,864	397,475	208,627	188,848	131,636	57,212
Total Water Supply...	29,300,394	2,312,496	744,914	1,567,582	1,518,023	49,559
<i>Sewerage and Drainage.</i>						
Metropolitan ...	15,139,925	1,031,134	259,412	771,722	836,569†	(-)64,847
Hunter District ...	1,868,802	91,158	37,630	53,528	49,725†	3,803
Other Country Towns*	896,415	94,820	39,913	54,907	40,743	14,164
Total Sewerage ...	17,905,142	1,217,112	336,955	880,157	927,037	(-)46,880

* Exclusive of drainage works.

† Includes Exchange.

The figures in the table show an aggregate indebtedness in respect of water supply and sewerage services amounting to £47,200,000. The net revenue after providing for working expenses was £2,447,739, interest amounted to £2,146,481, and in respect of the Metropolitan and Hunter District services, exchange on interest transmitted abroad £185,823, and contributions to sinking funds £112,756. The surplus amounted to £2,679.

A brief statement of the liabilities and assets of the Metropolitan and Hunter District services at 30th June, 1931, and of the other works (excluding Broken Hill and Junee) at 31st December, 1930, is shown below:

Particulars.	Water Supply and Sewerage Works.				
	Metropolitan	Hunter District.	Grafton and South Grafton.	Other Country Towns.	Total.
Liabilities—	£	£	£	£	£
Capital Indebtedness ...	38,521,015	4,716,800	75,442	3,590,356	46,903,613
Other	1,570,545	26,786	96	192,434	1,789,861
Total Liabilities ...	40,091,560	4,743,586	75,538	3,782,790	48,693,474
Assets—					
Works, etc.	38,599,334	5,387,141	94,528	4,019,423	48,100,426
Sundry debtors and outstanding rates	192,032	74,426	1,236	167,374	435,088
Cash, investments, etc. ...	1,627,731	55,865	1,233	122,350	1,807,179
Total Assets	40,419,117	5,517,432	96,997	4,309,147	50,342,693
Excess of Assets	327,557	773,846	21,459	526,357	1,649,219

Drainage Trusts.

In addition to the water and sewerage and drainage works to which the foregoing tables relate, twenty-six trusts for reclamation of swamp and other lands were in operation as at 30th June, 1931. The capital indebtedness in respect of the works was £79,226, and the annual instalments for repayment amounted to £4,529. The owners of the lands improved by these works are responsible for the repayment of the capital expenditure, and they are required to provide for the cost of maintenance and administration.

Metropolitan Water Supply and Sewerage.

The Metropolitan Board of Water Supply and Sewerage was constituted in 1888 to assume control of the water supply and sewerage services in the county of Cumberland, including those under the control of the City Council. The management of the water supply was transferred to the Board in May, 1888, and of the sewerage in September, 1889. The Board's jurisdiction extends to a large district outside the county of Cumberland and embraces a strip of territory extending along the South Coast beyond Wollongong to Lake Illawarra.

The Board, now termed the Metropolitan Water, Sewerage, and Drainage Board, is constituted by a president, appointed by the Governor, and seventeen members, elected by the aldermen and councillors of the local areas concerned. For the purposes of the elections the municipalities and shires have been grouped into nine constituencies, of which the City of Sydney forms one. Eight constituencies are represented by two members each, and

the other by one member. The term of office for elected members is four years, and one representative of the two-member constituencies will retire every two years.

The amount of capital expenditure on the Board's works to 30th June, 1931, was as follows:—

Nature of Expenditure.	Water.	Sewerage.	Drainage.	Total.
Loan Expenditure by—	£	£	£	£
Board to 30th March, 1925 ...	8,841,916	4,504,270	22,397	13,368,583
Board since 1st April, 1925† ...	8,550,435	4,516,713	394,860	13,462,008
Public Works Department ...	6,128,349	5,110,041	271,318	11,509,708
Municipalities (Works taken over)	98,824	301,417	19,169	419,410
Total from Loans ...	23,619,524	14,432,441	707,744	38,759,709
Grant from Unemployment Relief Fund	90,738	214,548	...	305,286
Total Capital Expenditure ...	23,710,262	14,646,989	707,744	39,064,995
Less Payments in Reduction of Capital Indebtedness ...	329,172	206,514	8,294	543,980
Net Capital Indebtedness ...	23,381,090	14,440,475	699,450	38,521,015

† Includes interest on works during construction.

The capital indebtedness of the Board to the Government was declared tentatively by the Metropolitan Water, Sewerage, and Drainage Act of 1924 to be £22,489,478, which was the net amount expended on the services by the Board and the Government as at 30th June, 1924, inclusive of works in course of construction for the Board by the Department of Public Works. This amount was reviewed by a financial committee, who recommended that the capital indebtedness as at 1st April, 1925, be determined at £23,576,702, viz., water supply £14,311,175, sewerage £8,955,206, and drainage £310,321. The determinations of the committee are to be ratified by Parliament before being adopted.

The Board is required to pay to the State Treasury interest on its debt to the State at the rate chargeable to statutory bodies representing the Crown, also from 1st July, 1928, sinking fund contributions at the rate of 5s. per £100, this being the rate payable by the State in respect of its contributions to the National Debt Sinking Fund, established under the financial agreement between the Commonwealth and the States as described in the chapter entitled Public Finance.

The Board, with the approval of the Governor, may raise its own loans, but the debt so incurred in respect of any of its services must not exceed 20 per cent. of the unimproved value of the lands ratable for that service.

Up to 30th June, 1928, no special loans had been floated for the Board, but loan advances amounting to £412,000 in 1924-25, £1,703,000 in 1925-26, £2,000,000 in 1926-27 and £2,380,000 in 1927-28 were made to the Board by the Colonial Treasurer. These advances, amounting to £6,495,000, are being repaid by annual instalments extending over a period of twenty years from 1st January, 1930. Further advances, repayable in 1929-30, were made to the Board during 1928-29, the amount being £450,000.

Particulars of the loans floated by the Board to 30th June, 1931, are shown below:—

Year.	Amount.	Price of Issue.	Rate of Interest.	Term—Years.	Repayable in—
	£	Par.	Per cent.		
1928	1,000,000	Par.	5½	20	Australia.
1929	1,500,000	£99 10 0	5½	15	"
1930	850,000	£99 10 0	6½	20	"
1930	1,541,149	£87 5 0	5½	20	New York.
1931	50,000	£99 10 0	6½	20	Australia.
1931	116,206	£99 10 0	6½	2	"

In April, 1929, the Board commenced to receive money on deposit at short call and on fixed deposit. The interest rates per annum were as follows:—Short call, 4½ per cent.; fixed deposit, six months 4½ per cent., 12 months 5 per cent., and 2 years 5½ per cent. These rates were reduced by 4s. 6d. in the £ as from 1st October, 1931, in terms of the Interest Reduction Act. The minimum deposit is £500.

The amount of deposits and the interest paid during each quarter are shown below:—

Quarter—	Amount of deposits at end of quarter.	Interest paid during quarter.
	£	£
1929—June	402,858	...
September	508,557	4,283
December	443,604	7,944
1930—March	407,649	5,356
June	405,433	4,346
September	383,425	4,328
December	397,518	5,561
1931—March	297,735	3,734
June	107,955	4,576
September	89,730	1,050
December	48,189	1,351
1932—March	36,451	607

The sources of the metropolitan water supply are the waters of the Nepean, Cataract, and Cordeaux Rivers, draining an area of 347 square miles, with a copious rainfall. The supply is stored chiefly in four large reservoirs, viz., Prospect, from which 5,503,000,000 gallons are available by gravitation; Cataract, with a capacity of 20,743,000,000 gallons; Cordeaux, 20,597,000,000 gallons; and Avon, 47,153,000,000 gallons. There is also a small reservoir at Manly, which holds 438,000,000 gallons. At 30th June, 1931, there were 93,001,000,000 gallons of water stored in these reservoirs. The construction of two reservoirs has been commenced, viz., Nepean to hold 21,800,000,000 gallons and Woronora 15,100,000,000 gallons.

The water is conveyed from the upper storages to the Prospect Dam, thence to Sydney and adjacent areas by means of tunnels, canals, etc., from which systems branch to supply Camden, Campbelltown, and other townships along the southern railway. Wollongong and several settlements on the South Coast are supplied from two reservoirs on the Upper Cordeaux River, which have a combined capacity of 433,000,000 gallons, and water

for Richmond is pumped from the Hawkesbury River. There are forty-eight service reservoirs and tanks below Prospect Dam, five above Prospect, and fourteen connected with the supply for the South Coast townships.

The total length of water mains as at 30th June, 1931, was 4,188 miles.

The first sewerage works in Sydney were begun in 1853, and in 1889, the date of transfer to the Metropolitan Board of Water Supply and Sewerage, there were 70½ miles of sewers in existence.

The present system consists of three main outfalls—the northern, discharging into the Pacific Ocean near Bondi; and the southern and western, discharging into the ocean at Long Bay. The northern suburbs ocean outfall discharges into the ocean at North Point, in the quarantine area; part of this main is in use and when completed it will serve the suburban areas on the northern side of Sydney Harbour and Parramatta River, extending as far west as Wentworthville.

The Metropolitan Water, Sewerage and Drainage Board maintains 76 miles of channels for stormwater drainage purposes, and is authorised to levy drainage rates within areas notified by gazettal.

The following statement shows the number of houses supplied with water and those connected with the sewerage system administered by the Metropolitan Board in 1911, 1916, and in the last six years:—

Year ended 30th June.	Water Supply.				Sewerage.		
	Houses Supplied.	Total Supply during Year.	Average Daily.		Houses connected.	Length of Sewers.	Length of Stormwater Drains.
			Per House.	Per head of population supplied.			
	No.	Thousand gallons.	gallons.	gallons.	No.	miles.	miles.
1911	139,237	10,587,434	208	41·7	108,012	825	49
1916	183,598	14,374,000	214	42·9	130,638	1,022	54
1921	221,886	17,701,000	218	43·7	148,923	1,197	64
1926	268,558	24,506,739	250	50·0	176,388	1,416	61
1927	280,157	25,675,530	251	50·2	179,580	1,491	69
1928	290,026	27,321,939	257	51·3	185,058	1,578	71
1929	299,401	30,899,799	283	56·6	191,689	1,709	73
1930	307,945	29,733,497	264	52·9	200,150	1,794	76
1931	308,657	30,803,000	273	54·7	204,177	1,871	76

General rates for water and sewerage are levied on the assessed annual value of the premises, the water rate in 1929-30 was 8½d. in the £ and the sewerage rate 8d. In 1930-31 the rates were 8d. and 7½d. respectively as compared with 6d. and 9½d. respectively in 1911 and 1916, and 9d. and 12d. in 1921. The rates for 1931-32 have been fixed at 9d. for water and 8d. for sewerage. Water is supplied by meter for gardens, livestock, and trade purposes at a charge of 1s. 2d. per thousand gallons, and it is supplied without a meter to areas not exceeding 1,000 square feet for a special fee of 8s. per annum.

Stormwater drainage rates are fixed in each area, so as to yield the revenue required to meet expenses, interest and sinking fund charges. They vary from ½d. to 5½d. in the £ of assessed annual value.

The following statement shows particulars of the financial transactions relating to the services controlled by the Metropolitan Board in various years from 1911:—

Year ended 30th June.	Capital Indebtedness.	Gross Revenue.	Working Expenses and Man- agement.	Renew- als.	Net Revenue.	Interest on Capital.	Sinking Fund Contri- bution.	Surplus.
	£	£	£	£	£	£	£	£
<i>Water Supply.</i>								
1911	5,420,813	299,442	99,355	*	200,087	192,486	...	7,601
1921	10,323,252	855,751	347,298	*	508,453	473,890	...	34,563
1926	16,156,470	1,319,872	422,359	70,274	827,239	796,144	66,350	(—) 34,255
1927	17,680,175	1,399,581	483,005	75,360	841,216	872,006	69,657	(—) 100,447
1928	19,317,808	1,480,748	513,171	106,172	861,405	816,323	74,071	(—) 28,989
1929	20,646,392	1,657,511	510,447	96,272	1,050,792	879,737	40,638	130,417
1930	22,525,679	1,722,140	519,119	139,000	1,064,021	973,083	50,486	40,452
1931	23,381,090	1,672,954	456,474	...	1,216,480	1,156,902†	58,010	1,568
<i>Sewerage.</i>								
1911	4,496,290	234,208	79,636	*	154,572	159,070	...	(—) 4,498
1921	7,329,632	615,615	229,441	*	386,174	341,675	...	44,499
1926	9,819,586	777,809	289,426	3,818	484,565	501,451	38,917	(—) 55,803
1927	10,589,916	833,384	254,777	4,712	573,895	539,638	41,818	(—) 7,561
1928	11,536,173	941,870	267,383	6,049	668,438	510,310	46,669	111,459
1929	12,794,194	1,007,884	264,404	10,170	733,310	548,298	27,725	157,287
1930	13,855,037	981,775	274,259	20,000	687,516	614,543	35,029	37,944
1931	14,440,475	979,389	247,896	...	731,493	758,519†	39,674	(—) 66,700
<i>Drainage.</i>								
1926	379,956	33,790	13,602	1,966	18,222	20,189	1,688	(—) 3,655
1927	423,360	33,944	14,309	1,174	18,461	21,895	1,693	(—) 5,127
1928	518,049	45,383	17,262	345	27,776	20,316	2,274	5,186
1929	594,163	50,789	15,806	272	34,711	25,820	1,200	7,691
1930	672,087	49,775	16,878	1,500	31,397	13,140	1,399	16,858
1931	699,450	51,745	11,516	...	40,229	36,504†	1,872	1,853

*Charged to Public Works Fund.

†Includes exchange—Water £93,921, Sewerage £63,944, Drainage £2,624.

Accounts are kept on a revenue basis, and the revenue due and the expenditure incurred in respect of any year are brought into account in that year. The accumulated loan expenditure is inclusive of works in course of construction. Interest on these works is payable by the Board and until 1927-28 it had been the custom to charge to revenue interest on works during construction. In that year, however, it was decided to capitalise such interest in respect of major works, *i.e.*, those having a life estimated at not less than fifty years.

Prior to 1st April, 1925, neither renewals nor sinking fund contribution was a charge on the revenues. The former were met from the Public Works Fund, and the latter was not charged.

The Hunter District Water Supply and Sewerage.

The water supply works of the Lower Hunter were constructed by the Government under the provisions of the Country Towns Water Supply and Sewerage Act of 1880. In 1892, control of the works was transferred to a Board under the authority of a special Act.

The Board is constituted by nine members, viz., a president appointed by the Governor and eight members elected by the aldermen and councillors of the local areas concerned.

Water is obtained mainly from a dam of 5,000 million gallons capacity on the Chichester River at a point about 60 miles north from Newcastle. This supply is supplemented as required by pumping water from the Hunter River.

The sewerage scheme for the Hunter district has its outfall at Merewether Gulf, some distance south from Newcastle. The districts served are Newcastle, Adamstown, Hamilton, Lambton, New Lambton, Merewether, Waratah, Wickham, and parts of the Tarro and Lake Macquarie shires.

Particulars relating to the water supply and sewerage services of the Board at intervals since 1911 are given below:—

Year ended 30th June.	Water Supply.				Sewerage.	
	Properties supplied.	Supply during year.	Average Daily Supply.		Properties Connected.	Length of Sewer.
			Per Property.	Per Head.		
	No.	thousand gallons.	gallons.	gallons.	No.	miles.
1911 ...	17,164	675,214	108	21·5	1,465	30
1921 ...	25,874	1,711,187	181	36·2	12,218	148
1926 ...	33,997	2,668,215	215	43·0	18,071	177
1927 ...	36,600	2,970,781	222	44·5	19,219	183
1928 ...	39,262	2,994,610	208	41·6	20,043	187
1929 ...	40,222	3,387,187	230	46·1	20,637	190
1930 ...	41,674	3,029,342	199	39·8	21,230	199
1931 ...	42,631	2,905,391	187	37·3	23,057	200

A water rate of 10d. in the £ was charged up to 30th June, 1927, then it was increased to 13d. on properties with an annual value exceeding £14. A charge of 15s. per annum is payable on properties valued at £14 or less, and extra charges are made for water used for other than domestic purposes. The charge by meter is 1s. 6d. to 2s. per 1,000 gallons. The sewerage rate is 12d. in the £ of assessed annual value.

Up to 30th June, 1928, the receipts were paid into Consolidated Revenue Fund of the State and payments in connection with the services were made from that fund. No deduction was made on account of expenditure on renewals, which was met from the Public Works Fund of the State. Interest was charged against revenue only on so much of the loan capital as was revenue-producing, the balance being either capitalised or paid from Consolidated Revenue Fund. On 1st July, 1928, a special deposits account was opened in the State Treasury for the receipts and expenditure, and the capital indebtedness to the State at 30th June, 1928, was determined by agreement between the Government and the Board and declared in the Hunter District Water and Sewerage Act, 1928, to be £3,360,911, viz., water supply £2,514,483, sewerage £661,888, and storm-water drainage £184,540. The Board is required to collect sufficient rates, etc., to cover expenses and to pay interest on its capital indebtedness and sinking fund contributions at the rate of 5s. per £100.

In determining the capital indebtedness a large amount was written off in consideration of the additional cost of the Chichester waterworks owing to delay in construction as a result of the war, concessions in charges for

water supplied to industrial concerns and the State railways, and considerable sums paid to the Treasury since 1907 as net surpluses and instalments to sinking fund for renewals.

Particulars relating to revenue, expenses, etc., during various years since 1911 are shown below:—

Year ended 30th June.	Capital Debt.	Gross Revenue.	Working Expenses and Management.	Interest on Loan Capital.	Sinking Fund.	Net Revenue.
	£	£	£	£	£	£
<i>Water Supply.</i>						
1911 ...	495,747	45,711	17,774	16,970	...	10,967
1921 ...	1,472,074	116,320	59,895	35,556	...	20,869
1926 ...	3,733,126	163,807	65,328	55,819	...	42,660
1927 ...	4,078,397	170,601	78,397	65,938	...	26,266
1928 ...	2,514,483*	214,669	89,769	76,957	...	47,943
1929 ...	2,716,581	222,905	91,874	134,367	6,824	(—) 10,160
1930 ...	2,830,415	231,698	90,993	142,660	7,260	(—) 9,215
1931 ...	2,847,998	235,325	77,706	160,298†	8,117	(—) 10,796
<i>Sewerage and Drainage.</i>						
1911 ...	170,151	8,975	3,177	2,902	...	2,896
1921 ...	590,790	32,164	16,007	25,328	...	(—) 9,171
1926 ...	719,549	68,412	22,625	31,932	...	13,855
1927 ...	781,452	75,175	25,578	32,968	...	16,629
1928 ...	846,428*	79,636	24,206	33,777	...	21,653
1929 ...	1,222,691	84,008	26,980	33,659	2,460	20,907
1930 ...	1,607,443	88,487	35,605	34,820	3,573	14,489
1931 ...	1,868,802	91,158	37,630	44,642†	5,083	3,803

* Capital debt written down. † Includes exchange—water £15,578, sewerage and drainage £9,756.

The increase in the interest charges in 1928-29 was due to the fact that interest in respect of the Chichester waterworks, previously capitalised, was charged to revenue.

ROADS, BRIDGES, AND FERRIES.

Prior to the enactment of legislation providing for the incorporation of shires, the State was divided into road districts, each under the supervision of an officer directly responsible to the Commissioner for Roads. These officers had under their care the greater part of the roads and bridges of the State outside the incorporated areas and a portion of those within such limits. Road trusts formed under various Acts had the supervision of the expenditure of certain grants for the maintenance of roads in districts chiefly of minor importance, as well as some important roads in the vicinity of the metropolis.

When the Local Government Act of 1906 was brought into operation, the councils of the municipalities and shires took over the administration of the roads, bridges, etc., under the control of the Roads Department, with the exception of those in the unincorporated areas of the Western Division, and certain bridges and ferries proclaimed as "national works." The Act authorised payments by way of endowment to municipalities and shires, the minimum endowment payable to shires being fixed at £150,000 per annum, and the Minister was empowered to withhold payment of endowment from a council if his requirements in respect of main roads were not satisfied:

Between 1906 and 1912 the amount of endowment allotted to shires was increased from £150,000 to £360,000 approximately, but the expenditure by the councils on the important roadways was not sufficient to maintain them in a serviceable condition. It was decided, therefore, to reduce the amount of general endowment to the minimum, and to make a separate vote to councils for the upkeep of the main roads. This vote was continued until the year 1924 when an Act was passed to place the main roads under the supervision of a board.

Under arrangements made in 1928 the Main Roads Board assumed control over works (including bridges and ferries) on main and developmental roads in the Eastern and Central Divisions of the State, and the Department of Public Works has charge of governmental works on other roads in these divisions and of all road works in the Western Division, including those on main roads in the six western municipalities.

Main Roads Board.

The Main Roads Act, 1924, was brought into operation by proclamation as from 1st January, 1925. The first Main Roads Board was appointed in the following month and commenced actual operations on 12th March, 1925. The Board was abolished on 22nd March, 1932, and its functions were transferred to a Board of Commissioners appointed under the Ministry of Transport Act, 1932. This Board was charged also with powers and functions of the Railway Commissioners, the Transport Trusts, the Commissioners of Road Transport, the Management Board administering the Tramways and the State Transport (Co-ordination) Board, which are described in the chapters relating to the land transport services.

The Main Roads Board consisted of two engineers with special knowledge of road construction, and a president. It was charged with the duty of co-operating with the local councils in the work of constructing and maintaining a well-organised system of main highways, with the primary object of developing the vacant lands in the State, of feeding the railways with traffic, of giving the primary producers access to markets, and of providing facilities for modern motor traffic. Public roads, except those in the City of Sydney, were proclaimed to be a main road on the recommendation of the Board.

The Main Roads Act, 1924, provided for the creation of three separate funds: (1) the County of Cumberland Main Roads Fund for metropolitan main roads, *i.e.*, those in the County of Cumberland which, for the purposes of the Act, is deemed to include the Municipalities of Katoomba and Blackheath, and the Shire of the Blue Mountains, also small sections of the Bulli, Colo, and Blaxland Shires added in 1929; (2) the Country Main Roads Fund; and (3) the Developmental Roads Fund. In terms of an amending Act passed in 1929 provision was made also for a Federal Aid Roads Fund.

The income of the two Main Roads Funds is derived chiefly from (a) the proceeds of taxes and fees in respect of motor vehicles; (b) annual subsidies from the State revenues; (c) grants from the Federal Government; (d) contributions by municipal and shire councils; (e) loan moneys appropriated for the main roads. The Developmental and Federal Aid Roads Funds consist mainly of moneys made available by the State and Commonwealth Governments. The Federal Aid Roads Fund receives also certain contributions from the Main Roads Funds; and for eight years, from 1st July, 1928, a State subsidy of at least £20,000 per annum for roads in the Western Division.

The proceeds of motor taxes, fees, and penalties, as from 30th June, 1924, to 30th June, 1929, were apportioned between the two main roads funds, after a deduction of 10 per cent. had been made by the Treasury for cost of collection. The County of Cumberland Fund received half the net proceeds in respect of motor vehicles owned by residents in the road district, also the net collections in respect of public vehicles licensed under the Metropolitan Traffic Act, and the Country Main Roads Fund received the balance. Under an amending law which operated from 1st July, 1926, and was repealed in the following year, the amounts payable to the County of Cumberland Fund from these sources were limited to £106,155 and £6,300 per annum respectively, and the annual payment of motor taxes, etc., to the Country Fund was limited to £452,382. The allocation of the proceeds of motor taxation fees, etc., as from 1st July, 1929, is made in terms of the Transport Act, 1930. The Main Roads Funds receive the tax on motor vehicles, other than public vehicles, less 5 per cent. for cost of collection, half the tax on vehicles owned by residents of the County of Cumberland being paid to the County of Cumberland Roads Fund and the balance to the Country Main Roads Fund. License fees are used to defray the cost of administration and control of traffic under the Transport Act, any surplus at the end of each financial year being payable to the Country Main Roads Fund. The proceeds of the taxation of motor omnibuses is distributed amongst the municipalities and shires and the Main Roads Funds for the maintenance of the roads on which they operate.

It was prescribed by the Main Roads (Amendment) Act, 1929, that the following be paid from the Cumberland and Country Main Roads Funds (a) to the Federal Aid Roads Fund—part of the State quota under the Federal Aid Roads agreement, (b) into the sinking fund established in terms of the agreement—sums equal to 3 per cent. of loan moneys included in the State quota, (c) to the State Treasurer—sums required to provide for interest and repayment of State loans appropriated for the main roads after 1st July, 1928.

The councils in the metropolitan road district may be required to contribute to the County of Cumberland Main Roads Fund at a rate not exceeding $\frac{1}{4}$ d. in the £ of the unimproved capital value of ratable property, the rate payable in respect of land used for agricultural and pastoral purposes, or land in the city of Sydney, being one half the rate levied on other lands in the district. Contributions by country councils depend upon the amount expended on the main roads.

In the metropolitan district, where the levy is compulsory, the whole cost of construction and maintenance is paid from the roads funds, but the actual work may be done by the councils under its direction. In the country districts the assistance in respect of road work may be granted to the council of any area through which a main road passes, and the council may be required to contribute part of the cost of the work as prescribed by the Act. Voluntary offers from the councils to pay a greater proportion of the cost than is prescribed may be accepted; or, in special circumstances, the whole cost of any particular work may be paid from the roads funds or the cost may be advanced to be repaid by the councils. The maximum contribution which may be required from a country council in a year is limited to the sum which would be produced by a rate of $\frac{1}{4}$ d. in the £ of the unimproved capital value. To meet cases in which a metropolitan or country council may be unable or unwilling to carry out the work planned, power is reserved to the Governor to authorise the Board administering the roads to do the work.

The proportion of the cost of works on country roads which is borne by the roads funds varies with the class of road, as defined below. The whole cost of a two-way strip of carriage way on State highways may be paid, two-thirds of the cost of similar works on trunk roads, and at least half the cost of works on ordinary roads.

Any road, not being a main road, may be proclaimed as a developmental road if it will help to develop a district, and a portion or the whole cost of construction may be provided from the Developmental Roads Fund.

The main roads have been classified into three groups in the order of their importance, viz., (1) State highways which are the primary avenues of communication by road between New South Wales and the neighbouring States or between the coast and the far interior; (2) trunk roads which are secondary roads forming with the State highways the framework of a general system of inter-communication throughout the State; and (3) main roads not included in the other groups.

The length of main roads in the county of Cumberland road district at 30th June, 1931, was 590 miles, including 193 miles of State highways; and there were 85 miles of secondary roads. In the country districts (excluding the Western Division) 13,232 miles of main roads have been proclaimed under the Act, and of these 3,459 miles have been classified as State highways, 2,321 miles as trunk roads, and 7,452 miles as ordinary main roads. In addition there were 2,450 miles of developmental roads.

Commonwealth Grants for Main Roads.

Apart from the assistance granted by the State Government for the construction and upkeep of roads, the Commonwealth Parliament, in each year from 1st July, 1923, to 30th June, 1926, appropriated moneys to assist the States in regard to roads. The amounts of the Federal grants were paid into a trust fund at the Commonwealth Treasury, and made available to the States as expenditure approved by the Federal authorities was incurred. When the Main Roads Board came into being there were unexpended balances for developmental roads amounting to £94,359 on the 1923-24 vote, £267,052 on the 1924-25 vote, and £275,860 on the 1925-26 vote, the total votes in each case consisting of £138,000 from the Commonwealth Government, and a subsidy of like amount from the State.

In 1926 the Federal Government introduced a new system of federal aid for road construction. The Federal Aid Roads Act was passed to authorise the Commonwealth to contract agreements with the various States, providing for the distribution among the States of a sum of £20,000,000 in ten equal annual instalments for the construction and reconstruction of federal aid roads defined as—(i) Main roads which open up and develop new country; (ii) trunk roads between important towns; (iii) arterial roads to carry the concentrated traffic from developmental, main trunk, and other roads. It was provided that at least one-fourth of all moneys expended under the Act should be on construction.

The funds provided by the Commonwealth were obtained from Customs duties on motor-cars and motor accessories, and each State participating in the scheme was required to expend a minimum amount equal to three-fourths of the sums provided by the Commonwealth. The State's share might be derived either from loans or from State revenue, at least one-eighth of it being derived from revenue, and the amount derived from loans was subject to a sinking fund of 3 per cent. per annum at a rate of interest sufficient to extinguish the indebtedness in twenty years. In terms of the agreement New South Wales received an annual grant of

£552,000 from the Federal Government, and was required to provide annually from its own resources £414,000, including at least £51,750 from revenue. The agreement was not signed until 17th June, 1927. Therefore no grants were paid prior to the financial year 1927-28. In 1931 legislation was passed to amend the agreement. The States were relieved of the duty of providing pro rata contributions as from 1st February, 1930, and the Commonwealth agreed to continue the annual grant at the existing rate until 30th June, 1931, then to grant until 31st December, 1936, the amount yielded by a customs duty of 2½d. per gallon on petrol imported into Australia and an excise duty of 1½d. per gallon on petrol refined in Australia. Moreover, the use of the money was extended to maintenance and repairs as well as construction.

Finances of the Main Roads Board.

A summary of the income and expenditure accounts of the funds administered by the Main Roads Board is shown below for the financial years ended 30th June, 1928, to 1931, also the total amounts to 30th June, 1931. Particulars of the moneys received and disbursed under the Federal Aid Roads agreement are included:—

Particulars.	1927-28.	1928-29.	1929-30.	1930-31.	Total to 30th June, 1931.
<i>Expenditure.</i>	£	£	£	£	£
Construction	2,345,915	2,560,083	2,778,338	1,584,146	12,172,332
Maintenance	744,159	1,042,706	1,315,283	848,835	4,931,823
Repayment of Loans ...	143,847	240,852	324,769	325,412	1,272,094
Administrative Expenses ...	66,568	90,838	97,168	83,946	403,462
Plant Running Expenses (including depreciation) ...	59,835	72,461	81,453	64,897	303,924
Miscellaneous	5,277	7,202	9,824	8,000	52,116
Total ...	£ 3,365,601	4,014,142	4,606,835	2,915,236	19,135,751
<i>Income.</i>					
Motor taxes, fees, etc. ...	1,337,289	1,555,697	1,526,647	1,258,883	7,716,845
Rates requisitioned from Councils	303,586	318,576	341,556	344,786	1,938,728
Loans raised by Councils ...	349,747	165,147	122,518	18,511	694,205
Contributions by Councils ...	58,625	112,436	53,980	26,977	252,018
State Appropriations—					
From Revenue	218,500	53,750	3,757	113,298	799,182
From Loans	1,289,500	1,470,250	298,637	230,000	4,990,545
Federal Grants	1,110,911	560,791	620,780	566,545	3,246,330
Plant Earnings	67,783	66,415	82,713	55,812	309,782
Miscellaneous	30,670	89,206	88,161	61,562	292,622
Total ...	£ 4,766,611	4,392,268	3,138,749*	2,676,374	20,240,257

* Adjusted in respect of earlier years.

The income for 1927-28 includes allocations by the Commonwealth for the two years 1926-27 and 1927-28 and the State subsidy in respect thereof. The income of the year 1929-30 showed a decline of £1,253,519, due chiefly to a curtailment of loan expenditure, and in the following year receipts from motor taxes decreased. Consequently expenditure, which amounted to £4,606,835 in 1929-30, dropped to £2,915,236 in 1930-31.

The expenditure and income of the various funds are shown separately in the following statement:—

Year:	Cumberland Main Roads.	Country Main Roads.	Developmental Roads.	Federal Aid Roads.	Total, All Funds.
<i>Expenditure.</i>	£	£	£	£	£
1925-26* ...	685,290	776,084	101,468	...	1,562,842
1926-27 ...	969,723	1,540,365	152,007	...	2,671,095
1927-28 ...	1,120,790	1,288,892	188,238	768,181	3,365,601
1928-29 ...	1,071,975	1,707,453	251,992	982,722	4,014,142
1929-30 ...	1,138,872	2,077,133	271,387	1,119,443	4,606,835
1930-31 ...	784,511	1,263,507	183,305	683,913	2,915,236
Total to 30/6/31	5,771,161	8,661,934	1,148,397	3,554,259	19,135,751
<i>Income.</i>					
1925-26* ...	1,121,274	2,000,095	264,003	...	3,385,372
1926-27 ...	716,825	888,057	276,001	...	1,880,883
1927-28 ...	1,341,508	1,731,102	26,001	1,668,000	4,766,611
1928-29 ...	1,307,562	1,539,137	315,569	1,230,000	4,392,268
1929-30 ...	855,390	1,751,099	176,607	355,653	3,138,749
1930-31 ...	699,642	1,263,392	131,340	582,000	2,676,374
Total to 30/6/31	6,042,201	9,172,882	1,189,521	3,885,653	20,240,257

*From 12th March, 1925, to 30th June, 1926.

The total expenditure by the Main Roads Board to 30th June, 1931, amounted to £19,135,751. Of this sum 30 per cent. was expended from the Cumberland Main Roads Fund, 45 per cent. from the Country Main Roads Fund, 6 per cent. from the Developmental Roads Fund, and 19 per cent. from the Federal Aid Roads Fund. Commonwealth grants prior to 1927-28 are included in the accounts of the Main and Developmental Roads Funds.

Details of the expenditure and income of each of the funds during the year 1930-31 are shown in the following statement:—

Particulars.	Cumberland Main Roads.	Country Main Roads.	Develop- mental Roads.	Federal Aid Roads.	Total, All Funds.
<i>Expenditure.</i>	£	£	£	£	£
Construction ...	350,718	400,606	175,775	657,047	1,584,146
Maintenance ...	175,411	673,424	...	...	848,835
Repayment of Loans ...	232,891	65,655	...	26,866	325,412
Administrative Expenses ...	23,087	54,103	6,756	...	83,946
Plant Running Expenses (in- cluding depreciation) ...	...	64,897	...	...	64,897
Miscellaneous ...	2,404	4,822	774	...	8,000
Total ...	784,511	1,263,507	183,305	683,913	2,915,236
<i>Income.</i>					
Motor Taxes, Fees, etc. ...	281,249	967,634	...	10,000	1,258,883
Rates requisitioned from Councils ...	344,786	...	...	...	344,786
Loans raised by Councils ...	18,511	...	...	...	18,511
Contributions by Councils ...	19,918	6,796	263	...	26,977
State Appropriations—					
From Revenue ...	...	48,953	64,345	...	113,298
From Loans ...	...	144,000	66,000	20,000	230,000
Federal Grants ...	...	14,544	1	552,000	566,545
Plant Earnings ...	...	55,812	...	...	55,812
Miscellaneous ...	35,178	25,653	731	...	61,562
Total ...	699,642	1,263,392	131,340	582,000	2,676,374

The Main Roads Act made provision for certain financial adjustments to be made by the Board with the Treasury and the municipal and shire councils in respect of moneys expended on metropolitan main roads, or borrowed by the councils for these roads, prior to the constitution of the Main Roads Board. Under these provisions the Board assumed liabilities in respect of interest and repayment of such moneys, including the councils' share of the cost of works carried out by the Government. The Board was responsible also for the repayment with interest of half the loan moneys advanced by the Treasurer for the County of Cumberland main roads including sums expended during the financial years 1920-21 to 1924-25. Subsequently it was provided that the whole of moneys advanced after 30th June, 1928, for the Cumberland and country main roads must be repaid from the respective funds. The loans which are thus chargeable to the Main Roads Funds are not included in the statement of liabilities shown below in the balance-sheet as at 30th June, 1931. The principal amounts outstanding at that date were £1,762,797 chargeable to the Cumberland Fund and £471,588 chargeable to the Country Main Roads Fund.

Particulars.	Cumber- land Main Roads.	Country Main Roads.	Develop- mental Roads.	Federal Aid Roads.	Total, All Funds.
<i>Liabilities.</i>					
	£	£	£	£	£
Sundry Creditors	11,078	29,452	25,043	145,896	211,449
Insurance Reserve	2,000	8,939	...	...	10,939
Balance of Income and Expenditure Accounts	271,042	510,948	41,124	281,394	1,104,508
Total	284,120	549,319	66,167	427,290	1,326,896
<i>Assets.</i>					
Cash at Treasury and Sub-advance Accounts	20,916	189,500	43,515	36,531	290,462
Stock on Hand	14,949	9,303	548	7,926	32,726
Depot Buildings, Plant and other Assets	91,186	149,647	...	...	240,833
Sundry Debtors—					
Councils (Rates, Loans, Interest)	133,762	176,507	5,758	4,424	320,451
Federal Government ... ..	...	15,000	15,000	376,981	406,981
Miscellaneous	23,307	9,362	1,346	1,428	35,443
Total	284,120	549,319	66,167	427,290	1,326,896

Length of Roads.

After the extension of the system of local government there was a great increase in the mileage of public roads. The length of roads under Government control on 30th June, 1906, prior to the transfer to the councils, was 48,311 miles; 195 miles were under the care of road trusts, and the Government paid subsidy to the municipal councils in respect of 1,338 miles of roads within their areas. There were also about 8,000 miles of roads and streets belonging to the municipal councils.

Statistics as to roads are collected triennially, and in 1930 the length of roads in the State was approximately 118,341 miles, of which 58 miles were controlled by the Government, 10,858 miles were in the municipalities, 101,737 miles in the shires, and 5,688 miles were in the unincorporated areas of the Western Division, also administered by the Government. The nature of the roads may be seen in the following statement:—

Divisions.	Blocked, Metalled, Gravelled, Ballasted, etc.	Formed only.	Cleared only.	Natural surface.	Total.
	miles.	miles.	miles.	miles.	miles.
National*	50	8	...	...	58
Municipalities	5,780	1,973	1,812	1,293	10,858
Shires	21,464	17,928	30,616	31,729	101,737
Western Division*.. ..	177	220	2,932	2,359	5,688
Total	27,471	20,129	35,360	35,381	118,341

* Year 1929.

The principal roads leading southward from Sydney are the Prince's Highway (349 miles), traversing the coastal districts to the Victorian border; and the Hume Highway (367 miles), via Goulburn and Gundagai to Albury. The Federal Highway (42 miles) runs from the Hume Highway, near Yarra, to the Federal Capital Territory; and the Monaro Highway (254 miles) from Tathra, on the coast, via Cooma and Tumut to Wagga.

The western highways are the Great Western (129 miles) from Sydney to Bathurst; the Mid-western (610 miles approximately) from Bathurst through Cowra, Wyalong, Balranald, and Wentworth to the South Australian border near the southern corner of New South Wales; the North-western (425 miles) from Bathurst via Orange, Trangie, Nyngan, and Bourke to Barringun on the Queensland border; and the Barrier Highway (about 394 miles) from Nyngan, via Cobar, Wilcannia, and Broken Hill to the South Australian border at Cockburn.

The principal northern roads are the Pacific Highway (609 miles), traversing the coastal districts from North Sydney to Newcastle, thence via Hexham and the coastal towns to the Queensland border at Coolangatta; the Great Northern Highway (446 miles), from Hexham, thence through Maitland, and along the tablelands through Glen Innes and Tenterfield to the Queensland border near Mount Lindesay. The Oxley Highway (377 miles), branching from the Pacific Highway near Wauchope, connects it with the North-western Highway at Trangie; and the Gwydir Highway (326 miles) branches from the same road at South Grafton and runs westerly via Glen Innes and Moree to Collarenebri. A road 16 miles in length between Landsdowne and Hornsby connects the Hume and Great Northern Highways.

Bridges and Ferries.

Many of the earliest bridges erected in the State were built of stone, and are still in existence. Those erected in the period following the extension of settlement to the interior were principally of timber, and have been replaced after an average life of about twenty-five years. Nearly all the

large bridges of recent date are of iron and steel and reinforced concrete, and some of them have been erected under difficult engineering conditions, owing to the peculiarity of the river flow in certain parts of the country. The municipal and shire councils are empowered to control the bridges, with the exception of those classified as national works and those under the control of the Main Roads Board. The most notable bridge-building project is the Sydney Harbour Bridge described below.

A wooden bridge across Middle Harbour at the Spit was built in 1924 by the Sydney Harbour Trust for the Manly Municipal Council. Tolls were levied to defray the cost until expenses had been paid in full, then the bridge was transferred to the Government in 1930. Similar conditions apply to a bridge across George's River, which was constructed by the Sutherland Shire Council, and opened for traffic in May, 1929.

Where local conditions and limited traffic have not favoured the erection of a bridge, a punt or ferry has been introduced. The most important ferries which are worked otherwise than by hand have been proclaimed as national services. Prior to 1st December, 1907, it was the practice to charge a small fee for ferry transit; but on that date tolls were abolished, and public ferries became free.

Sydney Harbour Bridge.

The Sydney Harbour Bridge, crossing between Dawes Point on the southern and Milson's Point on the northern side, is the largest arch bridge in the world. Its total length, with railway and roadway approaches (the railway connecting with the City Railway at Wynyard Station and with the northern suburban line at Waverton Station) is $2\frac{3}{4}$ miles.

The main bridge consists of a steel arch span of 1,650 feet, with a rise of 350 feet at the centre of the lower chord at crown, and the highest point of the top chord is 440 feet above mean sea level. It is flanked on either side by granite-faced concrete abutment towers and pylons and by five steel approach spans. The clearance for shipping is 170 feet from high-water level. The width of the deck overall is 160 feet; it carries a roadway 57 feet wide in the centre, with a pair of railway tracks on each side, and a footway 10 feet on each extreme outside. The main arch is composed of silicon steel and the deck of carbon steel. The weight of steelwork in the bridge is 50,300 tons, of which 37,000 tons are in the main span.

The actual construction cost is about £6,250,000, and the total cost, including resumptions and interest during construction, nearly £10,000,000. This amount will be reduced ultimately by realisations from the sale of surplus lands. The Government expenditure to 30th June, 1931, amounted to £8,136,946, including £4,057,662 to the contractors in respect of the main bridge and steel approaches, £1,507,000 expended by the Public Works Department on approaches, £1,252,258 on resumptions, and £1,048,932 as interest capitalised.

It was prescribed by the Sydney Harbour Bridge Act, 1922, that two-thirds of the cost was to be debited to the Government railways, and that one-third was to be paid by means of a special levy at the rate of $\frac{1}{2}$ d. in the £ of unimproved capital value of land in the following municipalities and shires, viz., Sydney, Manly, Mosman, Lane Cove, North Sydney, Wilmoughby, Ku-ring-gai, Warringah and part of Hornsby. Under amending legislation, however, it was arranged that tolls be charged for traffic other

than pedestrian, that the railway and tramway authorities pay a prescribed amount in respect of each paying passenger carried across the bridge, and that the special levy upon the local areas enumerated above be collected up to and including the year 1939.

The charges payable in respect of traffic across the bridge are as follows:—

	s.	d.
Motor cars and motor cycles with side cars each	0	6
Bicycles, tricycles, motor cycles without side cars, light vehicles propelled by hand or horse drawn „	0	3
Vans, lorries, drays, or other vehicles of which the tare weight does not exceed 2 tons „	1	0
Vans, lorries, drays, or other vehicles of which the tare weight exceeds 2 tons but does not exceed 3 tons „	2	0
Vehicles not otherwise specified „	3	0
Persons riding in vehicles (other than the driver)—Adults ..	0	3
„ „ „ „ —Children ..	0	1
Horse and rider „	0	3
Horses or cattle (loose stock)... .. per head	0	2
Sheep or pigs „	0	1

The bridge was opened for traffic on 19th March, 1932. Its administration is vested in the Board of Transport Commissioners, and one pair of railway tracks which are not yet required for the railway services are being used for trams.

Government Expenditure on Roads, Bridges, etc.

Although the main roads have been superseded largely by the railways, they are still the sole means of communication throughout a large part of the interior and serve as valuable feeders to the railway system. The following return shows the expenditure by the State Government and the Main Roads Board on works of a local character, such as roads, bridges, punts, ferries, public watering places, etc., in various years from 1906 to 1931:—

Year ended 30th June.	Expenditure from votes of Public Works Department.	Expenditure from Funds of Main Roads Board.	Endowments and Grants, to Councils from votes of Local Government Department.			Total Expenditure.
			Shires.	Municipali- ties.	Total.	
	£	£	£	£	£	£
1906	497,061	...	...	4,944	4,944	502,005
1916	114,011	...	353,048	62,457	415,505	529,516
1921	212,407	...	316,180	108,353	424,533	636,940
1926	321,785	1,385,888	255,465	9,654	265,119	1,972,792
1927	343,013	2,498,802	181,392	10,157	191,549	3,033,364
1928	361,023	3,090,074	246,790	17,124	263,914	3,715,011
1929	479,662	3,602,789	301,220	30,290	331,510	4,413,961
1930	464,271	4,093,621	312,178	69,129	381,307	4,939,199
1931	435,749	2,432,931	519,395	397,150	916,545	3,785,275

The moneys expended by the Main Roads Boards have not been provided wholly by the State Government, part of them being grants from the Government of the Commonwealth and contributions, etc., by the councils of the municipalities and shires, as shown on earlier pages of this chapter.

The expenditure in connection with the Sydney Harbour Bridge, amounting to £1,648,812 in the year 1929-30 and to £1,673,003 in 1930-31, is not included in the figures shown in the table. In addition there has been a considerable amount of expenditure on roads, bridges, etc., by local government bodies and on streets by private individuals in preparing land for subdivisional sales.

INDEX.

A

Abattoirs, 264, 553
 Aborigines, 385, 493
 Absentee Incomes, 741
 Taxation, 636, 645
 Accidents, Deaths, 546
 Ferries, 137
 Industrial, 602
 Mines, 105
 Railway, 171
 Traffic, 178
 Tramway, 171
 Admiralty Jurisdiction, 457
 Adoption of Children, 378
 Advances by Banks, 695-697, 711
 for Homes, 399, 709, 711
 to Settlers, 322-326, 705, 709, 711
 Afforestation by Prisoners, 469
 Agents, Farm Produce, 236, 550
 Ages at Death, 508
 at Marriage, 499
 of Factory Workers, 60
 of School Children, 418
 Agricultural Administration, 201
 College, Hawkesbury, 415, 436
 Education, 201, 414, 424, 426
 Production, 188
 Research, 201
 Agriculture, 185
 Department of, 201
 Employment, 577
 Holdings, 181
 Land, Area, 185, 308
 Machinery, 195
 Prices, 560, 621
 Value of Production, 618
 Air Defence, 36
 Alcohol, Consumption of, 407
 (Power) Bounty, 41, 42
 Alienation of Crown Lands, 331
 Aliens, 480
 Altitude of Towns, 12, 14
 Alunite, 90, 103
 Ambulances, 384
 Amusements, 402
 Anchorages, 132
 Animals, 243
 Noxious, 269
 Antimony, 90, 97
 Anzac Memorial Bursary Fund, 437
 Apiculture, 293
 Appeals, Law, 465
 Appendicitis, 541
 Apprenticeship, 380, 595
 Technical Education, 423, 426, 429
 Arbitration, Industrial, 589
 Architects, 397, 433
 Area Australian States, 2
 New South Wales, 327
 Arrivals and Departures, 478

Art Gallery, National, 443
 Artesian Bores, 240
 Assurance, Life, 724
 Asylums, State, 384
 Attorney-General, 19, 446
 Auditor-General, 24
 Australian Coinage, 687
 Loan Council, 634, 675, 682
 Note Issue, 680
 Aviation, 36, 179
 Awards, Industrial, 591

B

Baby Health Centres, 377, 512
 Bacon, 288
 Consumption, 288, 551, 552
 Exports, 289
 Prices, 296, 553, 565, 573
 Bananas, 230
 Bankruptcy, 454, 460, 735
 Banks, 692
 Advances, 695-697, 711
 Assets and Liabilities, 694, 697
 Capital and Profits, 694
 Clearances, 699
 Commonwealth, 689, 693, 704, 707, 713
 Deposits, 695-697, 708, 713
 Exchange Rates, 702
 Settlement, 699
 Interest Rates, 701, 709, 713
 Notes, 689, 695
 Reserves, 687, 695
 Rural Bank, 324, 693, 711
 Savings, 705, 707
 Advances for Homes, 400
 School, 420
 Barley, 226
 Barnardo Homes, 484
 Barristers, 433, 450
 Basic Wages, 607
 B.A.W.R.A., 256
 Bee-farming, 293
 Beef, 263
 Consumption, 407, 408, 551, 557
 Export Trade, 265
 Preserving, 69
 Prices, 553, 563, 565, 573
 Beer, 71, 405
 Consumption, 408
 Betting Taxes, 403, 634, 641
 Bills of Exchange, 702
 of Sale, 738
 Treasury, 662, 678
 Birthplaces of Population, 493
 Prisoners, 472
 Births, 501
 Notification, 376
 Rates, 503
 Biscuit Factories, 62, 69
 Bismuth, 90, 97
 Blindness, 375, 427

- Board of Fire Commissioners, 771
 Board of Health, 361, 549
 Board of Trade—Commonwealth,
 107
 State, 608
 Boards and Trusts, 24
 Land Boards, 459
 Rural Industries Board, 323
 Tariff Board, 107
 Transport Co-ordination Board,
 145, 174
 Bookmakers' Taxes, 641, 642
 Boot and Shoe Factories, 62, 74
 Border Railways, 162
 Bores, Artesian, 240
 Botanic Gardens, 401
 Boundaries of New South Wales, 1
 Bounties, 41
 Cotton, 41, 42
 Flax, 41, 42
 Fruit, Canned, 41, 42
 Gold, 81, 91
 Iron and Steel Products, 41, 42
 Linseed, 42
 Power Alcohol, 41, 42
 Sulphur, 41
 Wine, 41, 42
 Brands, Stock, 271
 Bread, Consumption, 551, 555
 Prices, 555, 565, 573
 Weight of Loaf, 550
 Breadwinners, 577
 Breweries, 62, 71
 Licenses, 407
 Brickworks, 62, 65
 Bridges, 780, 787, 789
 Sydney Harbour, 134
 Bright's Disease, 541
 British Settlers' Welfare Committee,
 485
 Broken Hill Mines, 86, 92
 Bronchitis, 538
 Bronze Currency, 687
 Bubonic Plague, 370
 Building Societies, 717, 720
 Stone, 103
 Buildings, New, 396
 Bulk Handling of Grain, 213
 Bullion—Imports and Exports, 117
 Bursaries, 414, 426, 435
 Bush Nursing Association, 364
 Business Licenses (Mining), 78
 Butter, 283
 Consumption, 288, 551, 556
 Exports, 117, 119, 284, 289
 Factories, 62, 68, 279
 Grading, 275
 Prices, 285, 296, 563, 565, 573,
 621
 Production, 283, 312, 620, 621
- C**
- Cabinet, 19, 29
 Cable Services, 180
 Cadets, Military, 34
 Cadmium, 94
 Camels, 261
 Canadian Tariff Treaty, 122
 Cancer, 533
 Candle Factories, 62, 64
 Capital Cities, Australian, Popula-
 tion, 490
 Capital Punishment, 470
 Capital Value of Buildings and
 Plant—
 Factories, 43, 48, 51
 Mines, 84, 86
 Cargoes—Interstate and Oversea,
 129, 131
 Cattle, 257, 278
 Interstate Movement, 258
 Prices, 262
 Slaughtering, 262, 553
 Cement, 62
 Censorship of Films, 403
 Census Enumerations, 475
 Charities, 361, 384
 Cheese, 286
 Consumption, 551, 556
 Prices, 565, 573
 Production, 286, 289
 Childbirth, Deaths in, 542
 Children, Adoptions, 378
 Ages in Schools, 418
 Courts, 381, 461
 Deaf, Dumb, Blind, 375, 427
 Deaths, 511
 Defective, 375, 382
 Delinquent, 381, 461
 Deserted, 376, 378, 380
 Employment, 60, 376, 382, 601
 Family Allowances, 391
 Feeble-minded, 382
 Homes, 380
 Neglected, 376
 Receiving Education, 417
 Reformatories, 381
 Schools, 416, 426
 State Wards, 380
 Truants, 381
 Vocational Guidance, 425
 Welfare, 376
 Chromite, 97
 Chronological Table, 36
 Church Adherents, 413
 Schools, 419, 426, 428
 Cigarettes and Cigars, Consumption,
 411
 Manufacture, 62, 72
 Cirrhosis of the Liver, 541
 Cities, 490, 745
 Citrus Crops, 232
 City Railway, 161
 Civil Jurisdiction, 451
 Classification of Factories, 44
 Climate, 5
 Clinics, Baby, 377, 512
 University, 434
 Venereal Diseases, 372
 Closer Settlement Fund, 353, 651,
 657
 Cloth Factories, 62, 73
 Clothing, Cost, 574

- Coal, 98
 - Commission, 101
 - Consumption, 100
 - Exports, 100, 117, 120
 - Intermittency in Mining, 584
 - Miners, 579
 - Miners' Wages, 612
 - Mining, 83, 85, 87, 98
 - Prices, 82, 563
 - Production, 90, 99, 620
 - State Mine, 99
 - Used in Factories, 55, 101
 - Used on Railways, 101, 171
 - Coastal Division, 314
 - Coffee Consumption, 551, 559
 - Prices, 565, 573
 - Coin held by Banks, 687, 695
 - Coinage, 687
 - Coke, 55, 62, 76
 - Cold Storage Works, 551
 - Commerce, 107
 - Commercial Education, 415, 423, 426
 - Commissions (Public), 24
 - Common Law, 453
 - Commons, 333, 401
 - Commonwealth, 17, 31
 - Commonwealth Bank, 689, 693, 704
 - Industrial Arbitration, 591
 - Savings Bank, 704, 707, 713
 - Taxes, 633, 635, 644
 - Community Advancement, Societies, 396
 - Settlement, 717
 - Companies, Incorporated, 714
 - Banking, 692
 - General Insurance, 723
 - Income, 741
 - Income Taxation, 637, 648
 - Incorporated, 714
 - Insurance, 731
 - Life Assurance, 724
 - Prices of Shares, 716
 - Compensation, Accident, 172
 - Railways and Tramways, 172
 - Workers, 602
 - Seamen, 143
 - Compulsory, Defence Training, 34
 - Conciliation, Industrial, 590, 592
 - Conjugal Condition of Population, 495
 - Conservatorium of Music, 441
 - Consolidated Revenue Fund, 650, 651
 - Constitution, Federal, 17, 31
 - State, 17
 - Consumption of Food, 551
 - Continuation Schools, 423
 - Conversion Loan—National Debt, 667
 - Convulsions of Children, 535
 - Coomella Irrigation Area, 358
 - Co-operative Societies, 717
 - Taxation, 638, 646
 - Copper, 90, 94
 - Prices, 81
 - Copyright, 448
 - Coroner's Courts, 463
 - Correspondence Teaching, 421, 426
 - Cost of Living, 572
 - Cotton, Bounty, 41, 42
 - Prices, 563
 - County Councils, 745
 - Courts of Law—
 - Appeals, 465
 - Children's, 381, 461
 - Coroner's, 463
 - Criminal, 463
 - Appeal, 465, 466
 - District, 452
 - Fair Rents, 458, 566
 - Federal, 460
 - High Court of Australia, 460, 466
 - Industrial Arbitration, 458, 590
 - Land and Valuation, 327, 460
 - Licensing, 405, 457
 - Magistrates, 451, 460
 - Marine Inquiry, 144, 457
 - Mining Wardens, 78, 458
 - Petty Sessions, 451, 460
 - Quarter Sessions, 464
 - Small Debts, 451
 - Supreme, 445, 453, 463, 465
 - Taxation Review, 458
 - Transport Appeal, 446
 - Cows, Dairy, 278
 - Creches, 377
 - Credit, Rural, 705, 709, 711
 - Crime, 461
 - Criminal Courts, 460
 - Crops, 188
 - Liens, 738
 - Times of planting and harvesting, 202
 - Crown Lands—Alienations, 331
 - Holdings, 309
 - Cultivation—Area under, 185
 - Curlwaa Irrigation Area, 359
 - Currency, 687, 702
 - Customs Revenue, 122
 - Tariff, 107, 121
 - Taxation, 633, 648
- D**
- Daceyville Garden Suburb, 399
 - Dairying, 274
 - Cattle, 278
 - Employment, 577
 - Export Control Board, 276
 - Exports, 289
 - Factories, 62, 68, 279
 - Farms, 279
 - Local Consumption of Products, 288
 - Machinery, 320
 - Organisations, 276
 - Production, 618
 - Supervision, 512, 549, 556
 - Day Nurseries, 377
 - Deaf Mutism, 375, 427
 - Deaths, 507
 - Accidental, 546, 602
 - Children, 511
 - In Gaols, 471
 - In Hospitals, 367
 - Index of Mortality, 508
 - Rates, 508
 - Debt, Public, 676, 678

Debts Courts, 451
 Defence, 34
 Dental Clinics, School, 383
 Hospital, 367, 435
 Dentists, 364, 433
 Deposits, Banks, 695-697, 713
 Metropolitan Water Board, 776
 Savings Banks, 708, 713
 Diabetes, 534
 Diamonds, 90, 102
 Diarrhœa and Enteritis, 540
 Diatomaceous Earth, 103
 Diphtheria and Croup, 370, 528
 Discount, Banks, 701
 Diseases, Communicable, 370
 Diseases, Deaths from, 522
 Seasonal Prevalence, 547
 Dislocations, Industrial, 597
 Divorcees, 456, 497
 Docks and Slips, 141
 Doctors of Medicine, 364, 433
 Domestic Training Schools, 415, 423,
 426
 Drainage Services, 772
 Trusts, 774
 Dreadnought Fund, 484
 Dredging for Minerals, 91, 95
 Drink Bill, 409
 Drunkenness, 410
 Dumping Foreign Goods, 122
 Dwellings, 396
 Advances for Homes, 399
 Fair Rents Courts, 458
 Rents, 566

E

Early Closing, Shops, 593
 Education, 414
 Agricultural, 201, 414
 Census Records, 415
 Children Receiving, 417
 Expenditure by State, 439
 Societies, 440
 Egg Marketing Board, 293
 Eggs, 291-293
 Prices, 563
 Elections—
 Municipal and Shire, 744
 Parliamentary, Federal, 32
 State, 25
 Electoral System, 25
 Electric Light and Power Works, 75
 Municipal, 768
 Railway, 170
 Electric Railways, 161
 Tramways, 166
 Electricity—Power of Machinery, 50,
 85
 Works, 62, 75
 Elevators, Grain, 213
 Emigration, 478
 Employees' Unions, 586
 Employers' Unions, 588
 Employment, 577
 Agencies, 585, 586
 Agricultural, 197
 Children, 60, 376, 382, 601
 Factories, 43, 46 49, 56, 578

Employment—continued.

Mines, 83, 104, 578
 Rural Industries, 320, 577, 601
 Women, 59
 Encephalitis, 370
 Engineering Standards, 40
 Works, 66
 Ensilage, 236
 Entertainments Taxes, 404, 634,
 642, 648
 Equity, Jurisdiction, 454
 Estates of Deceased Persons, 739
 Stamp Duties, 634, 639, 648
 Taxation, 634-649
 Evaporation, 9
 Examinations (School), 426, 428
 Exchange Rates, Bank, 702
 Settlement, 699
 Stock, 716
 Excise Tariff, 122
 Taxation, 633
 Executive Government, 19
 Ex-nuptial Children, 505, 519
 Expenditure — Local Government,
 633, 756, 759
 State, 633, 651, 656, 663
 Agriculture, 201
 Child Welfare, 379
 Education, 439
 Hospitals and Charities,
 363
 Justice, 473
 Loan, 664, 665
 Mining, 80
 Water Conservation, 237
 Experiment Farms, 201
 Exports, Interstate, 108, 124
 Oversea, 108
 Australian Produce, 109, 117
 Bullion and Specie, 111
 Dairy Produce, 108, 289
 Destination, 112, 119
 Guarantee Act, 108
 Inspection and Grading, 107
 Pastoral Products, 117, 268
 Ships' Stores, 120
 Extradition, 446

F

Factories, 39
 Employment, 43, 46, 49, 56, 578
 Inspection, 601
 New Industries, 76
 Production, 40, 46, 48, 52, 618
 Wages, 43, 46, 48, 51, 612
 Fair Rents Courts, 458, 566
 Fallowing, Wheat, 207
 Family Allowances, 391
 Family Endowment Tax, 634, 642
 Fares, Ferry, 575
 Railway, 156, 575
 Tramway, 169, 575
 Farming (see Agriculture)—
 Dairy, 274
 Share, 200
 Farm Produce Agents, 550
 Farms, Number, 306
 Farmyard Production, 618

Federal Aid for Roads, 783
 Capital Territory, 2, 33
 Government, 17, 31
 Health Council, 362
 Taxes, 633, 635, 644
Feeble-minded Persons, 382
Fellmongering, 63
Ferries, 780, 787
Ferry Fares, 575
Ferry Services, Harbour, 137
Fertilisers, 198
Film Censorship, 403
Finance, 633-742
 Australian Loan Council, 682
 Financial Agreement, 682
 Loans, 662
 Local Government, 756
 Private, 687
 Public, 633
 Public Debts, 662, 676-686
 Relations between State and
 Commonwealth, 634, 682
 Rural, 322
 Taxation (Federal), 635, 644
 (State), 634, 636
Fire—
 Board of Commisisoners, 771
 Insurance, 731, 733
 Prevention Services, 771
Fireclays, 103, 104.
First Offenders, 472
Fisheries, 302
 Consumption of Fish, 551, 554
 Employees, 578
 Markets, 551, 555
 Production, 618, 620
Flour, 211
 Consumption, 551, 555
 Mills, 62, 70
 Prices, 555, 563, 565
Food and Prices, 549
Food—
 Bill, Weekly, 573
 Consumption, 551
 Index Numbers, 569
 Laws, 549
 Prices, 563, 565, 573
 Relief for Unemployed, 583
 Standards, 549
Foreign Companies, 715
Forestry, 298
 Employees, 578
Forty-four Hours Week, 593
Franchise—
 Local Government, 744
 Parliamentary, 25
Freights, Ocean, 137, 215
 Railway, 158
Friendly Societies, 394, 575, 721
Fruit, 230, 560
 Markets, 551
Fuel—
 Coal Used, 86
 Cost of, 574
 Used in Factories, 52, 55, 101
 Used in Mines, 87
Fugitive Offenders, 446
Fur Farming, 296

G

Gaols, 469
Gas, Power of Machinery, 50
 Prices, 575
 Standard, 550
 Works, 62, 76
 Municipal, 767
Gauges of Australian Railways, 164
Geography of New South Wales, 1
Geophysical Prospecting, 81
Goats, 261
Gold, 90
 Bounty, 81, 91
 Currency, 687, 702
 Coin held by Banks, 687, 695
 Imports and Exports, 111
 Prices, 688
 Reserve against Note Issue, 690
Government, Constitutional, 17
 Coal Mine, 99
 Cost of, 30
 Early Forms, 17
 Employees, 579
 Arbitration, 592
 Pensions, 388
 Enterprises, 658
 Factories and Workshops, 43, 65
 Finance, 633
 Health Services, 361
 Housing Schemes, 399
 Insurance Office, 734
 Local, 743
 Railways, 145, 147
 Savings Bank, 707, 709
 Tramways, 145, 165
 Governor, State, 17
 Grafton Water Board, 773
 Grapes, 228
 Grasses, sown, 185
 Green Fodder, 235
 Groceries, Prices (see also Food),
 560, 575
 Gun Licenses, 412

H

Habitual Criminals, 471
Haemorrhage of the Brain, 535
Halls, Public, 402
Harbour and Wharfage Rates, 134, 140
Harbour Bridge, Sydney, 134, 788
Harbour Trust, Sydney, 133
Harbours, 132
 "Harvester" Wage, 609
Hat and Cap Factories, 62, 74
Hawkesbury Agricultural College, 415, 436
Hay Crops, 228, 235
Hay Irrigation Area, 359
Health Council—Federal, 362
 Health, Public, 361
Heart Diseases, 537
Herd Testing, 277
Hides, 268
High Court of Australia, 460, 466
Historical Table, 36
 Industrial, 624

Holdings, Land—
 Agricultural, 187
 Alienated, 309-311
 Purposes for which used, 307
 Rural, 306
 Size, 308
 Tenure, 309
 Value, 310
 Holidays, Public, 595
 Holmes, Advances for, 399, 709,
 711
 Honey, 293-295
 Horses, 259
 Hosiery Factories, 62, 73
 Hospitals, 361
 Commission, 365
 Mental, 373
 Private, 364
 Public, 365
 State Expenditure, 363
 Hotels, 405
 Hours of Work, 593
 Housing, 396
 Fair Rents Courts, 458
 Government Assistance, 399
 Rents, 566
 Hunter District Water Supply and
 Sewerage, 659, 772, 778

I

Illegitimacy, 505, 519
 Illiteracy, 416
 Immigrants, 478
 Immigration, Assisted, 481
 Restriction, 481
 Imports—Interstate, 108, 124
 Oversea, 108
 Bullion and Specie, 111
 Classification, 115
 Country of Origin, 112
 Imprisonment, 469
 Incomes, 741
 Companies, 638
 National, 741, 742
 Taxation, 634, 636, 645
 Federal, 635, 644
 State, 634, 636
 Increase, Natural, 477, 506
 Index Numbers—
 Retail Prices, 569
 Wages, 615
 Wholesale Prices, 560
 Index of Mortality, 508
 Industrial Arbitration, 589
 Awards and Agreements, 591
 Boards, 590
 Commission, 590
 Commonwealth Arbitration Sys-
 tem, 591
 Conciliation, 590, 592
 Crown Employees, Arbitration,
 592
 State Arbitration System, 589
 Tribunals, 458
 Industrial Assurance, 724
 Diseases, 601
 Dislocations, 597
 Loss of Wages, 599

Industrial Assurance—*continued.*

History, 624
 Hygiene, 601
 Training, 415
 Undertakings, Government, 659
 Unions, 587, 589
 Inebriates, 410
 Infantile Mortality, 511
 Infantile Paralysis, 370
 Infants Protection, 378
 Infectious Diseases, 370
 Influenza, 529
 Inquests, 463
 Insanity (*see also* Lunacy and Men-
 tal Hospitals), 372, 454, 536
 Insurance, 723, 731
 National, 723
 Interest—
 Banks, 701
 Savings, 709, 713
 Public Debt, 679, 681
 Reduction Act, 702
 Interstate Railways, 164
 Shipping, 127
 Trade, 108, 124, 127, 129
 Intoxicants, Consumption, 407
 Expenditure, 409
 Invalid Pensions, 386
 Investment Societies, Co-operative,
 717, 719
 Iron, 90, 96
 Bounties, 41, 42
 Oxide, 90, 97
 Prices, 563
 Production, 67
 Works, 62, 66, 67
 Irrigation, 237, 358
 Schemes, 239

J

Jam and Fruit Canning, 62
 Jam, Consumption, 551, 559
 Prices, 563, 565, 573
 Jervis Bay, 132
 Judges, 447
 Jury System, 450
 Justice, Cost of Administration, 473
 Law Courts, 445
 Minister, 446
 Police, 467
 Prisons, 469
 Justices of Peace, 448
 Juveniles—
 Employment of, 383, 601
 Offenders, 381

K

Kerosene Shale, 90, 102
 Kindergarten, 414, 427
 Ku-ring-gai Chase, 402

L

Labour (*see also* Employment)—
 Agencies, 585
 Factories, 43, 46, 49, 56, 578
 Mines, 83, 104, 578
 Rural, 197, 320, 577

Lachlan River, Proposed Irrigation, 239

Lambs, 249

Land—

- Acquisition, 335
- Administration, 327
- Agricultural, 185
- Alienation, 329-331
- Available for Settlement, 334
- Boards and Courts, 327, 459
- Closer Settlement, 353
- Conditional Purchases, 336
- Exchange, 339
- Leases, 332, 339-349
- Legislation, 327
- Mining, 332, 348
- Mortgages, 737
- Occupied for Mining, 79
- Policy (Government), 306
- Ratable, 748
- Real Estate Transactions, 736
- Reserves, 333, 401
- Resumptions by Crown, 360
- Revenue, 360, 654
- Sales, 338
- Settlement, 327
- Taxes, 634, 636, 644, 748
- Tenures, 335
 - Conversion, 349
 - Transfers, 737
- Transport Services, 145
 - Co-ordination, 145
- Valuations, 310, 747
 - Court, 327, 460
- Value, 749

Lard, 288

Law, 445

- Administration, 446
- Courts, 451

Lead, 90, 92, 622

- Prices, 81

Leases, Land, 332, 337-352

- Alienable, 339
- Inalienable, 347

Leather, 62, 63, 268

Legal Aid, Poor Persons, 450

- Profession, 433, 446
- System, 445

Legislative Assembly, 20, 22

- Council, 20, 21

Legitimation Act, 505

Leprosy, 370

Letters, 180

Libraries, 442

Licenses—

- Employment Agencies, 586
- Ferry Steamers, 137
- Fishing, 302, 412
- Forestry, 301
- Liquor, 405
- Mining, 78
- Motor Vehicles, 145, 173, 174
- Private Hospitals, 364
- Public Halls, 402
- Racecourses, 403
- Traffic, 173

Licensing Courts, 405, 457

Liens, 737

Life Assurance, 724

Lighthouses, 144

Limestone, 90, 103

Linnæan Society, 441

Linnseed (Bounty), 42

Liquor—

- Consumption, 407
- Expenditure, 409
- Licenses, 405
- Referendum, 28

Lithgow Iron and Steel Works, 67

Live Stock, 243

- Cattle, 243-246, 257-259

- Horses, 243-246, 259

- Mortgages, 738

- Pigs, 243-245

- Prices, 262

- Sheep, 243-250

- Slaughtering, 262, 553

Living—

- Cost of, 572

- Wage, 607

- Other States, 610

Loans—

- Authority to raise, 633, 651, 763, 771, 775

- Council, 634, 675, 682

- Local Government, 634, 763

- Metropolitan Water Supply Board, 634, 775

- National Debt — Conversion, 667

- State, 633, 662

- Cost of raising, 675

- Expenditure, 663

Local Government, 743

- Government Grants, 760

- Housing Schemes, 400

- Loans, 763-767

- Municipalities, 743

- Population of Areas, 486-492

- Shires, 743

- Taxation, 752

- Valuations, 460

Lock Hospitals, 372

Lockouts, 597

Lord Howe Island, 3

Lotteries, State, 403

Lunacy, 372, 536

- Jurisdiction, 454

M

Machinery, Coal-cutting, 85

- Manufacturing, 43, 48, 50, 51

- Mining, 83, 84, 86

- Rural Industries, 195, 320

- Used in Factories, 43, 48, 50, 51

- Works, 66

Macquarie River, Proposed Irriga-

- tion, 239

Magistrates, 448, 451, 460

Magnesite, 103

Mail Services, 180

Main Roads Board, 781

Maize, 223

- Consumption, 224

- Prices, 194

Manganese, 90, 97

- Manufacturing Industry, 39-77
 - Value of Production, 618
- Manures, 198
- Marble, 103
- Margarine, 62
- Marine Inquiry Courts, 144, 457
- Marine Insurance, 731, 734
- Marketing Primary Products, 107, 550
- Markets, Municipal, 550, 756
- Marriages, 497
- Masculinity of Population, 492
- Materials used in Factories, 43, 46, 48, 52
 - Mines, 87
- Maternity Allowances, 376
- Matrimonial Causes Jurisdiction, 456
- Measles, 526
- Meat Consumption, 551, 552
 - Industry, 265
 - Industry Board, Metropolitan, 264, 553
 - Prices, 264-267, 552, 561, 563, 565, 573
 - Supply, 267, 553
 - Works, 62, 69
- Medical Inspection of School Children, 383
- Medical Officers, Government, 361
- Medical Practitioners, 364, 433
- Meningitis, 370, 535
- Mental Diseases, 372, 454, 536
- Mercantile Marine Officers, 142
- Mercury, 97
- Metal Works, 66
- Meteorology, 5
- Metropolis, Population, 488
- Metropolitan Water Supply and Sewerage, 634, 659, 772, 774
 - Transport Trust, 145, 165
- Migration, 478
- Migration, Internal, 487
- Military Forces, 34
- Milk, 281, 556
 - Act, 556
 - Board, 557
 - Consumption, 288, 551
 - Prices, 296, 558, 565, 573
 - Production, 280
 - Supervision of Supply, 556
 - Yield per Cow, 281
- Minerals, Prices, 81
 - Production, 86, 87, 90, 618, 620
- Mines, Valuation, 748
 - Inspection of, 104
- Miners, 83
 - Rights, 78
 - Wages, 86
- Mining Industry, 78
 - Accidents, 105
 - Companies (No Liability), 714
 - Employees, 578
 - Industrial Dislocations, 597
 - Industry, 78
 - Leases and Licenses, 78
 - Population, 492
 - Wardens' Courts, 78, 458
- Ministers of the Crown, 446
- Ministries, State, 19, 29
- Minting, 687
- Mitchell Library, 443
- Molybdenum, 90, 97
- Money (*see* Currency)
 - Orders, 691
- Moneylenders, Registration, 737
- Moratorium Act, 738
- Mortality, Causes, 522
 - Gaols, 471
 - Index, 508
 - Infantile, 511
- Mortgages, 448, 737
- Motor Vehicles, 145, 173
 - Bodies Made, 62
 - Imports, 115, 116
 - Insurance, 731, 734
 - Omnibus Services, 173, 177
 - Registrations, 145, 173
 - Taxation, 173, 176, 634, 641
- Mules, 261
- Municipal Library, Sydney, 443
- Markets, 551
- Municipalities, 743
 - Elections, 744
 - Finances, 759
 - Loans, 763
 - Population, 487, 746
 - Rates, 747, 752
 - Taxation, 634, 752
- Murray River, 3, 4
 - Irrigation, 239
- Murrumbidgee River, 3, 4
 - Irrigation Area, 237, 358
- Museums, 442
- Music, Conservatorium, 441
- Mutton Consumption, 551, 552
 - Export, 266, 267
 - Prices, 266, 267, 553, 563, 565, 573
 - Production, 263, 269

N

- Namoi River, Proposed Irrigation, 239
- National Debt Conversion Loan, 667
- National Debt Sinking Fund, 685
- National Income, 741, 742
- National Insurance, 723
- National Park, 402
- Nationality of Population, 493
- Nationality of Shipping, 129
- Naturalisation, 493
- Naval Defence, 36
- Navigation Department, 126
 - Laws, 126
- Navigation of Rivers, 136
- Nephritis, 541
- Newcastle Harbour, 131, 132, 136
 - Iron and Steel Works, 67
 - Omnibus Services, 178
 - Tramways, 165
 - Transport Trust, 145
 - Water and Sewerage Works, 659, 772, 778
- New Settlers' League, 485
- New Zealand Trade, 112, 122, 130

Notes, Australian, 689
 Bank, 689, 695
 Postal, 691
 Notifiable Diseases, 370
 Noxious Animals, 269
 Nurseries, Forest, 298
 Nurses, 364
 Nursing Associations, 364, 384

O

Oatmeal, Consumption, 551, 556
 Prices, 565, 573
 Oats, 224
 Observatory Hill Resumed Area, 400
 Observatory, Sydney, 15
 Occupations of the Population, 577
 Factory Workers, 58
 Rural, 577
 Offenders Convicted, 461, 464
 Oil, Bounty, 81
 Machinery, Power of, 50, 86
 Shale, 90, 102
 Old-age Pensions, 386
 Omnibus Services, 173, 177
 Onions, 235
 Prices, 565
 Opal, 90, 102
 Orchards, 231
 Orphanages, 381
 Ostriches, 261
 Oversea Shipping, 127
 Trade, 108
 Transport Association, 137
 Oysters, 304

P

Packing Houses, Fruit, 233
 Paper Currency, 689, 695
 Parcels, Post, 180
 Parks, 401
 Parliament
 Commonwealth, 32
 Cost of, 30
 State, 20, 28
 Parliamentary Committees, 23
 Parliamentary Government, cost of,
 20, 30
 Passports, 480
 Pastoral Industry, 243
 Employment, 577
 Exports, 117, 268
 Value of Production, 269, 618
 Pastures Protection, 271
 Patents, 448
 Pensions, 386
 Commonwealth Public Service,
 391
 Invalid, 386
 Old Age, 386
 Police, 390
 Railway, 391
 State Public Service, 388
 War, 388
 Widows, 389
 Petroleum, 81
 Pharmacists, 364
 Picture Shows, 403, 404

Pigs, 286
 Slaughtered, 554
 Pilotage, 126
 Pistol Licenses, 412
 Plague, Bubonic, 370
 Plant Diseases, 236
 Platinum, 90, 97
 Pneumonia, 538
 Police, 467
 Pensions, 390
 Poor Persons, Legal Expenses, 451
 Population, 475-494
 Aboriginals, 493
 Alien, 480
 Australian States, 477
 Birthplaces, 493
 Capital Cities of Australia, 490
 Cities, 490
 Conjugal Condition, 495
 Country Towns, 491
 Distribution, 486
 Increase of, 477, 506
 Intercensal Years, 476
 Metropolis, 488
 Mining, 492
 Municipalities and Shires, 487,
 746
 Nationality, 493
 Race, 493
 Sexes, 492
 Sources of Increase, 477, 506
 Urban and Rural, 487
 Pork, Consumption, 551, 552
 Prices, 553, 565, 573
 Port Charges, 139
 Port Kembla Iron and Steel Works,
 67
 Smelting Works, 68
 Ports, 132
 Newcastle, 131, 132, 136
 Port Jackson (Sydney), 131, 133
 Postage, 180
 Rates, 575
 Postal Notes, 691
 Posts and Telegraphs, 180
 Potatoes, Consumption, 551, 560, 563
 Prices, 560, 563, 573
 Production, 235
 Poultry Farming, 290
 Power Alcohol—Bounty, 41, 42
 Power of Machinery, 43, 50, 85
 Works, 62, 75
 Preference to Unionists, 595
 Preferential Tariffs, 122
 Prices—
 Agricultural Produce, 193
 Bread, 555, 565, 573
 Butter, 285, 563, 565, 573, 621
 Coal, 82
 Company Shares, 716
 Dairy Products, 296
 Eggs, 291
 Farm Produce, 296
 Flour, 194
 Gold, 688
 Live Stock, 262
 Meat, 264-267, 552, 561, 563,
 565, 573
 Metals, 81

Prices—*continued*.

- Milk, 296, 558, 565, 573
- Pastoral Produce, 254, 262, 264–267
- Retail, 565, 573
- Silver, 688
- Wheat, 194, 217, 563, 621
- Wholesale, 560
- Wool, 254, 563, 621
- Prickly Pear Lands, 352
- Primage Duty, 122, 648
- Prisons, 469
- Private Finance, 687
 - Incomes, 741
 - Wealth, 739
- Privy Council Appeals, 466
- Probate, 455, 739
 - Duties, 634, 639, 648
- Produce (Farm) Agents, 236
- Production, 617, 620
 - Agricultural, 188–193, 617, 618
 - Dairying, 280, 295, 618
 - Factories, 62
 - Principal items, 62
 - Value, 43, 46, 48, 52
 - Farmyard, 295, 617, 618
 - Fisheries, 303, 617, 618
 - Forestry, 299, 300, 618
 - Manufacturing, 312, 618
 - Mining, 82, 86, 90, 312, 617, 618
 - Pastoral, 269, 618
 - Poultry Farming, 290
 - Value of, 617
 - Volume, 620
 - Wheat, 203, 312
 - Wool, 312
- Prohibition (Liquor) Referendum, 28
- Property, Value of, 747
- Proportional Representation, 25
- Prospecting for Minerals, 80
- Prothonotary, 447
- Psychiatry, 373
- Public Debt, 676, 678
- Public Finance, 633
 - Health, 361
 - Hospitals, 364, 365, 372
 - Instruction, 414–444
 - Library, 442
 - School System, 414
 - Service Employees, 580
 - Service Pensions, 388
 - Trust Office, 449
 - Works Fund, 650, 657
 - Committee, 23
- Puerperal Diseases, 370, 542
- Pure Food Act, 549

Q

- Quarantine, 127
- Quarries, 103

R

- Rabbits, 270
 - Fur Farming, 296
- Racecourses, 403
 - Admission Tax, 634, 642

- Racing Taxes, 634, 641
- Railway and Tramway Institute, 431
- Railways, 145, 147
 - Accidents, 171
 - Capital Expended, 148
 - City, 161
 - Coal Supplies, 171
 - Commissioners, 145, 147
 - Cost of Construction, 148
 - Earnings, 151, 153
 - Electric, 161
 - Electricity Works, 170
 - Employees, 170
 - Fares and Freight Charges, 156, 575
 - Finances, 147, 151, 659
 - Gauges, 164
 - Gradients, 159
 - Interest on Capital, 151
 - Non-paying Lines, 152
 - Passengers, 153, 163
 - Private, 163
 - Revenue, 151, 153
 - Rolling Stock, 160
 - Safety Appliances, 159
 - Superannuation Fund, 391
 - Traffic, 153, 161
 - Uniform Gauge, 164
 - Victorian Border, 162
 - Wages, 170
 - Working Expenses, 151
 - Workshops, 66, 169
- Rainfall, 6, 312
 - Sheep Districts, 257
 - Wheat Districts, 204
- Ratable Property, 748
- Rates (Local Government), 634, 747, 752
- Real Estate, Transactions, 736
- Real Property Act, 736
- Reception Houses for Insane, 374
- Recreation Reserves, 401
- Re-exports, 120
- Referenda, Federal, 33
 - State (Prohibition), 28
- Reformatories, 381
- Refrigerating Works, 69
- Registrar-General, 448
- Registration—
 - Births, Deaths, Marriages, 495
 - Companies, 714
 - Land Titles, Mortgages, 448, 736
 - Money Lenders, 737
 - Mortgages, 737
 - Motor Vehicles, 145, 173, 174
 - Shipping, 138, 141
- Religions of—
 - Population, 413
 - Prisoners, 472
 - School Children, 419
- Rents, House, 458, 566
 - Fixed by Court, 458, 566
 - Index Numbers, 570
 - Reduction Act, 569
- Representative Government, 17
- Representatives, House of, 31
- Research, Industrial, 40
- Reserves, 333

Reserves, Gold—
 Banks, 687, 695
 Note Issue, 690
 Reservoirs (Water), 776, 779
 Retail Prices, 565, 573
 Returned Soldiers' Settlement, 357
 Homes, 401
 Pensions, 489
 Revenue—
 Customs and Excise, 122
 Land, 360
 Local Government, 747, 756, 760
 Postal Services, 183
 Railways, 151, 153
 State, 633, 651
 Sydney Harbour Trust, 135
 Tramways, 167
 Rice, 226
 Consumption, 551, 556, 565
 Prices, 565, 573
 Rifle Clubs, 35
 Riverina, 317
 Rivers, 3
 Irrigation Schemes, 239
 Traffic, 136
 Roads, 780, 786
 Board, 781
 Commonwealth Grants, 783
 Government Expenditure, 663, 789
 Transport, 145, 173
 Royal Society, 441
 Royal Society for Welfare of
 Mothers and Babies,
 377, 512
 Royalties, Mining, 79
 Rural Bank, 324, 693, 711
 Co-operative Societies, 717, 719
 Credit, 322, 705, 709, 711
 Finance, 322
 Industries Board, 323
 Industries, Capital Invested,
 320
 Employees, 577, 601, 613
 Labour, 320
 Lands, 306
 Value, 310
 Machinery used, 320
 Population, 487
 Settlement, 306
 Training, 415, 424, 426
 Rye, 235

S

Salaries and Wages—
 Factories, 43, 46, 48, 51
 Mines, 86
 Sales Tax, 122, 649
 Savings Banks, 705, 707, 713
 Advances for Homes, 400
 School, 420
 Sawmills, 62, 66, 299
 Scarlet Fever, 370, 527
 Schools—
 Dental Clinics, 383
 Examinations, 426, 428
 Medical Inspection, 383
 Private, 414, 416, 425, 428
 Pupils, 416, 426, 428

Schools—continued.

Savings Banks, 420
 Scholarships, 426, 428, 435
 State, 414, 416, 420
 Primary, 421
 Religious Instruction, 420
 Secondary, 422
 Technical, 429
 Teachers, 416, 426, 437
 Scientific Societies, 440
 Sea Carriage of Goods, 127
 Seamen, 126, 142
 Compensation, 143, 602
 Mercantile Marine Offices, 143
 Wages, 143
 Seasons, 5
 Secondary Wage, 611
 Senate, 31
 Settlement, Land, 327
 Character of, 312
 Sewerage Services, 772
 Finances, 659
 Sex of Population, 492
 Shale Oil, 81, 90, 102
 Share Farming, 200
 Sheep, 247
 Breeds, 250
 Interstate Movement, 249
 Prices, 262
 Required for Food, 554
 Slaughtering, 263, 553
 Sheriff, 447
 Shipbuilding, 141
 Shipping, 126
 Control Legislation, 126, 141
 Insurance, 731, 734
 Marine Inquiry Courts, 144, 457
 Port Charges, 138
 Ships' stores Exported, 120
 Shires, 743
 Elections, 744
 Finances, 759
 Loans, 764
 Population, 746
 Rates, 747, 754
 Taxation, 634, 752, 754
 Sickness, 364
 In Gaols, 471
 Silos, Wheat, 213
 Silver, Coinage, 687
 Mines, 92
 Prices, 81, 622, 688
 Production, 90, 92, 620
 Sinking Funds, Local Government,
 764, 765
 National Debt, 675
 State, 682, 686
 Size of Factories, 48
 Skins and Hides, 268
 Slaughtering, 262, 553
 Smallpox, 370, 526
 Smelting Works, 68
 Soap Factories, 62, 64
 Social Condition, 361
 Societies, Building, 717, 720
 Charitable, 384
 Co-operative, 717
 Friendly, 394, 721

Soldiers' Children—Bursaries,
436

Pensions, 389

Solicitors, 433, 450

Special Purposes (Revenue)

Fund, 650, 657

Specie, Imports and Exports, 111

Spirits, Consumption, 407

Expenditure, 409

St. George County Council, 746, 768

Stamp Duties, 634, 640

Standards, Engineering, 40

Starr-Bowkett Societies, 720

State—

Advances for Homes, 400, 711

Advances to Settlers, 322-326

Asylums, 384

Children, 378

Coal Mine, 99, 171

Debt, 678

Education, 414

Employees, 579

Enterprises, 658

Expenditure on Education, 439

Factories, 43, 65

Finances, 633, 650

Forests, 298

Government, 17

Hospitals, 365

Housing Schemes, 399

Insurance Office, 604

Labour Exchanges, 585

Lotteries, 403

Marketing Bureau, 550

Railways, 145, 147

Savings Bank, 400, 707, 709

Tramways, 145, 165

Wards, 378, 380

Workshops and Factories, 43, 65

Steel Production, 62, 67

Stillbirths, 495

Stock Exchange Index, 716

Stock, Live, 243

Slaughtered, 553

Street-trading (Children), 383

Strikes, 597

Sugar Cane, 235

Sugar, Consumption, 551, 559

Mills, 62, 70

Prices, 563, 565, 573

Refinery, 71

Suicide, 546

Sulphur, Bounty, 41

Superannuation, 389, 433

Supreme Court, 445, 453, 463, 465

Sydney—

City Commission, 744

Corporation Act, 743

Electricity Undertaking, 768,
770

Finances, 756, 760

Harbour, 131, 133

Bridge, 38, 134, 788

Trust Finances, 659

Loans, 763

Meteorology, 13

Milk Supply, 556

Observatory, 15

Population, 488, 746

Sydney—continued.

Sydney Harbour Trust, 133

Trade, 132

T

Tallow, 268

Tanneries, 62, 63

Tariff Board, 107

Customs and Excise, 121

Taxation, 634

Betting, 403

Commonwealth, 634, 644

Courts of Review, 458

Entertainments, 404

Family Endowment, 392

Local Government, 634, 752

Motor Vehicles, 173, 176

State, 563, 565, 573, 634, 636

Tea, Consumption, 551, 559

Prices, 563, 565, 573

Teachers, 416, 426, 437

Colleges, 437

Technical Education, 423, 426, 429

Telegraphs, 180

Wireless, 181

Telephones, 182

Temperatures, 5, 10, 12

Theatres, 402

Employment of Children, 383

Thrift, 394

Ticks, Cattle, 272

Tides, 16

Tile Works, 65

Timber (*see also* Forestry), 299

Imports and Exports, 300

Prices, 563

Works, 62, 66

Time, Standard, 16

Tin, 90, 95

Prices, 81

Tobacco—

Consumption, 411

Expenditure, 411

Factories, 62, 72

Licenses, 411

Prices, 563, 566

Production, 235

"Torrens" (Land) Title, 736

Totalisators, 403

Totalisator Tax, 634, 642

Town Planning, 396

Towns, Population, 490

Trade and Commerce, 107

Trade Marks, 448

Trade, Interstate, 108, 124, 127, 129

Bananas, 231

Butter, 284, 289

Eggs, 292

Maize, 224

Oats, 225

Wheat, 211

Trade, Oversea, 108, 127

Trade Unions, 586, 589

Traffic—

Accidents, 178

Licenses, 176

Regulation, 145, 173, 467

Tramways, 145, 165, 169

Accidents, 171

Tramways—continued.

- Capital Cost, 165
 - Employees, 170
 - Fares, 169, 575
 - Management Board, 146, 165
 - Revenue and Expenditure, 167
 - Transport Trusts, 145, 165
 - Wages, 170
 - Transport Act, 145
 - Co-ordination, 145, 174
 - Transport and Communication, 107
 - Transport (Oversea) Association, 137
 - Transport Trusts, 145, 165, 173
 - Trawling Industry, 303
 - Trunancy, 381
 - Trust Funds—State, 651, 661
 - Trustee, Public, 449
 - Tuberculosis, 370, 371, 531
 - Tungsten, 90, 97
 - Tweed Mills, 62, 73
 - Typhoid Fever, 370, 525
- U**
- Unemployment, 581
 - Unemployment Relief, 363, 377
 - Food Relief, 583
 - Relief Tax, 582, 634, 642
 - Unions, Industrial, 587, 589
 - Preference to Members, 595
 - Trade, 586, 589
 - United Charities Fund, 385
 - University of Sydney, 431
 - Finances, 432
 - Lectures, 433
 - Staff and Students, 433

V

- Valuation (Land) Court, 327, 460
 - Of Property, 747
- Valuer-General, 747, 751
- Vegetables, Markets, 560
 - Supply, 234, 560
- Vehicles, Motor, 146, 173
- Veneral Diseases, 372
- Veterinary Surgeons, 273, 433
- Victorian Border Railways, 162
- Vineyards, 228
- Violence, Deaths from, 545
- Vital Statistics, 495
- Vocational Guidance, 425
- Voters (Parliamentary), 27

W

- Wages, 607
 - Factory, 43, 46, 48, 51, 612
 - Living, 607
 - Lost through Disputes, 599
 - Mines, 86
 - Railways, 170
 - Rural Workers, 321, 578, 613
 - Seamen, 143
 - Tramways, 170
- War Pensions, 389
- Returned Soldiers' Settlement, 357
 - Service Homes, 401
- Warragamba Irrigation Scheme, 239
- Water and Sewerage Rates, 634, 772
- Water Works—Finances, 659, 772
 - Conservation, 237, 772

Water Works—continued.

- Rates, 634
 - Reservoirs, 776
 - Supplies, 772, 777
 - Waterworks, 239
 - Wealth, Private, 739
 - Weather, 8
 - Weights and Measures, 549
 - Western Division, 15, 318, 351
 - Lands Board, 351, 459
 - Wharfage, Sydney, 133, 140
 - Rates, 634
 - Wheat, 202-222.
 - Bulk Handling, 213
 - Consumption, 210
 - Cost of Growing, 219
 - Districts, 205
 - Exports, 117, 120, 211
 - Grading, 212
 - Pools, 216
 - Prices, 217, 563, 621
 - Production, 203, 312, 621
 - Shipping Facilities, 134
 - Used for Flour, 70
 - World's Production, 222
 - Wholesale Prices, 560
 - Whooping-cough, 528
 - Widows, Pensions, 388
 - State Aid, 380
 - Wife and Child Desertion, 376, 378, 380
 - Winds, 5
 - Wine, 228
 - Bounty, 41, 42
 - Consumption of, 407, 409
 - Licenses, 405
 - Wireless Telegraphy, 181
 - Telephony, 182
 - Wire Netting, Advances, 270
 - Women—
 - Employed, 577
 - Rural, 321
 - Franchise, 25, 413
 - In Factories, 59
 - Prisoners, 469, 470
 - Status, 413
 - Wages, 608, 610
 - Rural, 321
 - Wool, 251
 - Exports, 117, 119, 256
 - Liens on, 738
 - Prices, 254-256, 563, 621
 - Production, 251, 312, 621
 - Sales, 254
 - Scouring, 62, 63
 - Woollen Mills, 62, 73
 - Workers. (*See* Employment.)
 - Workers' Compensation Insurance, 459, 602, 731, 733
 - Educational Association, 435, 441
 - Wrecks, Ship, 144, 457
- Y**
- Youthful Offenders, 381, 461, 469
- Z**
- Zinc, 90, 92
 - Prices, 81
 - Zoological Gardens, 402